Middle-Mile Advisory Committee
August 19, 2022
Meeting Recap and Transcript

The Middle-Mile Advisory Committee met on Friday, August 19, 2022 at 10:00am PST via virtual conference.

Agenda Item 1: Welcome and Overview

Chair Bailey-Crimmins welcomed everyone to the meeting.

A quorum for the meeting was established.

Member		Designee	Present	Absent
California Department of Technology	Liana Bailey-Crimmins		X	
California Public Utilities Commission	Alice Reynolds		X	
Department of Finance	Gayle Miller		X	
Government Operations Agency	Amy Tong		X	
Department of Transportation	Tony Tavares	Mike Keever	X	
State Senate	Lena Gonzalez	(Ex-Officio Member)		X
State Senate	Mike McGuire	(Ex-Officio Member)		X
State Assembly	Sharon Quirk-Silva	(Ex-Officio Member)		X
State Assembly	Jim Wood	(Ex-Officio Member)	X	

Agenda Item 2: Executive Report Out

Mark Monroe provided the executive report out, focused on permitting summits and contracting forums.

Agenda Item 3: Project Updates

Mark Monroe and Scott Adams provided the California Department of Technology's (CDT's) update focusing on the project timeline and stakeholder outreach.

Janice Benton provided a California Department of Transportation update focused on project delivery, dig smart, preconstruction, preliminary projects, and efforts to streamline projects.

Tony Naughtin and Ron Hutchins provided the Third-Party Administrator update focusing on core network backbone operation and future operational issues.

Rob Osborn provided a California Public Utilities Commission (CPUC) update focused on local agency technical assistance, California Advanced Services Fund grants received, and last mile funds.

Agenda Item 4: Public Comment

Staff noted written public comments were submitted by (attached):
- Will Micklin
- Jeff Blagg

Public comments were made by:
- Philip Neufeld
- Larkin Bullard.

Closing Remarks

Committee members had no closing remarks.

Ms. Bailey-Crimmins thanked Committee members, staff, and attendees and noted the next meeting is scheduled for September 16.

The meetings adjourned at 11:10am PST.

(meeting transcript attached; video and presentation slides from meeting posted to Committee web site)

Transcript

MMAC Meeting – Friday, August 19, 2022

Let's start roll call. Ms. Stein please call roll and share the meeting housekeeping items.

Good morning. Director Bailey-Crimmins.

Present.

President Reynolds.

Present. Miss Miller.

Present. Mr. Keever.

Present.

Secretary Tong.

Present. And may I suggest we hold a little bit because I see the participant literally just coming in right now, I want to make sure we just give them a second to get folks to login first. Sorry, that was my roll call but... Oh, let's hand it back to the Chair.

Thanks, Secretary. We'll go ahead and proceed with roll call.

Senator Gonzales. I'm also looking to see if they accidentally came in via the attendee route. Senator McGuire. Assembly Member Quirk-Silva. Assembly member Wood. A few housekeeping items. There is time at the end of the meeting allocated for public comment. Presenters, please cue Cole to advance your slides. Committee members, please raise your hand to speak. The Chair calling on you helps ensure you are heard. Madam chair, we do have a quorum.

Thank you, Ms. Stein. Do any committee members have brief comments before we start the project updates? Alright, so with that we'll go ahead and start with the first item, which is the executive report out, which is Mr. Mark Monroe.

Yes, good morning committee members. Mark Monroe, Deputy Director for the Middle-Mile broadband initiative happy to provide another update to the members on the progress of the MMBI project, next slide. As noted at last month's meeting, we want to make sure these MMAC meetings address the needs and concerns of the committee members so we're trying to establish a consistent format…formatting approach here that, hopefully, will help us all speak the same language and by seeing the consistent presentation of the progress of each project…each of the project components each month. For this morning's executive report out I'll be talking a bit about the permitting summit and the contractor forum we held in recent weeks. In our updates, I'll be talking about several contracting efforts that are underway and Scott Adams will provide an update on CDT's stakeholder engagement efforts, and then we'll have CalTrans provide several updates and its billed

