CALIFORNIA ALL

Middle-Mile Broadband Initiative

Middle-Mile Advisory Committee Meeting

October 18, 2024

Minutes and Transcript

The Middle-Mile Advisory Committee met on Friday, October, at 10:00am PST via virtual conference and in-person.

Agenda Item 1: Welcome

CIO & Directorate Bailey-Crimmins welcomed everyone to the meeting.

CIO & Directorate Bailey-Crimmins welcomed and thanked all MMAC members, designees, presenters and attendees.

A quorum for the meeting was established.

Member	Designee		Present	Absent
California Department of Technology	CIO & Directorate Bailey-Crimmins		X	
California Public Utilities Commission	President Reynolds		X	
Department of Finance	Chief Deputy Director Perrault		X	
Government Operations Agency	Secretary Tong	Luis Larios	X	
Department of Transportation	Director Tavares	Designee was Chief Deputy Director Keever		X
State Senate	Senator Gonzalez	(Ex-Officio Member)		X
State Senate	Senator McGuire	(Ex-Officio Member)		X

State Assembly	Assembly Member Tasha Boerner	(Ex-Officio Member)	X	
State Assembly	Assembly Member Wood	(Ex-Officio Member)		X
County of Monterey, District 1	Supervisor Alejo	Local Government Representatives	X	
County of Del Norte, District 2	Valerie Starkey	Local Government Representatives	X	

Agenda Item 2: Executive Report Out

Mark Monroe shared the executive report out, not that since the July MMAC, there have been significant developments in the project. Two groundbreaking events took place in Willits and Sacramento, marking key milestones in the project's progress. Additionally, two new or expanded RFI2 partnerships were signed, further enhancing the project's scope and collaboration. Construction has also advanced substantially, with 1,800 miles of infrastructure currently underway.

Agenda Item 3: Project Updates

- **Mark Monroe** provided the California Department of Technology's (CDT's) update: New and expanded partnership agreements have been established under the RFI2 initiative. Notably, a new partnership with American Dark Fiber (ADF) has been formed, while the existing collaboration with CVIN has been expanded and amended. These agreements strengthen the project's infrastructure and support its growth.

- **Shannon Martin-Guzman** provided an update on Installations Partners and the Government-to-Government engagements:
  - Installation Map
    - 1,823 Miles Actively Being Installed
  - Installation Partners:
    - American Dark Fiber (ADF)
    - Arcadian
    - Zayo
    - TPN-299
    - Boldyn
    - Lumen
    - Hoopa Valley
    - YTEL
    - Siskiyou Tel
    - Vero
    - CVIN
    - Digital 395

- ➢ Government-to-Government
  - Signed contract with YTel
  - Negotiations:
    - o 4 Tribal Communities
    - o Ventura County
    - o City of LA Bureau of Street Lighting
    - o City of Fort Bragg

- **Monica Hernandez** gave an update on Stakeholder Communications. The most recent stakeholder engagement workshop was held on September, 2024 with a total of 71 attendees. The objective was to increase transparency and improve communication. Agenda items discussed were:
  - ➢ Project Delivery Updates
  - ➢ Groundbreaking Highlights
  - ➢ Caltrans Updates

  A survey was conducted and showed that 60% of attendees found the meeting valuable and 70% would like to continue these meetings (*results did not include neutral responses*). A snapshot of survey comments were shared. The new fact sheet was also shared and will be updated online at the end of each month.

  A video presentation was shared – click [here](#).

- **Mark Monroe** gave an introduction on customer research, early marketing and the Operations TPA. There is a strong focus on understanding the long-term interconnection and service needs of potential last-mile customers. Early outreach efforts have been made to FFA grant recipients and other potential customers to discuss IRU/lease agreements. In parallel, there is an ongoing pursuit of a long-term operation TPA to manage the network on behalf of the State.

- **Preston Rhea** gave an update on the MMBI Customer Research: The purpose of customer research is to explore interconnection services and foster relationship building. A graph was shared with the total number of entities that CDT has engaged with. Customers have expressed a strong need for MMBN's services, highlighting their interest in the network's offerings. They are particularly eager to understand how MMBN will balance its various goals. Additionally, customers have requested more detailed information on pricing, routes, and the project timeline to better assess the service's impact and availability. The next steps are to continue engaging with potential customers, finalize the pricing framework, and finalize the interconnection points

- **Jeff Wiley** gave an update on MMBN Fiber Installation which includes preconstruction progress. Maps, charts and photos were shared to give details on each district, the timeline, miles completed, the 112 hubs and an overview of each regions progress (totaling 777 miles). The permitting and encroachment process is 25% complete with the remaining 75% in progress.

- **Erik Hunsinger** gave an update on lighting fiber, planning requirements, Off Caltrans ROW Hubs and targeted/strategic marketing. Lighting the network

consists of 170 fiber spans with available lit infrastructure, ready to be turned up for service. In terms of planning requirements, the hub configuration includes cabinet installation, optimizing the DC power plant and cooling systems, and infrastructure implementation. For the Off Caltrans ROW hubs, GSN is responsible for preconstruction at all 20 locations, most of which leverage government-to-government partnerships. Targeted and strategic marketing efforts are also in place, focusing on FFA grant recipients, with 105 applications identified, as well as other carriers. Marketing the MMBN is expected to help jumpstart sustainability, with both carriers and hyper-scalers benefiting from diversified networks. Additionally, telecom carriers typically require a two-year lead time for network expansion.

- **Jonathan Lakritz** gave an update on the Last Mile Programs. The Last Mile Programs and Investments Overview details several key broadband initiatives, including BEAD, CASF, Loan Loss Reserve, and the Federal Funding Account (FFA). The Federal Funding Account (**FFA**) supports last-mile infrastructure projects. More than $600 million has been awarded for high-quality, reliable last-mile infrastructure to a variety of grantees, including Tribes and county organizations, with projects focused on serving low-income and disadvantaged communities throughout California; many of these projects plan to connect to the Middle Mile Broadband Initiative, a crucial component in linking these communities to broader networks. Over 60 projects have been awarded across 27 counties with more to come. The **Loan Loss Reserve**, which has a $50 million budget specified by SB 109, aims to support broadband projects by covering loan losses. Applications have been received in the first window this year, and awards are targeted for before December 31, 2024. The California Advanced Services Fund (**CASF**) has awarded nearly $450 million since 2008 to support broadband deployment. The application deadline for Adoption, Public Housing and Tribal TA closed on July 1st and received 107 applications. The next deadline for new applications is January 1, 2025. The **BEAD** (Broadband, Equity, Access, and Deployment) program focuses on expanding broadband access and promoting digital equity. Currently, it is in the challenge process, allowing organizations (but not individuals) to submit challenges within a structured 120-day period. This period will end November 4th, 2024. Key milestones in the project include the opening of BEAD Rulemaking (R.23-02-016) for design and implementation, the acceptance of the Five-Year Action Plan by the National Telecommunications and Information Administration (NTIA), and significant approvals for initial proposals. The first volume of the Initial Proposal received approval on April 4, 2024, followed by the approval of Volume 2 on October 3, 2024. These milestones mark critical progress in the project's development and implementation. A graphic of the BEAD Challenge Process was shared.

Agenda Item 4: Public Comment

Public comments were made by:

- Patrick Messac, Oakland Undivided
- Jeff Blagg, Plumas-Sierra Telecommunications

Members Final Comments

Chair: We are still looking for a location and will let you all know once we have confirmed.

Closing Remarks

Chair, Director Bailey-Crimmins thanked everyone for their attendance and participation. The next meeting will be Friday, January 17th from 10am – 11:30am. The meeting adjourned at 12:07pm.

Transcript

The Chair: Good morning, everyone. Welcome to the October 2024 Middle Mile Advisory Committee. We are going to go ahead and call this meeting to order. The first order of business is Roll Call, Miss Alvarado.

Alicia Alvarado: Thank you, Director. Housekeeping rules statement. Attendees, please note there is time allocated at the end of the meeting for public comment. Presenters, please cue Sam to advance your slides. And committee members, please use the raise your hand feature on Zoom to cue the chair to call on you to speak. Now, the committee member roll call. Chair Bailey Crimmins.

The Chair: Here.

Alicia Alvarado: President Reynolds.

The Chair: She will be here shortly.

Alicia Alvarado: Chief Deputy Director Perrault.

Director Perrault: Here.

Alicia Alvarado: Director Tavares. Secretary Tong.

Luis Larios: Luis, on behalf of Secretary Tong.

Alicia Alvarado: Senator McGuire. Assembly Member Boerner. Assembly Member Wood. Supervisor Alejo.

Supervisor Alejo: Present.

Alicia Alvarado: Supervisor Starkey.

Supervisor Starkey: I am here.

Alicia Alvarado: Madam Chair, we have a quorum.

The Chair: Thank you, Ms. Alvarado. Well, again, welcome everyone. I can't believe October is here. And this is the last board meeting of 2024. There's been a lot of accomplishments over the last several months, including we will hear additional RFI Square awards, so lots of progress being made on the network. We also have Caltrans making significant progress across their miles, hubs, and helping us do an oversight of all the projects. And I also want to recognize all the hard work CPUC has been doing in relation to making those awards at the FFA level. All of you have seen that. A lot of progress being made at the last mile. And obviously a lot goes on with our GSN third-party administrator partner, Golden State Net. So, you will hear a lot of great things today. And our first agenda item is the executive summary update from Mr. Mark Monroe.

Mark Monroe: Yes, good morning, Chair and members. Thank you very much. Mark Monroe, Deputy Director for the Middle Mile Broadband Initiative here at CDT. I appreciate the opportunity again to provide an update on the project. Since we met last July, the CDT team and its partners have continued to make tangible progress on this MMBI project. First, we held two groundbreaking events with one of our joint build partners, Arcadian, in Willits and in Sacramento in August, that we'll be hearing more about a little later. When completed, these two segments will comprise more than 530 miles of the network. CDT has also finished negotiations on two new RFI Squared partnerships that we'll talk through in a few minutes. These partnerships are consistent with the overall architecture we presented at the July MMAC and represent, again, more than 500 miles of the total MMBI network. And lastly, we want to note that more than 1,800 miles of the network is currently under construction and that by the end of this calendar year, we expect more than 3,000 miles to be under construction. So exciting progress as we continue to get conduit and fiber in the ground. And with that, that ends my executive report out.

The Chair: Thank you, Mr. Mark Monroe. I will open up. Are there any questions for the board members in the room? Are there any questions or comments that any of the board members want to make online? All right, I see none. The second agenda item is the Department of Technology's update. This is a multi-presentation effort. So let me read it off and we will strategically stop between each presenter so that members can ask questions. So, the sections are first, there's an overall programmatic update by Mr. Mark Monroe and Mr. Martin-Guzman. We have the second section is the stakeholder outreach and engagement, which will be from Monica Hernandez. And the third will be last mile engagement from our consultant, Preston Rhea. So with that, we'll go ahead and get started, Mr. Mark Monroe.

Mark Monroe: All right. Thank you. As I noted earlier, CDT has signed several new partnership agreements since we last met. We recently executed a contract with our newest RFI Squared partner, American Dark Fiber, or ADF. ADF will be constructing 10 segments that total 380 miles throughout the state in a joint build effort. And CDT held its kickoff meeting with ADF last month. ADF has already started construction on one segment and anticipates starting construction on more segments by the end of this calendar year. Similarly, the committee may also remember that CDT already has a

partnership with CVIN for the development of more than 2,500 miles of the network. But since July, CDT has signed a contract amendment with CVIN for the development of an additional 158 miles of the network, again, consistent with the plan that was presented at the July MMAC. And then lastly, we're very excited about this. We're pleased to announce that since we last met, CDT signed an IRU lease agreement with the Yurok tribe for a 48 mile segment. This segment will run along State Route 101 through Yurok Tribal Land and in the counties of Humboldt and Del Mar. Altogether, new partnerships such as these and combined with the existing RFI Squared partnerships are expected to comprise more than 7,000 miles of the MMBI network. Next, I want to turn it over to Shannon Martin-Guzman, our project delivery manager, to provide updates on the status of each of these partnerships.

Shannon Martin-Guzman: Good morning chair and members and thank you for the opportunity to present today. I'm happy to be here to highlight the progress we've been making towards building the middle mile broadband network. As of today, as Mark mentioned, we are actively installing over 1,800 miles of underground infrastructure across the state, which includes vaults, conduit, and fiber optic cables. This is a big achievement for the program, and we wouldn't be this far along without our Caltrans and RFI Squared partnerships. In the following slides, I will be providing a brief overview of the RFI squared partner projects, along with the progress we've made since we met at the July MMAC. And slide eight, please. One more. All right. The first RFI Squared partner I want to highlight is one of our newest, American Dark Fiber. American Dark Fiber is a lease partner with 10 segments throughout the state, totaling 380 miles. These routes traverse through Tehama, Plumas, Lassen Lake, Mendocino, Yellow, San Luis Obispo, Ventura, Los Angeles, San Bernardino, Riverside, Imperial, and San Diego counties. As you can see, they cover a lot of real estate across the state of California. They are currently in the pre-construction phase for nine out of the 10 spans and have actually commenced installation on the route in San Diego County. They're expecting the complete construction of all 10 segments by quarter three of 2026. Next slide, please. Our next joint build partner that we would like to report on is Arcadian. Arcadian, as shown in pink on the map, has over 1,000 miles throughout the state. They are still primarily in pre-construction for most of the assigned miles and are estimated at a little over 70% complete. In addition, we've had four groundbreaking events for smaller spans that cover Los Angeles, Willits and the most recent in Sacramento taking place. Arcadian plans to kick off the remainder of construction in the first half of next year and are targeting to complete all installation by the fourth quarter of 2026.

The Chair: Can we just hold just for a second? Can I verify, did we lose connection to, there we go. I wanted to make sure that we didn't lose connection to the public. So, oh, there. And I also want to recognize Member Boerner has also joined us. Nice to see you. Thank you. All right. Thank you. Continue.

Shannon Martin-Guzman: Next slide, please. Our next partner that we'd like to highlight is Zayo. Zayo is a joint build partner that is currently in the installation phase under the 194 mile segment in Northern California, running along Highway 395. As you can see on the map, this segment traverses through Modoc, Lassen, and Sierra counties. Since July, they have completed 58% of their insulation, which equates to approximately 111 miles of infrastructure in comparison to being only 5% complete in July. Sales moving

along quickly. They are forecasting the complete installation of all 194 miles in the first half of 2025. Next slide, please. Our next partner is TPN-299, also known as Trans-Pacific Network. They're responsible for 171 miles along State Route 299 and traverse through Shasta, Trinity, and Humboldt counties. They made great strides in installation this year and have installed 153 of their 171 assigned miles. They are on track to install all miles by the end of this year with associated hubs coming in late 2025. Next slide, please. Our next partner, Boldyn, is responsible for 82 miles of leased fiber in the Bay Area. They have a total of six segments, two of which have already been completed, one that runs from San Francisco to San Bruno, and another on Spear Street in downtown San Francisco. While the remaining four are in the installation phase, which includes spans that run from West Oakland to Walnut Creek, Oakland and Fremont, San Leandro to Dublin, and Richmond to Oakland as well. Boldyn is forecasting to have all miles installed by the end of Q2 2025. As of today, they have completed a total of 47 of their 81 assigned miles. Next slide, please. Our next partner is Lumen. Lumen has the second largest build within the program and is responsible for almost 1,900 miles of the middle mile broadband network with both joint build and lease components throughout the state. The lease miles are in blue, as you can see, while the joint build miles are highlighted in pink. Lumen primarily has existing infrastructure in the ground, so they've been pulling fiber into existing conduit as part of their scope of work. Installation is currently in progress for nine of the 20 assigned segments, totaling 876 miles. These segments include spans that traverse through El Cajon, run from Sacramento to Palo Cedro, Los Angeles to San Diego, span in Napa, San Jose to San Luis Obispo, Bloomington to Rialto, Oakland to Sacramento, and Santee to Lakeside, which is nearing completion. As of today, Lumen estimates that all conduit vaults and fiber will be installed by Q3 of 2026. Next slide, please. Our next partner is one of our tribal partners in Hoopa Valley. They are currently responsible for a joint build of approximately 23 miles in Humboldt County along State Route 96. They're currently 60% complete with their pre-construction activities and plan to have all pre-construction wrapped up by March of 2025. With the estimated construction start date in April of 2025. Hoopa is currently forecasting to have all miles installed by Q4 of 2026. Next slide, please. Our next partner is YTel, and they are another tribal partner that represents the Yurok tribe and signed an agreement with the program to lease 47 miles that run from Orick to Crescent City in late July. The route passes through Yurok tribal land, Humboldt and Del Norte counties and runs on in adjacent to Highway 101 in the northwest corner of the state. They're currently at 75% complete pre-construction and working on obtaining necessary permits to start installation by the end of this year. Next slide. Our next partner is Siskiyou Tel. Siskiyou Tel is responsible for the installation of 164 miles of infrastructure in Northern California in Siskiyou County. They're currently at 75% complete of pre-construction, which is an increase of 15% since the July MMAC, with plans to kick off construction in Q1 of 2025. Next slide, please. Vero. Vero is a joint built partner who has two segments totaling 24 miles in Humboldt County along the Northern California coast. One segment has already been completed that runs along the east side of the Arcata Bay. And the second segment, also known as the Trinidad Spur, recently started installation on October 2nd. Installation is currently forecasted to be completed in Q3 of 2025. Next slide, please. All right. Our next partner is CVIN. And CVIN is our largest partner with over 2,600 miles of infrastructure leased throughout the state of California and was able to obtain an additional 158 miles through the most recent RFI squared solicitation. The current scope of work consists of a combination of a little over a thousand miles of existing

infrastructure and a little over 1600 miles of new construction. As of today, this CVIN project is 85% complete with pre-construction activities and has started an installation of infrastructure on 14 of 91 segments, which equates to over 400 miles throughout the state. CVIN also plans to start an additional 11 routes by the end of this year. Next slide, please. The next partner we'd like to highlight is Digital 395. The slide displays the Digital 395 network that we are purchasing from the California Broadband Cooperative. The network operates along the Highway 395 corridor totaling 435 miles and 11 huts that runs across San Bernardino, Inyo, and Mono counties. We're on track to complete this purchase by the end of the month. And once we formally close out the transfer of ownership we will begin some prep work on the existing 11 hubs that will allow us to install our electronics, which is targeted for early 2025. Next slide, please. All right, the next slide highlights the government to government partnerships that have recently been executed or are nearing execution of a formal agreement. As highlighted in the RFI Squared updates, we recently signed a contract with YTel, a telecom company owned by the Yurok tribe, for 47 miles of leased infrastructure in Northern California. We continue to look for ways to partner with various tribes and municipalities in order to achieve the goals of this project. This includes joint builds opportunities, as well as placing some of our hubs on the tribal land or property owned by local municipalities. Some of the tribal entities that we are currently collaborating with include the Karuk tribe, Santa Ynez Band of Chumash Indians, the Quechan Indian tribe in Fort Yuma, the Coyote Valley Band of Pomo Indians and 29 Palms Band of Mission Indians of California. In addition, we are in active negotiations with Ventura County, City of LA Bureau of Street Lighting and the City of Fort Bragg an anticipate executing formal agreements in the coming months. That concludes the RFI Squared partner updates. First, I'd like to open it up for questions.

The Chair: Thank you, Mr. Martin Guzman and Mr. Monroe. A lot of progress. You know, we are obviously building the largest, California is the open access middle mile, but I would say you are far, far ahead of many, many other states on delivering something so large. So, my hat's off not only to you, but also to all those partners that we just saw. Without them, you know, connecting communities would be very difficult. So, my hat's off to everyone that's decided to be a partner with California. We appreciate it. I would like to open it up to any members on the dais who have maybe questions or comments before we go to the next section.

Director Perrault: Thank you for the report. And I echo The Chair's comments. This is a huge lift in a very, very large state. And particularly I just wanted to lift up the good work that I know we're doing with all the partners, but particularly with our tribal partners. This is an amazing opportunity for us to be able to lean in and work with many of these tribes to do some of this work that I think ultimately is going to benefit some of their communities. Great job there. Quick clarifying question for you. And this is just because I'm still a little new and so I don't know if I understand all of the logistics and intricacies. But on the Digital 395, that's a purchase, and you said then we'll be purchasing it and then we'll be doing the improvement. Is the "we" Caltrans?

Shannon Martin-Guzman: CDT

Director Perrault: CDT okay. I was just trying to figure out who the "we" was as far as who was actually going to implement the work. You said there's some improvements that have to be done to the hubs as well as, okay.

Shannon Martin-Guzman: Yes. The Digital 395 route was essentially a turnkey solution for the program. We were able to purchase the existing infrastructure along with the 11 hubs that run along that route. And we just weren't looking to upgrade the HVAC systems and make sure that the current hubs are up to code and compliance and ready for the network.

Director Perrault: Perfect. Thank you. And again, a nice opportunity to leverage something that's already there. So great. Okay. Thank you so much.

The Chair: Yes, President Reynolds.

President Reynolds: Yeah, thank you. I also wanted to echo the appreciation and thanks for the presentation and then recognize the incredible work that's been done. The progress really is amazing when we think back to where this project started. And then I also wanted to highlight what I can tell is a lot of joint work with the last mile projects. And I know that the tribes and some of the other local communities and in Yurok in particular, some of these tribes have received technical assistance grants. So you see this, the presentation that you just made building on the prior work that we've done. So this has been a progression from the beginning where we've started to build capacity, communities and tribes and then now we're kind of pulling it all together. And so I just wanted to recognize that and really appreciate all the great work. Thank you.

The Chair: Thank you. Are there any members online that have any questions or comments? All right, I see none at this time, but I know that all of them are very vocal if they have questions later on through the other parts of the presentation. The next section we have is stakeholder engagement. There's a lot going on in that front. So we will go ahead and have Monica Hernandez give a presentation.

Monica Hernandez: Thank you. Good morning, everybody. It's my pleasure to be here. Good morning to our members online as well. Next slide, please. I know this is a repetitive slide, but I really think it's important for those folks who are watching online and following along and then also recognizing that we meet on a quarterly basis and all of you have a lot of other responsibilities. The initiation of the middle mile stakeholder engagement meetings was really to create a venue for stakeholders who were coming to the Middle Mile Advisory Committee, making public comment. And as you know, none of you are able to respond to those. And it was just very frustrating for a lot of folks. We also recognize that stakeholders were not getting the information that they needed to either advocate or communicate on our behalf to their community and to their stakeholders. So earlier this year, we started stakeholder engagement meetings that are scheduled on a quarterly basis. They follow after the middle mile advisory committee so that you all hear the news first if we have news or if we're having issues or challenges. For example, when we had the outcomes of the budget and how that was going to inform the middle mile broadband network that was discussed here. And then the following week, or actually maybe even the same

week, we held our stakeholder meeting off schedule because that was just a critical point in the program that they needed to hear. So next slide, please. We closely mirror the Middle Mile Advisory Committee agendas, but not always. Our invitation list continues to grow. And we've noticed a modest decrease in attendance so we're kind of tracking that. We do provide agendas ahead of time. Based on stakeholder feedback, we implemented the opportunity to submit questions ahead of time so then we can fold those into our presentations. Often those questions we receive ahead of time result in a separate meeting with that specific stakeholder, depending on the topic. Here's a quick breakdown of our presentation. And interestingly, we're seeing this downward trend. So internally, we're asking ourselves, why might that be happening? And I'll get to a little bit of that when we look at our evaluation results. So again, we had a successful meeting, with approximately 45 attendees. And if I could have the next slide, please. Here's a snapshot. We actually changed some of the questions we asked in our meeting evaluation. Frankly, wanting to know, is our trending downward of attendance because people aren't finding value? Do they want these meetings to not go on? You can clearly see that the meetings should continue. I will note that we only had nine survey respondents out of our 45, but we do want to get the feedback because this will not be successful unless we are listening to our audience. So this is just one of the questions we asked, but I think it is most relevant to you. Interesting that some folks are saying it's not valuable. It's not worth their time. And we asked open-ended questions as well to understand what might not be working. When we asked attendees what else they would be interested in hearing about, we heard about the connections with FFA applications and the Middle Mile Network, what work is happening there. Broadly, looking for more details. So I will note that what you heard from Shannon is very much aligned with what our stakeholders hear. And there was also interest in more Caltrans updates and you know, I was left a little stuck, quite frankly, because we're sharing the same information which from where I sit is quite thorough. So we're trying to pick a little deeper of like, what are the details that you're thinking we have that we're not sharing or where are we missing? So if I could have the next slide, please. And in true form, I wanted to share some verbatim comments that we received. You know, if we want to build trust and continued engagement, we have to be honest with what people like and what people don't like. So we have both our positive and less positive. One of the comments you see here where they're saying, you know, you're just mostly talking about construction or installation, it's a bit of a challenge because that's the phase we're in. We are making progress. We've really extended beyond that pre-planning component so looking forward, we're going to continue to give a lot of construction updates and then we'll move into huts and electronics. So we have a ways to go where we want to keep these folks engaged. We do encourage questions during presentations. After each presentation, we also take a pause to invite more questions. And because these meetings have actually gotten fairly short, we haven't had a lot of engagement. We actually stayed online at the end just kind of waiting like for any questions, encouraging them live through the chat. So it was a little bit of a, I don't know how long to stay on a Zoom where nobody's talking and nobody's asking questions, but I just want to note that we are trying to meet the stakeholders where they're at whenever possible. We did stay on for approximately five minutes at the end of the last one so maybe the stakeholder who was concerned didn't stay on the whole time. One thing that I want to share with all of you is that we still have some stakeholders who are quite frustrated. And I would say disappointed. These are the

stakeholders representing the communities where we had to, we don't have the sufficient budget, or they don't have the FFA grant application. They don't meet that criterion that informed the final 8,000 mile network. So as a reminder, in July, we had our presentation here from Mark. We had that presentation also for the middle mile stakeholder group that laid out the budget language and statutory language and the reality of we had a vision of 10,000, but this reality resulted in a final 8,000. So we have folks all across the state who are telling us and coming to us quite frustrated. We try to meet with them one-on-one in a group and kind of walk through why the miles in their community are not part of that 8,000. Oftentimes it's because they did not have an FFA application indicating that they would connect to the middle mile. So I want to share that with all of you because I sympathize with these folks. We continue to look for other resources. We have communities that have been working on local broadband plans and they feel pretty stuck. So I just think it's important for all of you to know that we're trying to communicate with these communities. We understand their frustration. As you all know, the decisions on the final network were not a qualitative choice. It really was what the statutory requirement and guidance was and what was the budget available. And we were thankful that we are able to have these innovative partnerships that really maximize the public dollars to reach 8,000. Had we not done that, perhaps the network would be smaller. So I just think it's very important that we acknowledge that we still have communities who are disappointed and we're trying to meet them where they're at and again, we support them and a lot of thanks to the public utilities commission for the many, many programs that they have, and they're a continued great partner. So thanks to your team for helping with that. And can I have the next slide, please. And this is a bit of a navigation slide that will lead you to a new public document that we are creating on a monthly basis. We are creating a middle mile fact sheet. So if you navigate to cdt.ca.gov., you click on Initiatives, you'll see the Middle Mile Initiative. You can click on there. And at the top of the Middle Mile Broadband Initiative landing page, you will see this and online it's showing orange here. It's a white box that says fact sheet. If you click on that, you will be able to look at it and if I have the next slide, please. This new downloadable fact sheet which we're very excited about showing the progress of how we are moving month over month. This will be updated in the same cadence and posted online as our What's New section. Just as a reminder, that's every fourth Monday of the month. So we're very excited about that. And this is an accessible document as well for anybody who is listening online and downloading it. We did prominently place, and it's quite large in the top right corner, the fact sheet date, just because we are going to be creating these monthly. We want to make sure that people have a strong reference point to when the data was updated. And to close out my presentation, if I could have the next slide, please. We have a highlight reel of the two groundbreakings that Mark Monroe mentioned earlier, and I will let the video take it from here.

MMAC Video: California has embarked on a groundbreaking initiative to build the nation's largest middle mile broadband network. Going through all 58 counties, the network is rapidly expanding toward more than 8,000 miles of middle mile connectivity across California. Since July 2024, the Middle Mile Broadband Initiative has broken ground on three new segments. Bringing us one step closer to closing the digital divide. In San Jose, we began work on the capital route. This route will connect communities across Silicon Valley, supporting both innovation and opportunity. This is

the route that we'll begin in San Jose. And then at the Nevada state line in Kings Beach. So right now we're connecting the conduit to pull back as far as the shackles we're putting them on. We're going to start pulling back the conduit once we get to our exit peg. So that's where the drill head is right now over there. It's approximately 20 minutes away. So we're getting everything prepped and start pulling back the microdot. In Willits, the Redwood Route stretches 280 miles through Northern California connecting rural communities to vital digital resources. This is really important that we're going to be able to have broadband in our community and allow equal access so that even children in rural communities have access to communications with their teachers and outside the area. it really does take everybody doing their part together to build this. Every community along is going to carry bandwidth that's going literally across the plane. And in Sacramento, work on 256 miles of the Capitol Route continues. Ensuring our state's capital region remains at the forefront of connectivity and progress. The COVID-19 pandemic truly showed us how dependent we are on the internet and how important broadband access is for equity, how important broadband access is for our families and making sure that everyone can get connected. We are the fifth largest economy in the world. And what broadband will bring is new opportunities to build economic development. It could be where tribes are, where they don't have electricity, now we're bringing internet to those areas. It should not matter where we came from. Some of us came from small towns. If you are urban, if you are rural, if you are suburban, California should have internet for everyone. California is not interested in temporary fixes, but a sustainable solution that will benefit our residents for generations to come. This project is a testament to California's culture of innovation, where government, private industry, and community organization come together to solve complex problems. In the next three months, the Middle Mile Broadband Initiative will kick off construction on over 30 new segments. Adding about 1500 miles of fiber building toward more than 3,200 miles in active construction by the end of 2024.

Monica Hernandez: I'm happy to take any questions or comments. As you can see, we're very proud of the construction progress that the team is making.

The Chair: Thank you, Ms. Hernandez. Yeah, it does really resonate with all of us. We sit in our cubicles and our walls and make decisions, but when we go out to the communities, we hear from the mayors and talk to the workers it is just amazing to see the progress. And it's like this buzz and excitement that's happening across the entire state. And I know that President Reynolds is probably testament is actually when she talks about the communities and households that are connecting because we have the middle mile, but without the last mile, we aren't getting to the communities that are such need. So thank you so much for all your hard work. I will open it up to my colleagues and the members on here. First, are there any questions or comments that anybody has?

President Reynolds: Yeah, thanks. Maybe just a quick question and really appreciated the overview. I think it's important for us to continue to hear what you're hearing when you're having these community meetings. So that description of some of the comments I thought was very useful. Just a quick question on what you expect for the next steps for that stakeholder group. You may have said, but I missed kind of what will the cadence be for the future or I know that you're taking input because you want to

work on continual improvement, but if you could just let me know a little bit more detail on that.

Monica Hernandez: Absolutely. At this time, we still plan on continuing that quarterly cadence and expanding. And one thing that I think Mark would agree with, I hope he would agree with, is the asking for questions in advance, I think it has really helped us respond to the questions and then also better meet stakeholder needs. As I mentioned, we get some questions and it's like, oh, we really need to meet with this group. We need to have the conversation just with them, either it's going to be a difficult conversation, or it may be too basic, or too early or maybe it's a stakeholder that just kind of got in and is trying to figure out where they fit in with this work or this project. So we're going to continue that quarterly basis, again, following and mirroring closely to the MMAC and hopefully creating that opportunity where stakeholders can ask more specific questions. Shannon gets a lot of more detailed questions. One thing that will, I think, remain a challenge is a little bit of the forecast that we do, our stakeholders want more certainty on, oh, construction will 100% start on this specific day or time. And it's just, we can't do that. The team is fantastic and are looking at a few months window. So we're going to continue to just be very honest with that of, you know, here's the target, here's some of the factors that could advance it and make that groundbreaking sooner or later. And then I think it's really important as we move forward to communicate that we have the Hudson Vaults installation as a part of this. So you can't just put the fiber in the ground. Then we have to go through significant electronics installation. And then, of course, we have to do a lot of testing. So I'm anticipating that folks who maybe aren't as familiar with how to build a broadband network and get it operational, myself included, I'm one of those people, but I get the inside learning. I want to make sure that our stakeholders understand that we're putting fiber in the ground, but we still have more work to do to get that system operational. So I think it's a balance and it's also a balance, President Reynolds, that your team has as well with a lot of the grant making that they're doing. Thank you.

The Chair: Thank you. Director Perrault.

Director Perrault: Thank you. Thank you for the follow-up. I think that that's important. I'm going to continue to think that perhaps maybe you guys have done just such an amazing job with your outreach that that's why you're having less folks because the questions have been answered. But, you know, we'll go with the positive. And then I have a little bit of a selfish request on that fact sheet. I know you said it's online, but I'm going to be honest with you. I will forget it. Is it possible you could have that email to the panel? It's a nice resource to have available when folks ask some of these just common questions about what the progress is, how many miles, what does it look like.

Monica Hernandez: Absolutely, we'll do that for all the members. Thank you.

Director Perrault: Thank you so much.

The Chair: Thank you. And I see two members online. First, Supervisor Starkey.

Supervisor Starkey: I thank you so much. Ms. Hernandez, this is very useful, and I love hearing the feedback from the communities because I think we make our decisions, I'll

start my video, sorry. We make our decisions based on what we hear the feedback from our communities and it's very important. I really don't have a question. I really want to make sure that you know the hard work that went into all the slides and the video, all of that is very, very much appreciated. And you said something about people who always want certainty. And I agree, people want certainty. That is what's requested. But I find that people really like honesty. So keep up that good work. Keep just being real with the information that's getting put out there. And I just wanted to express my gratitude.

Monica Hernandez: Thank you very much.

The Chair: Thank you, Supervisor Starkey. Supervisor Alejo.

Supervisor Alejo: Also, Ms. Hernandez, thank you for the work being done by the entire team. I appreciate the video because I always say nobody's going to tell our story but ourselves, right? So I think it's incumbent upon us at every opportunity to use those photographs, the video that was just shown. To tell the story that we are making progress and that it's significant and that we are on task to complete this work by the end of 2026. That video, where is it available? Is it posted on our website? I looked right now, and I couldn't find it. Where else can the public be able to see this information you know, outside of this meeting.

Monica Hernandez: Great. Thank you. This was the premiere, so it's not posted yet. This was the grand premiere. So it will be posted on our website and we will be posting it to LinkedIn and X as well this afternoon. But we can share the direct link when we send over the fact sheet as well.

Supervisor Alejo: Appreciate it. And in that second part, I agree with Supervisor Starkey on just the opportunities for our public and the stakeholders to weigh in. And I think this is part of our story that as we went and embarked on this journey to carry out this major infrastructure project of fiber throughout our state, we try to provide as many opportunities as possible to provide feedback and have their questions answered along the way. So I just want to thank the staff for doing that. And I also appreciate hearing what is being raised at these meetings. Obviously, I should have saved concerns that our funding limitations are only allowing us to build out the 8,000 miles. There are 2,500 plus miles that we don't need to get done, but because of the limitations and the statutory requirements, we're limited to that. But I want to echo that as one of the advisory members, I hope that at some point we finished what we started in finishing the remaining 2,500 miles as well. I want to hear that those communities that are impacted are raising those concerns and why were they not funded? Obviously, the answer is obvious. The money wasn't there but in future years, I think that it should be our goal as an advisory committee to encourage our governor and the legislature that as soon as there's an opportunity to provide the funding so that we complete the project in its entirety. So I just wanted to echo those statements from those community members. Because we all know we still need to finish that portion at some point in the future. Thank you.

The Chair: Thank you, Supervisor Alejo. Are there any other questions before we go to the next update? I see. Oh, yes. Assembly Member Boerner.

Assembly Member Boerner: Thank you so much. I really appreciate the outreach. I wanted to ask you when you were doing all the stakeholder feedback and you were doing this, are people differentiating the middle mile from last mile? Because, you know, the middle mile is only as good as the last mile connection is. And so I could think it would be very difficult for normal people when they come into these rooms to conceive of a middle mile that we're building out, but they're not clear about what that is going to mean for everyday people or their community.

Monica Hernandez: Yeah, thank you for that question. And I would say yes, the majority do. When we did our outreach, we specifically started with folks who were already engaged and I would say are very sophisticated stakeholders in terms of middle mile and last mile, the layering of grant opportunities, the planning, construction. At the onset, intentionally created this to not include local governments. This was really meant for the community stakeholders, advocates who had been part of the process. Over time, though, more government entities have joined in, and we don't see a reason to exclude them. So again, it is a sophisticated stakeholder group but still needed more information and did, I think, warrant this extra attention. And they're also messengers for us as well. And if we're not communicating to them on our progress or our challenges, then they're right there living in communities we're not reaching out further. So yes, they definitely understand the intricacies and the connection between the last mile and the middle mile.

Assembly Member Boerner: And I get that. I get that these are sophisticated stakeholders. When I go out to my community in San Diego County, and I talk to people about the middle mile, no one knows what I'm talking about. So if there's a list of people from San Diego who attended, it would be great if you could send them over to my office because I don't know of one advocacy group in San Diego who's ever come and talked to me about middle mile or to be frank, broadband at all and so that would be helpful to understand. I do worry that these sophisticated stakeholders with the middle mile, last mile differentiation don't exist everywhere in the state.

Monica Hernandez: I would say that's correct.

Assembly Member Boerner: So there's parts of our state who are being left out of the conversation, not intentionally from anything you can control. It's because they just don't have the advocacy organizations that maybe the Bay Area or LA or maybe some of the rural counties have. And I'm sorry you're seeing my messy kitchen behind me, so I apologize for that.

The Chair: We see the beautiful flowers or something. So we're all good. Thank you. All right. Thank you, Ms. Hernandez, for a great presentation. We are going to go ahead and shift to HR&A advisors, Preston Rhea, who's going to give an update on our last mile customer outreach and kind of where we are in relation to that connection to the people and the faces that are going to use this. Preston.

Mark Monroe: Actually Ms. Bailey Crimmins, if it's all right, I want to kind of do a quick high level walkthrough here.

The Chair: Absolutely.

Mark Monroe: And thanks again to Monica for that exciting presentation and it was great to see the shots of the physical progress being made. As noted, before we move to the next section on CDT's recent customer research effort, we wanted to remind the committee members that CDT is continuing to look towards the operation of the network. This includes several simultaneous efforts CDT has going, that we wanted to take a moment to review. The first CDT has recently completed its customer research effort that Mr. Rhea will be talking through in a second here in partnership with the Broadband Equity Partnership. This has aimed at getting a better understanding of the interconnection and service needs of potential last mile customers. BEP has been instrumental in this effort, and Preston will be providing a summary of the outcomes of this effort next. Secondly, CDT is working with Golden State Net on a limited marketing effort, which involves continued efforts to reach out to FFA grant recipients and other potential customers regarding the need for connection to the MMBI network. providers are normally planning several years into the future for how they connect to the network as it develops. So it's important to start these conversations now. And so at the end of his presentation, Erik Hunsinger of GSN will also be providing an update on this. And then lastly, we want to remind everyone of CDT's ongoing effort in terms of securing a long-term operations TPA to begin operating the network when it comes online. All three of these efforts reflect CDT's look forward to the eventual operation of the network and over the next couple of years before the December 2026 deadline. With that, I'll turn it over to Preston Rhea.

Preston Rhea: Thank you very much, Chair. Thank you, Mark. As Mark mentioned, BEP in collaboration with CDT and with GSN engaged potential customers of the Middle Mile Network who operate Last Mile Networks themselves through two different channels. If you move on to the next slide, I'll describe these channels, what we found through these channels and the next steps for MMBI. So we conducted customer research with, as you can see, 103 unique organizations through two channels. We held interviews with a range of different potential customers of the Middle Broadband Network, and we also sent out a survey which was amplified through the help of the CPUC's carrier list, as well as some industry groups that pushed the survey out to ISPs. The purpose of this customer research effort was threefold. We wanted to understand the ways that potential customers were thinking about interconnecting with the middle mile broadband network once it's concluded. We wanted to know which services they were interested in using from MMBN. And we also wanted to do some one-on-one relationship building with these potential customers now in anticipation of when the operations TPA comes on board. You can see here the different range of the types of entities that we talked with. There was a plurality of those that were ISPs, there were also county municipal governments. We've reached out to tribal governments and other public agencies as well. And as you can also see there in the bottom right, of those unique organizations, 31 that we contacted and had conversations with or heard from the survey are FFA applicants. So we have a priority focus on FFA applicants. Next slide, please. So through these conversations and through the survey, we confirmed that potential customers told us that there is a strong need for MMBN services. They told us that in the current state of things, they are having a hard time with the lack of availability of middle mile services, and the lack of

affordability of existing middle mouse services. They also expressed a need for MMBN to exist and to be able to use MMBN services in order to realize their FFA, their BEAD, their ARDOF, and their Reconnect projects in the last mile. They also described MMBN as being vital to making their last mile projects viable in general to connect more households ultimately to broadband in California. They look forward especially to MMBN offering further resiliency and redundancy for their own last mile networks where they may only have one path out to the internet now or one provider that can offer services they need for uplink. And they also expressed to us interest in every potential service that MMBN is currently offering in the draft MMBN product catalog. Customers also said that they want to understand how MMBM will balance its goals. They're eager for MMBN to be present and to be present for a very long time. They understand that MMBN per SB 156 has to be financially sustainable on its own terms. And they want to make sure that prices are commensurate with being sustainable while also, as SB 156 says, being at or better than the market rate. And they also, as we've heard today through other stakeholder channels, they're very interested in more details, details on service pricing, details on the specific routes, and details on the timeline to activation of service. They are especially eager to understand how to realize their last mail projects, they're going to build laterals to connect to MMBN and how those can be realized. Next slide, please. So from the outcome of the customer research that we did and the connections that we made with these different potential customers. MMBI is going to continue to engage with those potential customers. They're going to continue to have conversations to get more specific about exactly the services that they're going to want and to keep those conversations going in anticipation of the operations TPA coming on board. Also, as we anticipate the operations TPA coming on board, we're going to continue to take in real market information of the services that these potential customers currently purchase. So that we have a stronger picture of the market for those services and what those services cost. And to use that information to support the operations TPA to make its final product catalog. And finally, we're going to work closely with them. CDT will work closely with them to finalize how interconnections will happen between those last mile providers and with MMBN to identify specific locations and the methods of interconnecting via laterals. That's my update from the customer research so far. The Chair: Thank you, Mr. Rhea. Any questions from any members on the dais? I see none. Well, are there any questions from any of the members online? Yes, Assembly Member Boerner.

Assembly Member Boerner: Yes, I'm not sure this is the right place to ask this. When we're looking at the pricing framework, this is at this point, this presentation is just giving the feedback from people who would use the middle mile. And so when I think about it, I'm concerned about that pricing structure. Could you go into more detail or is that a different presentation?

Preston Rhea: Yeah, the data that I mentioned that we were going to take in is just the prices that those potential customers are currently paying. The operations TPA ultimately is going to be the entity selling the services. I think Mark was going to mention something about that.

Mark Monroe: Yeah, so it's a great question. It's something that we're trying to move to now we're into construction as we look ahead here, we're looking for how create that

right structure. But yeah, that is correct. Ultimately, as we bring in the operations TPA, they will be instrumental in helping us determine that pricing. And so I think that the key thing that we point to is that one of the major determinants of pricing in the market is having to make back the capital costs that were expended, and we don't have to do that. And so I think that's the biggest component for how we expect this to really drive down costs and this to be at or below market value in terms of access costs.

Assembly Member Boerner: Okay, thank you.

The Chair: Yes, Ms. Perrault.

Director Perrault: I'm going to follow up that question. I know it's going to be surprising coming from the Department of Finance. And I don't want to put words in your mouth, so I want to make sure I'm understanding from the operational standpoint, and I know we're not there yet. The intent would be that the costs, the pricing, would cover fully the operational overhead. Is that correct without any subsidy?

Mark Monroe: That is correct. That is the goal that we are working towards.

Director Perrault: And I recognize we're seeking a balance, right? We're trying to make sure that access isn't hindered because it's cost prohibitive, but in our ideal, I'm trying to figure out if that's what the plan is from an operational standpoint.

Mark Monroe: Yes.

Director Perrault: Okay, great.

The Chair: Excellent questions. All right. Supervisor Alejo.

Supervisor Alejo: Yeah, Mark, I'm sure this is the point to bring this up, but could you just talk about our operations plan that is due at the end of January of next year, and the progress that has been made to complete that other requirement out of the work that we're doing.

Mark Monroe: Yes, absolutely. And thank you for that question. To remind everyone, I think I want to say it was SB 108. It might have been AB 108. But it was one of either the budget trailer bills or one of the versions in the budget, but basically required CDT to do three reports. One of them has been completed, another is currently being reviewed. And the third one that I believe you're referencing, Supervisor Alejo, is kind of characterized as a business plan. It's really an attempt to look at what it's going to cost to operate the network. And obviously, until we have an operator on board, a lot of the information is going to be somewhat preliminary. But by the January 31st, I believe, is when it's due. And so we're in the process of working on that right now as we've been working on these other reports as we move towards January, we're still planning on obviously meeting that reporting requirement. And then we hope by then to be able to have better information for the kind of the scope of what those costs could be. And again, and it will be a range, but so in answer to your question, we are working on that. And that is something that is expected January 31st.

Supervisor Alejo: And will this body have a presentation on that at our next meeting, I believe, I know if our next meeting is in January, but will we have an opportunity to have a presentation on that report before it's finalized?

Mark Monroe: I'm sorry, I'll have to get back to you on that. As you noted, I think it's the third week in January will be our next MMAC meeting. That will be prior to January 31st. So I'd have to see kind of what the schedule looks like and what the internal process review process looks like for that. So if it's all right, I'd like to get back to you on that.

Supervisor Alejo: Thank you.

The Chair: Great questions. All right, we are going to go ahead and shift to Caltrans. And so Caltrans, this is the third agenda item, and we are lucky enough to have Jeff Wiley here to give us an update on all the things that you are working on.

Jeff Wiley: Thank you. Good morning, Chair Bailey Crimmins, committee members, and other public participants. My name is Jeff Wiley, and I serve as the Assistant Deputy Director for the Middle Mile Broadband Initiative at Caltrans. Today, I'll walk you through the progress we've made and the work that's ahead as Caltrans moves closer to delivering our parts of this transformative initiative. Next slide, please. I plan to cover three major areas. Our current pre-construction and construction status for the Caltrans portfolio of the middle mile fiber builds that cover 770 miles of the network. I'll also cover the pre-construction status of the 112 network hubs that Caltrans has the responsibility for completing the pre-construction work on. And then our progress on issuing encroachment permits and providing the construction oversight for the installation partners that plan to use the Caltrans right-of-way. Next slide, please. Going to begin with an overview of our fiber installation efforts. I'm happy to report that Caltrans continues to make significant progress in the pre-construction phase of its 770 mile fiber portfolio. The bottom bar represents how far along we were at the last MMAC meeting. Which I reported that 65% of the pre-construction tasks were completed. As you can see from the top bar, Caltrans is currently through 85% of the pre-construction tasks and is working to deliver more miles into construction. Caltrans will continue to push forward and overcome the challenges with the goal remaining to have all projects under construction as soon as possible. Next slide, please. This slide provides a breakdown of the Caltrans pre-construction progress by Caltrans District. Each of the district teams are continuing to complete tasks and move their projects forward, getting the infrastructure to construction. You will notice on this slide that Districts 8 and District 9 are not displayed on the chart. This is due to Caltrans not having network miles to deliver in those districts. However, you will see those districts show up in later graphs. As every Caltrans district is involved in the middle mile broadband initiative in one way or another. Next slide, please. This slide is highlighting the Caltrans pre-construction delivery schedule by CDT region. On the right side of the map, sorry, on the right side of the slide is the map of California. It shows the Caltrans builds in green. With the context of the entire middle mile broadband network in yellow. The Caltrans build connects a lot of the hard to reach communities to the middle mile network. It also is connecting portions of the partner builds to make a full middle mile network throughout the state. From the table, you will see that some of the

miles have been pushed into the first quarter of 2025. While this is not ideal, it has become necessary as we've had to account for adjustments in the project limits that have required resubmission of some of our permit information. Also, design changes that became necessary as we encountered unforeseen location constraints within our design process. Though some of the pre-construction has been pushed past December of 2024, the funding being used by the Department of Technology is not in jeopardy due to their proactive management. In addition, there are no impacts to meeting the December 2026 completion deadline. Next slide, please. Caltrans is getting fiber into construction. This slide highlights by CDT region the amount of miles in which Caltrans has in construction. To date, there are 62 miles of the Caltrans build under construction. With most of those miles being in CDT Region 1. That is in the north of the state. Well, it represents just the beginning of our construction activities, it is a critical step in bringing the goals of the Middle Mile Broadband Initiative closer to reality. In future MMAC meetings we will continue to report on this progress and watch the in construction numbers increase, while the infrastructure that's remaining decreases. Next slide, please. I always like to show in these meetings what the construction process looks like. So here we have a slide showing the construction along Highway 29 in Lake County. If you look at the upper left and the lower right pictures, you can see what it looks like to be trenching and using our trenching method of installing fiber in the non-paved areas that are adjacent to our right-of-way fence lines. In the middle picture we show how the trenching takes place within the traveled way as well as the use of a slurry cement structural backfill to ensure the roadway integrity. All of this type of work is done with the use of roadway or lane closures to ensure the safety of our worker crews. The upper right picture shows the last part of it in which we are actually blowing fiber through the installed conduits. Next slide, please. So Caltrans is also responsible for completing the pre-construction tasks on 112 of the 132 network hubs that are critical to the middle mile network. This slide is highlighting the overall pre-construction progress we have on those hubs. All 112 hubs are moving through their pre-construction tasks. And as this graphic is showing, we are about 54% complete with those pre-construction tasks for the hub statewide. With 46% of those tests remaining. Next slide, please. Like the fiber progress, I want to provide you with a look at how the districts are progressing. Each district faces their own challenges, so they're not always equal in their progress. Note, District 8 and 9 have returned to the graph even though they are not delivering fiber projects. They do have hubs they are responsible for. We are closely monitoring the district's progress and working to resolve any issues as early as possible to avoid delays and keep hub installation on track. Next slide, please. This slide shows the pre-construction delivery of the 112 network hubs and a map of all the 132 hubs. So it's showing a mix of what Caltrans is delivering and the non-Caltrans hubs that are being delivered throughout the state. Specifically talking about the 112 Caltrans hubs, we are currently expecting 58 of the hubs to be ready to construct within quarter one of 2025. With another 42 hubs ready within quarter two of 2025. The 12 remaining hubs will be ready to construct within quarter three of 2025. I'll note here the 12 remaining hubs that are pushed later into 2025, we are just now securing some of those sites so it's later in our design progress. We've had to move those out a little bit. We do remain confident that the network hubs will be constructed prior to December of 2026 and in time for the Department of Technology schedule for the network activation. We are working to ensure any delays are mitigated. Allowing us to keep the hub installations on track. We continue coordination with CDT and GSN to ensure that these hubs align with their

requirements and the Caltrans designs. Next slide, please. Caltrans also has another key role beyond just the design and the construction of the fiber and hubs. Whenever an entity needs access to the state highway system, they require an encroachment permit for that access. Caltrans is responsible for issuing those needed encroachment permits to the installation partners when their installations will be within their Caltrans right of way. This flow chart is a high-level overview of those steps in the encroachment permit process and says that once a project is identified, the partner and Caltrans will engage with each other. This collaboration is an important step to ensure that Caltrans understands their project and the partner understands what the encroachment permit process is. The initial engagement typically ends with the execution of a project agreement which we call a two-party agreement. It outlines the roles and responsibilities of everybody involved. In some very simplified installations, that project agreement may not be needed. When the partner's designing construction plans are ready that package is submitted to Caltrans for review to ensure that all necessary permitting has been completed from FHWA, environmental and other external agencies. And if everything is in order, an encroachment permit is issued, and the partner can enter their construction phase. During that construction phase of the encroachment permit Caltrans provides construction oversight to ensure that the builder follows the terms of the encroachment permit and that the safety and quality of the state highway system are kept. Next slide, please. So the next few slides are our first take at trying to track and report on the progress within the encroachment permits. We are working to show the progress that Caltrans is making with the partners to facilitate their fiber installations within the state highway right-of-way. In future iterations of this slide, we intend to show how many miles of the network build will be covered by those encroachment permits and thus be able to show the number of the miles that have permits executed. From the table, it can be seen that we are in the early stages of the encroachment permit process with the installation partners. It should be noted that not all of the partner segments will require an encroachment permit as not all of those installations will be within Caltrans right of way. Next slide, please. This slide shows our statewide estimate of how far Caltrans is in executing the encroachment permits with the installation partners. Currently, based on our engagements and the number of project agreements that have been signed we're currently estimating that we're about 25% through the tasks needed to issue the encroachment permits. Caltrans will continue working with the partners to issue encroachment permits quickly while still ensuring that all necessary clearances and approvals are obtained for those. Next slide, please. This slide expands on that estimated progress to show the task by Caltrans District. There are partners operating in every Caltrans district. And at least some of those will not require segments that will need encroachment permits. As stated earlier we will be working to improve our reporting on this aspect of the Caltrans role. As permits are issued, Caltrans intends to provide updates on the miles under encroachment and when those installations have been completed. The partnership between Caltrans, the Department of Technology, and the installation partners is key to the broader success of the Middle Mile Broadband Initiative, and we are committed to supporting them every step of the way. This concludes my presentation for the Caltrans portion, and I'm open to any questions.

The Chair: Well, first of all, thank you, Mr. Wiley. I know we've always talked about the construction and pre-planning, but it's great to have a presentation. Now you've

expanded really to make sure the public and everyone recognizes that Caltrans is much more involved than just the miles, right? The hub construction and the encroachment permitting and a lot of the oversight that we just really appreciate all eyes and your experience coming to bear to make sure that this project is moving forward. Thank you for that partnership and like to open it up to any members that have questions at the dais. Comments? Ms. Perrault.

Director Perrault: Just a quick question. So one of the initial charts that you talked about sort of the pre-construction progress, I note that we have 437 miles for the next two months in pre-construction, which seems like that's an aggressive number compared to what we've completed in the past six or seven. How confident are we that you're going to meet that because it's a larger number than in any other reporting period.

Jeff Wiley: It is. And a lot of that has come from those previous reporting periods in which we've had to delay a little bit and delay a little bit. We've been continuing working on those projects. It's not that their new projects cropping up. Getting it across that 95% to 100% can take a lot of effort sometimes. But we are fairly confident in the numbers that we've got. We've been working with the districts basically weekly for probably the last three or four months, meeting with them, making sure if they're having trouble getting something through a permit or they're having something on the design side, we're bringing kind of all options to bear, if you will, to make sure we can get them out to construction as soon as possible.

Director Perrault: And then secondary, just one other question. I would like to echo the director's comments about the encroachment and permitting process. I appreciate you bringing that piece to us so we really kind of understand the full breadth of what Caltrans is doing and how deeply involved you are with the project. And correct me if I'm wrong because this is not my area. I presume Caltrans has to do encroachment permits in other areas of your work throughout the state, and you have a team that deals with this all the time, not just for this project. So can you talk to me a little bit about, I'm curious about what have you seen or do you anticipate the increased workload is for resources just for the encroachment process, permitting process for this project, is it going to be a big lift or are you able to integrate some of that work into your into resources or personnel you might already have that are doing this type of thing for other projects or other partners?

Jeff Wiley: That's an excellent question. It's one that actually all the districts are asking me as well. It is a larger workload for them. Yes, we do it all the time. You need an encroachment permit if you're going to put a freeway out there. We do encroachment permits for movie productions. We do encroachment permits for a local agency that needs to put a retaining wall out there. But this is a lot of miles on a lot of segments with a lot of different partners. So it is a larger workload for them. I am working with our traffic operations division to figure out how to best get those resources to them. The interesting thing about the encroachment permit process is some of the resources come in as reimbursed work after the fact. Because as those encroachment permits come in, that's when we ask for the resources from the permittee. That's part of the reason for the project agreements as well. And so we do some redirection internally to cover those resources. Some of them also utilize existing

resources that we have in the functions that we do get resources through our annual Finance letter.

Director Perrault: Thank you. I appreciate that. I think I'm glad to hear that. And I kind of presumed so, but I appreciate you articulating that it's sort of a combination. However, where there's efficiencies that can be had, it sounds like you all are looking for those to utilize. So I appreciate that. Thank you.

The Chair: Any other questions from the dais? I see none. I do see Supervisor Alejo.

Supervisor Alejo: Yeah, thank you very much to Caltrans for the significant work that is moving forward. I had a question on just on the last couple of slides, on the encroachment permitting with our partners. I think one of the slides indicated we're at 25%. Could you just give us your assessment of what that means? Is that where we want to be? And what's the timeframe for making further progress on that permitting.

Jeff Wiley: Sure. And like I said, this is our first attempt at really showing what that is. So what we've done is we've taken the major tasks, which is really engaging with the permitting partners to find out what their projects are like, signing the project agreement so that we can enter in to do the review of their work and then issuing that encroachment permit. So they're very, how do I want to say it? To get to the 100% of having the encroachment permit done, it's a very well-defined set of steps. So where we're at with 25%, we've got some partners that we've actually executed encroachment permits on and we've got other partners in which we've executed the project agreements on. But we're just starting to get some of the engagement. And so that early engagement has a fairly low percentage of work. It's really just, hey, how are you doing? Are we coming to the table to understand their project? So based on the fact that we've just entered into some agreements or CDT has with some new partners I think we are about where we should be. And I do believe that as we go through for the next MMAC, you're going to see those numbers jump up fairly rapidly as we get the engagement and get the encroachment permit review process underway.

Supervisor Alejo: Great. Thank you for that. To better understand that component of what you're doing on those encroachment permitting. Thank you.

The Chair: Thank you. Any other questions or comments? Okay, I see none. We'll go ahead and go to the fourth agenda item, and that is Golden State Net, third party administrator. We have Mr. Erik Hunsinger here to give us an update on what's going on out there.

Erik Hunsinger: Morning committee members. Next slide, please. So the network is well underway. We've got a plan. We know where it's going to be located. Now, really in earnest, we're beginning the engineering efforts of lighting the infrastructure for the state of California. Part of that is breaking apart the network into spans, which are discrete segments in between the hub locations. Which allows us to track accurately what happens on a daily basis to the fiber infrastructure. Right now, there's not a lot of activity, but once the infrastructure is completely built and lit, there's going to be constant activity as we onboard either FFA or commercial entities that may be

interested in buying the infrastructure for sustainability purposes. So every portion of this network will have broadband capacity at their choosing. We'll be offering 10 gigs, 100 gigs, 400 gigs and potentially 800 gig infrastructure to communities if that's what they choose. As routes become available and are constructed, we'll tie those spans together into routes and connect those to the larger telecom world. Meaning they'll actually be active and running and they can get service right and so one of the first routes that is targeted is the D395 route. Next slide, please. As noted about every 50 miles, a hub is required. Mr. Wiley kind of covered the Caltrans portion of that. Those hubs include the lit infrastructure that the state is going to be running for their own network. It will include dark fiber that provides the connectivity if consumers wish to have dark fiber. And they're essential in creating the redundancy, I know that that's a word that maybe sounds kind of funny, but essentially it offers resiliency and diverse path options for communities to get really solid infrastructure in their region. So part of that is installing DC power plants which will back up all of the electronics that are installed into the hubs. As well as generators in case there's a utility outage in the region. And then this allows for all of the infrastructure that's implemented to run effectively and efficiently 24/7. Next slide, please. So as we're entering into the phase of anticipating route turnup, we have to begin that planning requirement. We want to be ahead of the curve before the fiber is actually available. It takes about four months of understanding precisely what the characteristics of the fiber are between hubs and on those spans, whether the number of splice joints, whether there's bumps in the road, whatever it might be, the electronics have to be calibrated precisely to those routes. So we have to plan with the equipment provider and then there's a logistic effort to get that equipment on site and installed in those hubs. So we're doing that early now before all of the fiber is lit. And of course, as noted by Mr. Martin-Guzman, we have the first opportunity on D395 where we do have an understanding of what those characteristics are and have the availability of those hubs. So we believe that we'll begin deploying equipment in late 2024, but with anticipation of having service availability on that route early 2025. So it takes a little time to get that stuff in place, make sure it works, make sure it's reliable and then connect to it. In addition to that, we'll be tying that particular route to Telecom centers so that it can go into production early. So we're coordinating with CDT on how that happens and what their timelines are. Next slide, please. In addition, Golden State Net has a responsibility for about 20 hubs that are off of the Caltrans right away. We're working on collaboration with right-of-way land holders. And in addition to that, permitting, as well as design. I want to add that we're also working to optimize and reduce the number of hubs, if possible, sometimes based on routing and the way the fibers connect, we have an opportunity to reduce a particular hub and that represents a substantial savings to the network. But at the moment we're working on about 20 different locations that are not on the Caltrans right of away, including collaboration with Cal Fire as well as one federal entity, Department of Interior. I'm really happy with the fact that we've made headway with 11 municipalities. I want to remind folks that you do not have to have a hub in your in your city to use the network. We can do mid-span interconnects, so the flexibility of connection is always there when communities are ready to connect now, tomorrow, in the future. But having a hub there means that they're helping CDT optimize the network. They're protecting the network; they're providing reliable power to that infrastructure. And so it's just a strong partnership with those municipalities to improve the performance of the network. In addition, there's a couple of nonprofits that have volunteered land space for the hubs. And then also the tribal relationships,

including, as previously mentioned, Coyote Valley, 29 Palms and the Quechan Tribe. So we're really excited about these opportunities because they perform in a way similar to the municipalities, they provide active security because they are monitoring, they see the hub every day, they know what's going on. There's power at those locations. So it's really a strong benefit for the network, including the fact that we have a relationship where tribal entities are assisting us in making the network run. So it's an exciting opportunity. Next slide, please. As Deputy Director Monroe had indicated, he's asked us to kick off interest in the network. And so, of course, we want to jumpstart with FFA grant applications. Any awardees who are keenly interested in getting ahead of their development of their last mile infrastructure will want to plan to connect to the middle mile. And so we want to be out in front of that and make sure that that happens in a smooth and efficient manner. That will include understanding their goals, their drivers, what sort of capacity they need, where specifically the connection happens and what the impact to the network may be so that we can plan and facilitate that. Also, there's been quite a bit of interest from the commercial community on what the state is up to. So with a pretty sizable cable of 288 fibers that allows the state of California to jumpstart sustainability by working with commercial entities who may benefit from the infrastructure the state's putting in place. We've had some initial conversations and some interest with some partnerships. But we expect that to grow over time. And so you know any commercial entity that's using this infrastructure is planning now for next year's effort because they not only have budgetary requirements, but they also have to do construction to interconnect the infrastructure and fold it into their network plans. So all of that, if we can jumpstart that now, then that will help with a sustainability model that we're working towards once the network is finished and completed. That is the last slide that I had, so it concludes my update if there are any questions, thank you Director Bailey Crimmins for the time.

The Chair: Thank you, Mr. Hunsinger. Excellent progress. Any questions? I see President Reynolds.

President Reynolds: Thank you very much for the presentation. It's great to hear about the continuing process and I appreciate you coming again to report to this committee. I had a question about the power supply, and you mentioned the DC power plants and backup generators. Does that mean that the huts are not going to be connected to the electrical grid?

Erik Hunsinger: No, they are. So great question. So typically, in the hubs, there's a battery backup for emergency that often lasts for you know a hour maybe sometimes even 15 minutes, depending on the design but there's a battery backup to just assist in case there's a glitch in the power system, in the power grid. But every hub should be connected directly to utility systems so there's a battery backup for just a minor issue. There's a utility grid for constant connection, and then there's a generator in case all else fails, right? And so those do have to be managed and fueled and kept up to date as well. But that's to ensure that the network is running 24/7. And so part of the long-term operations will be a plan to provide maintenance around those generators as well as fueling and testing on an ongoing basis. That's part of the model of the operations as the network is running.

President Reynolds: Understood. Okay. That's great to know.

Erik Hunsinger: We do need the utilities to help and support this network. So we're working actively with Caltrans on connecting all the hubs and it's an important element to the network, you're absolutely right.

President Reynolds: That's great. And hopefully working with the utilities so they know it's coming and can get ready. And yeah, that's an important part of it.

Erik Hunsinger: Some of these locations are in, you can imagine some really remote areas. And so utilities aren't necessarily the easiest thing to connect, but it is a top priority.

President Reynolds: I was thinking about the remote areas and how you need to have special care there. Well, certainly let the PUC know if there's anything that we can do if you're working for any of the regulated utilities.

Erik Hunsinger: We are going to take you up on that.

President Reynolds: Okay. Feel free to. We want it done right and planning in advance is always helpful and so happy to connect.

Erik Hunsinger: Great, thank you.

The Chair: Thank you. Any other questions on the dais? Or remotely, any members remotely? Okay. Thank you very much, Mr. Hansinger. We have our final fifth agenda item from the California Public Utilities Commission. We have Jonathan Lakritz, who's going to provide an update. Thank you.

Jonathan Lakritz: Thank you very much, Chair and Committee members, for this opportunity to provide you with an update on the last mile programs associated with the multi-year broadband investments and other related activities that the California Public Utilities Commission. Next slide, please. This slide is familiar to many of you. It provides a snapshot update of the last mile SB 156 programs involved in the multi-year infrastructure investment. Starting on the left side is the Broadband Equity Access and Deployment, or BEAD program as it's known. This is a $1.86 billion federal program that was approved in the Infrastructure Investment Job Act of 2021. I will give a more in-depth update of this later but want to note that the grant solicitation window is not yet open. Next, we have the California Advanced Services Fund, which is actually a suite of six programs under its banner. An increase in the local assistance budget was approved this year. This presentation includes more detail on two of the CASF programs, the Broadband Adoption or our digital grant program in the broadband public housing grant programs. Next, we have the loan loss program. This program aims to enable tribes, local governments, and nonprofits to finance broadband deployment. I will dive a bit deeper into this program in the coming slide, but I want to note that given the projected budget shortfall, the budget was modified to $50 million, which will be awarded this year. Last, as we mentioned, we have a federal funding account. This program aims to deploy wireline last mile infrastructure in every county of the state. I will talk about the exciting updates on the awards in more detail, including the action taken yesterday by our agency to approve $41 million to fund nine

projects. Of the total funding available for the federal funding account, allocations are split among county areas, and I'll take a moment to remind everyone of the allocation formula. The allocation formula is that $5 million is allocated for every county to start. And then each county is further allocated funding based on each county's share of unserved. I'll dive a bit deeper into this program in the next slide. Next slide, please. So the goal of the federal funding account to FFA is to provide direct connection to unserved locations and end users. As a refresher, the first grant window closed on September 29, 2023. We received 484 applications for over $4.6 billion in requested funding from 63 distinct entities. So a lot of interest in our program. We're very excited about that. To date, the federal funding account has awarded over $600 million for 68 projects in 30 counties. The CPUC has made tremendous progress in an effort to bridge the digital divide. These awards reflect benefits. A variety of grantees have been awarded, including tribes and county organizations. Some of the tribes and county organizations awarded include the Santa Ynez Bend of the Chumash Indians in Santa Barbara County, Nevada County Fiber, and the City of Fort Bragg. These awards benefit low-income and disadvantaged communities throughout California. The map that's on the screen shows where all the applications are that we receive so you can see they really cover the entire state or there's representative applications from the entire state. Nearly all the 68 projects connect to a publicly funded open access middle mile networks like the state middle mile broadband initiative. Indeed, 40 of the 68 awarded projects plan to connect to the MMBN. So we're really excited to be able to partner with Caltrans and very excited to hear about the progress. The MMBI is a crucial component for these projects to catalyze and enable these projects to serve disadvantaged, low-income, and high-cost communities. These awards represent comprehensive on-time investments implementing the vision of the Broadband for All initiatives in the multi-year broadband investments made by our state. Recommended awards are rolled off by the country approximately every two weeks, so there'll be more coming through the end of the year. Next slide, please. To further showcase the progress made in FFA, I'll provide some additional highlights on the bold items. So as I mentioned, we've awarded 68 projects with a total amount of $647 million. Recommended awards to an additional eight projects for a combined $157 million have been issued for public comment. The total awarded and recommended projects we'll deploy approximately 2,000 miles of network and benefit approximately 2.9 million Californians. The awards represent a diversity of approaches and communities. I'd like to take a moment and highlight a few awards to demonstrate the diversity of the applications. The award to the Tolowa Dee-Ni in Del Norte County of $4.8 million will serve the tribal community, community anchor institutions, and unserved locations in the Smith River area. An award in Alpine County in Eastern California to the Golden State Connect Authority will leverage additional outside bond funding for an even larger network deployment. In the last example are awards to a group of projects in San Luis Obispo County whose awards build upon the state-owned open access middle mile network with six projects planning to bring social, economic, and public safety benefits of a high-speed broadband to unserved locations in San Luis Obispo County. Again, I want to stress how the MMBI has been transformative and enabled many federal funding account applications and awards that would not have been possible and from providers that would not otherwise have been able to provide service. As I moved from the federal funding account, please watch for new recommended awards approximately every two weeks for the rest of the year when items are issued for public comment in

advance of the commission voting meetings. Next slide, please. I want to talk a little bit about the loan loss reserve program. So the loan loss reserve program is to support public entities, tribes, and affiliated nonprofits to finance and issue broadband infrastructure bonds. Unlike other broadband programs at the CPUC, this is not a grant program. A resolution adopted earlier this year implemented a 24-25 budget act agreement that specified $50 million for the program this year. More recently, we've issued a resolution for public comment recommending awarding $50 million in broadband loan loss reserve funding to Golden State Connect Authority, and the item is set to be considered the commission's November 7th voting meeting. In awarding these funds, the CPUC looks forward to the program enabling the multiplier effect of bond-funded network buildouts and demonstrating the impact and value a larger pool of funds could enable in the future. Next slide, please. Now let's talk a little bit about the California Advanced Services Fund. So the CASF program, also known as the California Advanced Services Fund. It's our oldest broadband program at our agency, continues to serve as an important tool in supporting digital equity and the goals of the broadband for all. The CASF includes a number of accounts or programs. I'll speak about the CASF and the programs in the following three slides. This slide covers the next opportunities for entities to apply for grants for three of the CASF accounts and the status of the last round of applications. I'll note that the next opportunity for applicants to submit will be for grant applications related to the adoption, public housing, and tribal technical assistance programs. Applications are due by January 1st, 2025. There are bullets on the slide that cover the status of the 100 applications that we received in our prior grant round. Next slide, please. So there's a lot of numbers on the slide. The purpose of this slide is to summarize and demonstrate what we funded in the first six months of 2024 and since the program was enacted by legislation in 2008. So since 2008, the CASF has helped close digital divide in California. By providing grants to build and expand broadband facilities. Grants were awarded for over 1,200 projects totaling over $448 million. Next slide, please. So this slide provides a snapshot of the broadband adoption account, which provides grants to support digital literacy and inclusion. To date, the CPUC has approved 365 digital literacy grants that have benefited over 98,000 participants and funded 41 broadband access programs serving over 220,000 participants. More program highlights are summarized at the bottom of the slide. The budget for this fiscal year is approximately $36 million for this program. Next slide, please. This slide provides a snapshot on the broadband public housing account. The program was revised and updated in 2024. The numbers on the slide represent the activities up and before the expansion and updating of the program recently. So the public housing account has connected more than 21,000 housing units with free internet access. Next slide, please. So now we'll move to the last of the programs, which is the BEAD program. As I mentioned, we've not started the grant making process in this program, but we have made a lot of progress. So in June of 2023, the National Telecommunications and Information Administration, or NTIA, allocated $1.86 billion to California and federal funding from the Broadband Equity Access and Deployment, or BEAD program that was created by the Infrastructure Investment Job Act. So as you can tell, it's the federal government and there's lots of acronyms, and I apologize for that. I would like to highlight some of the key milestones we've already accomplished and talk about where we're going. So we opened a rulemaking in our agency in February of 2023 to establish the rules for the program. NTIA accepted California's five-year action plan in 2023. And finally, at the end of 2023, we submitted what we call our initial proposals,

which are our draft rules for NTIA to approve Volume 1 deals with the challenge process and Volume 2 deals with how we would conduct a subgrantee selection process. On April 4th, NTIA approved the initial proposal Volume 1 or the challenge process. And the Commission voted to adopt the initial proposal at its May 9th voting meeting. More recently, on October 3rd, the NTIA approved the initial proposal Volume 2, which again is the subgrantee selection process, and the commission adopted it on September 26th. So now we have the rules in place that we need to run the program. So now we're moving on from there. We have a lot of background preparatory activities, but the first public activity will begin in quarter four, we will be conducting outreach on the grant making process through a series of webinars and office hours. In addition to conducting that outreach, we will start in the first quarter, we will conduct the actual subgrantee selection process in the first three quarters of 2025. Both the CPUC and NTIA will need to approve the proposed grant awards, which we will need to submit in October of 2025 to the NTIA. As a reminder, all activities are subject to NTIA review and approval. I'll go over more detail the activities in the next slide. So next slide, please. So this is the timeline slide that we look at every morning when we start our job to remind ourselves where we're going. This timeline represents the five work streams that the CPUC is using to implement the federal BEAD program in California. Across the very top, as I mentioned, is this planning process that we go through with NTIA. So we've submitted our five-year action plan. We've submitted the initial proposal, Volumes 1 and 2. The red star shows that we received approval for all of that. The next step we do is where the next line is, the challenge process, which we're currently conducting. And that started on July 9th and the public part of the challenge process ended on September 19th with the end of the rebuttal period. And I'll describe the challenge process in more detail. The next line is the subgrantee selection process as I mentioned, we will begin that with outreach in quarter four of this year, and then we'll begin accepting applications in the first quarter of next year. After that, once we've completed the challenge process, submitted the results to the NTIA, they've approved those results, that is the actual specific grant awards. Then deployment activities can begin. We're hoping those activities can begin in 2025. But the timing is dependent on the NTIA and commission approval of the final proposal. Throughout the entire process, we've been doing public outreach. We started by partnering with CDT in 2023 on the statewide public engagements. And we've continued our outreach in 2024 by holding a number of webinars and informational sessions. up to and through the challenge process to make sure that everyone participating in the process understood what the requirements were. Next slide, please. So we're in the challenge process. I'll spend a few minutes just talking about what it's about and where we are. So the challenge process is a very important part of the BEAD grant making process. It is a public process to establish the locations that will be eligible to receive BEAD funds. That is the locations that subgrantees may submit proposals to be funded in the first quarter of next year. We are currently in the 30-day final determination phase during which the CPUC resolves outstanding rebuttals. As a reminder, the challenge process has four phases, as you can see on the slide. The challenge phase was where permissible entities were able to challenge the existing BEAD map by submitting evidence about specific locations that may not have been accurately represented as either unserved, underserved, or served. From there, we submitted challenges, were vetted to make sure they met the NTIA's evidentiary thresholds. And then we moved into the rebuttal phase where broadband service providers or other rebutters could provide evidence of unchallenged locations. And

that phase was for 30 days and was already concluded. We are now in the final determination phase where we'll resolve remaining challenges that are left unresolved at the end of the rebuttal phase. At the end of all this, we will package all the results and send them to NTIA for their approval. At the end of the very process, NTIA, once they've approved it, we will be issuing a final map of all the locations that will be eligible for BEAD funding. So that concludes with the update that we would like to provide and I'm available for any questions.

The Chair: Thank you. Significant progress happening across the state and it's great to see all the communities and all the outreach, Mr. Lakritz, you're just exemplifying all the things that are happening across CPUC so thank you very much for highlighting that today in the presentation. I'd like to open it up to the dais to see if there's any comments or questions. Yes Ms. Perrault.

Director Perrault: I know I've been talking a lot today.

The Chair: No, that's all good. We always want to hear from finance.

Director Perrault: Quick question on the FFA grants, a lot of work I'm glad it seems like way more interest than obviously there's funding for. So glad to see that there's 68 projects being funded. On that map you showed, it looks like we've kind of we've covered the perimeter of the state, and it looks like sort of the north and then I'm assuming the blue is the parts that don't have awards on that map of California. Is that correct? Was I reading that right?

The Chair: They don't have any awards yet.

Director Perrault: They don't have any awards yet. Okay, I just wanted to make sure. So it does look like a kind of our Central Valley a little bit and then perhaps the north, just not far north. I'm assuming that there could be reasons or are we anticipating that there may be some awards, maybe there's not as much need in that area for last mile. Is it a combination?

President Reynolds: I just want to be clear that there is an allocation for every county. Every county has awards and it's divided among counties. Each county is getting an amount of money.

Director Perrault: There is. Okay. Thank you. And we're just in the process. Okay. That's perfect. Thank you.

The Chair: Fantastic. All right. I see, first, we'll go ahead and go Supervisor Alejo.

Supervisor Alejo: Thank you very much. Yeah, on that FFA grants it was eye-catching to see that there was $4.6 billion in requests but only 600 million in awards. It just shows that the demand and the work that's needed out there for that last mile work across the state is very significant. We know that more needs to be done in that area and hopefully in future funding allocations, but I just have a question on the loan loss reserve program because it was a very small fraction of what was originally proposed, 50 million is available, but I think the original amount needed was, I think, 750 million. So

we have 50 million to provide in grants what's the demand out there or projects that we're hoping to have the loan loss reserve as a tool to fund projects in local communities. So what's the demand out there?

Jonathan Lakritz: So I'm happy to get back to you with specific numbers of what the requests were. I can tell you that we did receive requests from Golden State Connect Authority for 37 of its member counties. So we received a wide range of requests from the Golden State Connect Authority, and I apologize, I don't directly manage that program, but I'm happy to get back to you with the specific information.

Supervisor Alejo: Yeah, I was just seeing some of the advertisements by the CPUC for this program in March. I think it was previous allocations. And at that time in March, they had opened it up for the $500 million. Do we know, maybe you don't have the knowledge, but whether those previous allocated 500 million, has that been allocated already or was that impacted by the June state budget?

Jonathan Lakritz: So my understanding is the grant round that we opened indicated that there would be $50 million available for it. And that's what we're basing our awards on is what we received with regards to that. But I'm happy to have members of our team who run that program follow up with you and provide you a separate briefing.

Supervisor Alejo: Okay. I just wanted to point that out because I know through Golden State that there were a lot more projects that they were hoping to get off the ground and that were impacted, obviously, because of our state budget deficit. Yeah, I'd love to get that information.

Jonathan Lakritz: Absolutely.

Supervisor Alejo: Just as we continue to see the progress on how this funding mechanism is able to get projects off the ground as well. Thank you.

The Chair: Thank you for the question. Assembly Member Boerner.

Assembly Member Boerner: Yes, thank you. And to the Supervisor's question, I believe when we were going through the budget, the actual budget for this next fiscal year didn't have more than 50 million in requests. So that's one of the reasons it was cut back. It doesn't mean next year we couldn't put more in depending on how many concrete requests come in. I think that's something that we will all continue working on next year. I have two questions. One is of the awards made, this is for the CPUC, of the awards made, the 600 million plus the 150 million, I believe, I don't have the slide in front of me, that were recommended how many of those are recommended or are planned to connect to the middle mile?

Jonathan Lakritz: So 40 of the 68 projects that have been awarded have indicated that they want to connect with the Middle Mile Network. And the ones that are going forward, we're anticipating that more of them will be connected with the Middle Mile Network as more details become available. And it looks like Mr. Monroe may have information to add to that.

Mark Monroe: Yes, thank you very much. The CDT team works on a more or less daily basis with PUC, and we're tracking about all together of those applications, 105 of those applicants would connect to MMBI if awarded.

Assembly Member Boerner: 105 of the ones that have been recommended and awarded already or of the total 461 or whatever the number was that was submitted.

Mark Monroe: Yeah, I'm sorry of the total 484, I think. Yeah, right. So the 105 is a subset of the 484. And I think what Mr. Lakritz is talking about is more specific to the recommendations that have been made so far.

Assembly Member Boerner: So the 40 of the let's call it 750 million to make it easy. And of the 40, how much in dollars of the 750 is that?

Jonathan Lakritz: Sorry, it's $668 million that has been awarded and I will need to get back to you with the exact number for the 40.

Assembly Member Boerner: For the next presentation, you should probably come with those numbers already because what I'm concerned about is 40 of the projects, but if 40 projects are very small, what we're seeing is the uptake of the middle mile is also small. And that means the cost of the middle mile could be transferred on to small segments that are connected to the middle mile, which will ultimately have a higher cost for the end user. So that's the reason I'm asking for that. And then my understanding of BEAD is that BEAD once the plan is approved, you have to go out. And I'm worried about the delay and the FFA funding the capacity of the CPUC to fulfill its plan with BEAD and the timelines that NTIA has put on. Could you speak to that?

Jonathan Lakritz: Sure. So we are nearly fully staffed within our agency for the BEAD program. We also have additional resources we have met all the timing requirements so far that the NTIA has laid out, and we are confident that we will be able to run our subgrantee process within the 365 days that NTIA permits us to do that so we're well on our way to being ready. We'll be conducting outreach we will be starting our grant round in the first quarter. It is somewhat dependent upon NTIA approving the final set of locations and the potential grantees have indicated that they want that information before they're required to submit grants. So we're coordinating closely with potential grantees with NTIA and we are meeting all the deadlines that have been established so far. So we're remaining confident that we're

Assembly Member Boerner: Yeah, I know you've met all the deadlines for BEAD. That's not the question. You've met all the deadlines for BEAD. But I'm thinking about all, you know, we have an oversubscription to FFA. And then there's going to be a confusion because there's going to be an overlap of FFA awarding and people applying for BEAD, right? You'd think a lot of the same applicants would apply. So if they've applied to FFA, they haven't yet been awarded, do they know how to balance, you know, how will those applicants know if should they also apply for BEAD? Do you see what I'm saying like it's going to be parallel now instead of succession or serial in how they apply. So how do we communicate it to the public? How do we go about that? Yeah.

Jonathan Lakritz: So we've already been conducting outreach with both potential FFA awardees and also with other entities that are interested in the BEAD program. Our agencies on track to publicly announce and or adopt or announce the vast majority of the FFA awards by the end of the calendar year. So with that cycle, it should be the majority of the awards will be publicly announced before the BEAD process begins. There's also a difference because each program has its own eligibility criteria. It's important for awardees to also understand what the eligibility criteria are. The federal program has unique participation requirements in it. And so we're working on both educating potential bidders in that program or grantees in that program, what the requirements are, as well as helping them coordinate and understand where we are in the process. So I think that we're coordinating as closely as we can and we're also working with our colleagues at NTIA to make sure that we understand more precisely when they're going to be granting us approvals.

Assembly Member Boerner: Yeah. And I think that, you know, my understanding is once NTIA grants approval, the 365 day clock starts.
Correct. Yes, So that outreach is going to be very, you know, have to be a little bit more timely than the FFA outreach and how we did that process. I just worry for the applicants; they're going to be confused. They're going to see two different programs. They apply for one. They don't know if they're going to get it. Do they apply for the other? And remind me, does the BEAD funding have any advantage if they connect to the middle mile? Any point advantage and awardee?

Jonathan Lakritz: It does not have any point advantage, but we are definitely encouraging, and as Mr. Monroe earlier expressed, the financing or the pricing for the public middle mile network should be substantially more attractive than the pricing that's available through other sources. So we're anticipating that as the pricing information gets out there, the interest in using it. I mean, right now, a lot of the entrants have already expressed interest and some of the potential grantees have already expressed that without the existence of the middle mile broadband network, they wouldn't even be looking at participating in either the FFA or the BEAD program. So they're very aware of it.

Assembly Member Boerner: I understand that, but several of the applicants expressing that versus us investing all this money in the middle mile where we're awarding grants that aren't connecting and aren't using our middle mile that we've invested in, that's a problem that we should all recognize. I think when you look at 105 out of the 483 I think Mr. Monroe said 484, you know, that's a quarter, a quarter of the applicants and so we're investing this middle mile. We want people to use it. The more people that use it, the lower the cost is per user, right? That's what we're looking at. So the more we award grants to people who aren't using the middle mile, the higher the cost, right? It's just plain economics. So those are the things I hope we can continue looking at. And when we come back at our next meeting that we have detailed data about all those different applications, procedures, how we're doing the outreach, how people are understanding which program they can apply for, what are the differences, and make sure that we're using all of our federal dollars before we put in more state dollars.

Jonathan Lakritz: Understood. Thank you.

Assembly Member Boerner: And I'm sorry, I have to jump off. This was only on my calendar until 1130, and I have a 12 o'clock right now, so I'm going to have to jump off.

The Chair: Thank you, Assembly Member Boerner. And actually, I did want to bring that up as a discussion item for the members. I think the whole time that we've been running the meeting, I don't think it's ever gone an hour and 30 minutes. And so I would like to get the thoughts on just because of, you know, if people are flying in or of other meetings, if everyone is okay, obviously we still need to get to public comment. What is the thought of the membership to at least make the meeting two hours versus an hour and a half. Is there any concerns?

Director Perrault: I already tell my assistant to block two.

The Chair: You have no problems with that. President Reynolds, any concerns?

President Reynolds: Yeah, I had the same problem as the Assembly Member. I had another meeting that was booked at the end of this meeting. I wonder if we could think about having a selection of updates at each meeting so that we could shorten each one rather than going over every update at every meeting. I don't know. I mean, or maybe we shorten certain ones and just do the key updates and then have a more in-depth discussion say we pick Caltrans one meeting and go into a little more depth and then keep the other ones shorter and just hit the key points. So I don't know, maybe a difference in planning of the presentation. I don't want people to feel like these meetings aren't informative though. So there's always that balance. Maybe some thoughts from the staff, from you Chair on how best to structure the meetings to keep them a little more condensed.

The Chair: Thank you very much. Two hours, try to do an hour and a half, but condense the agenda Mr. Larios, any thoughts from you?

Luis Larios: I'd circle back with Secretary Tong, but we certainly can be flexible. And I think two hours would be beneficial, thank you.

Director Perrault: Let me just say I'm in agreement if it makes sense and we're still gaining all the value, condensing it is fine. I think it would just be best if we don't or we can't then maybe actually pad the timing when we're working on calendaring just and that way, we're not running other meetings on top of thinking it's going to be done.

The Chair: Thank you. Any thoughts, Supervisor Alejo or Supervisor Starkey, I want to make sure you have a voice in the discussion as well.

Supervisor Alejo: Thank you. I'm good through the two hours as long as we can block of the time in advance, we can make that work on my schedule.

The Chair: Thank you, Supervisor. Supervisor Starkey.

Supervisor Starkey: And I can concur. I think two hours. And then if we end early, it's always a bonus.

The Chair: Okay, you can always give time back. All right. Thank you very much. We are going to go ahead and shift to public comment. Ms. Alvarado, if you want to go ahead, we'll do public comment in the room first, and then we'll go online.

Alicia Alvarado: In order to ensure everyone who wishes to make a public comment has the opportunity to do so, we respectfully request one person per entity and two minutes per person. The order of public comment will be online public comment submissions prior to the meeting, Zoom hands raised and phone hands raised via star nine. We have not received any comment submissions prior to our meeting, so we will start with public comments via Zoom. Please raise your hand and we will unmute.

The Chair: Sorry, Ms. Alvarado, I was going to do the people in the room first, if that's okay. Is there anybody interested in public comment in the room? All right, we see none. We'll go ahead and go to the Zoom.

Alicia Alvarado: Starting with Patrick Messac.

Patrick Messac: Good afternoon. And knowing that we are short on time, I'll keep it brief. I just want to express my gratitude to Shannon, Monica, Deputy Director Monroe, Director Bailey Crimmins, CPUC Partners, and CDT for their ongoing engagement around Middle Mile. I know it has been a long journey to get here, but I'm really encouraged by the way that CDT is really tapping into community wisdom. Just two quick comments, first on the supply side, it's really exciting to see the progress on the builds, especially for regions like Oakland that are relying on the network, the middle mile network, to light up our last mile project. And just look forward continuing working in close partnership to actualize the promise of this network. And then on the demand side, this was one of the first meetings where I really heard the state articulate a vision for the middle mile that extends beyond just tapping into FFA or even BEAD for that matter. In our conversations with local ISPs, especially smaller innovative ISPs, they are planning on using the network without being part of an FFA or BEAD project. And I think we just need to continue to hold that, especially as we think about the price card and differential pricing. In 2028, ILEX that currently is required to offer access to their dark fiber at just reasonable rates, will no longer be obligated to do so due to the FCC's elimination of the UNI requirement. And I know that a lot of our smaller ISPs have a lot of anxiety about that 2028 date. And one of the reasons why they're so excited about the MMBN. I encourage CDT to pursue all available avenues to avoid monopolization of the network by incumbent providers or by business clients that are not advancing digital equity and just encourage the state to continue to meet with smaller and regional ISPs to develop a complete vision of all the uses. And then just in closing, as I always do, just want to continue to advocate for differential pricing in low revenue density communities like East Oakland, where providers need that extra bit of incentive to build out last mile networks or for FFA projects, which are serving equity-based aims. Again, thank you for the partnership and look forward to working in ongoing collaboration to actualize this incredible project.

Alicia Alvarado: Thank you, Mr. Messac. Jeff Blagg. It appears Jeff Blagg is having difficulty connecting.

Jeff Blagg: Hello?

Alicia Alvarado: I think I hear you, sir.

Jeff Blagg: Can you hear me now?

Alicia Alvarado: Yes.

Jeff Blagg: Oh, okay. Sorry. Yeah, a couple questions. One on IRUs, would it be possible to see how many fibers are being acquired through those agreements? I'm kind of curious what each entity is presenting to the network. And then also how many, this goes to Caltrans, how many of the original 18 identified priority projects are completed as proposed and designed. That is omitted from the map now. It was initially on the map. Those projects are no longer visible. So like some kind of historical layer would be interesting. And then those areas that have been excluded from the network because of the budgetary constraints can those areas be also identified because we're getting questions within the county that I work in, what happened to it, where did it go? That kind of thing. There's nothing visible to show these people what was originally there and what's gone. I think that would be beneficial. Thank you.

Alicia Alvarado: Thank you. That would be the last comment online.

The Chair: So we are done with public comment unless there's anyone else that's changed their mind in the room. So I want to thank CalSTRS. This is the first time we've been in their boardroom, obviously for their team members that have welcomed us, it helped us get through the technical part. Obviously, CEO Cassandra, you know, she's just been amazing in opening her doors to all of us. So thank you, committee members. Thank you, presenters. Thank you, the public, for making our final 2024 meeting memorable. We are going to be thinking about what we need to do on the agenda to make it easier on everyone's schedules. And our next meeting is Friday, January 17th from 10 to 1130. We are still looking for a location and we will send that information out to all of you when it gets a little bit closer. Have a wonderful holiday season if I don't see all of you. At this point, we're going to go ahead, and call our October 2024 MMAC meeting adjourned. Thank you.