efforts. Golden State Net will provide a summary of its work on developing the network's core backbone, and the Public Utilities Commission will be providing an update on the last mile progress that is, that it is…it or I'm sorry, the last mile programs that it is administering that are so critical to the success of providing broadband for all. Next slide. So, as we continue with the execution phase of the project, CalTrans' efforts include a robust review of streamlining of its permitting efforts which it will be discussing this morning. CalTrans will also be presenting some early construction packages that are being developed at some of the districts and I will be discussing some broader system-wide construction approaches that CDT is exploring with CalTrans. The two things I want to mention to the committee members are the permitting summits and the contractor forums previously referenced. Last February, CDT held a permitting summit with CalTrans and the State permitting agencies to present the project and start discussing the permitting approaches that would best meet the federal schedule needs of the project. Since then, CDT and CalTrans have met on a weekly basis with both state and federal permitting agencies to discuss alternatives. This last week we held a follow-up permitting summit to present the approaches that the agencies have agreed to and the positions that would be required that we need to fund to achieve the quicker timeframes. As CalTrans will walk us through, this is expected to result in significant further reductions to the average permitting timeframes for the project. And federal permitting entities were also invited and a plan is in place to further streamline the federal permitting processes as they applied to the network. CDT and CalTrans also hosted several forums with a number of construction contractors to present the project and discuss how best to approach construction of the network. We heard from contractors that design build construction manager general contractor and job order contracting in addition to the standard design bid build approach could all be used. And contractors reported that providing for regional segmentation of construction may help utilize regional expertise. And we learned that these approaches could potentially be used, while preconstruction and permitting work is still ramping up to go out to bid for construction contracts and much of the system. This would as I think I've mentioned before, provide us with an updated and much more accurate cost model on which to base optimization decisions and would allow for contractors to mobilize equipment and staffing sooner to start constructing segments as preconstruction and permitting work is completed on various segments. Will discuss this…these contracting efforts over more in our update, but that is my executive report out.

Thank you, Mr Monroe. I'd also like to acknowledge and think that Assembly member Wood has joined us so we'll add him as a panelist and I would like to open it up to any committee members that might have questions for Mr. Monroe before he gives this is next update. I see none at this time. We'll go ahead and go to the second agenda item for the Department of Technology update, Mr. Monroe.

All right, great. Can we go to the next slide here? So, what we've put together here as a project timeline that we plan to continue using to show what has been done to date and how that relates to the work that remains over the life of the project. You can see here, for example, why we were so focused on completing a map of the entire network, so that the pre-construction activities can begin. This allows…this also allows CalTrans to identify dig smart opportunities along the plans network route and they'll be talking…continue to talk about those a little later. With this schedule, we can see that we can begin to pursue

construction contracts as early as this fall at the same time that CalTrans is doing preconstruction work and this will, in turn, allow for construction work to begin earlier as preconstruction is completed on each individual segment, rather than having to wait for those segments to be completed and then go out to construction for construction contracts. We can also see the timeframe CalTrans has for completing pre-construction and how important it is, will be to shorten that permitting timeframe, so that the construction can begin sooner. Next slide. Consistent with this timeline, we are working on the following three contracting efforts. The first, we plan to go out to bid is this month as a logistics contract. We've mentioned in the past, this will be key for working with the materials contractors with whom we've already contracted and the construction contractors that we're planning to contract with to forecast the materials needs and plan for production, storage, and delivery with construction. We are also working towards early construction contracts this fall for more…approximately 75% of the network. As noted previously, this will allow us to develop an updated cost model and make earlier decisions. We're already optimizing our construction and leasing for the network. And then, we're also…uh, important to this optimization effort, our…we're developing a similar approach to identify opportunities for and cost for IRU leases on the 10,000-mile network. While GSN and PUC have helped identify where existing open access infrastructure currently is, the intent is going out to bid for IRU leases is really to better understand what infrastructure would actually be made available to the state, how this could meet the needs of the network overall, and what these IRU leases will ultimately cost. Next slide. Other efforts that are underway that we will be presenting and coming MMAC meetings include both the market sounding to clarify what services potential last mile providers will need and a business plan to better understand how the network will be operated once it is built. Next, Scott Adams will provide an update on CDT's stakeholder outreach efforts. Scott?

Thank you, Mark. And also, good morning Chair Bailey-Crimmins, committee members, and members of the public. I want to thank you for the opportunity to provide a brief update on the Department of Technology's broadband stakeholder engagement efforts since last month's committee meeting. Wanted to stress that we are committed to engaging with diverse groups and audiences across the state, both on the planning and implementation and the coordination in alignment with the state's broadband for all program and those of local and regional efforts. Wherever possible, the Department of Technology and other state partners including the Public Utilities Commission have endeavored to leverage these stakeholder convening opportunities to focus on all components of the states BroadbandForAll program, including the implementation of the Broadband Action Plan, the middle-mile broadband initiative, the last mile programs that CPUC is implementing and administering, and then other digital equity initiatives to demonstrate really how all of those are linked together and complement one another to achieve broadband for all. This slide here, we've wanted to highlight just that handful of several multi stakeholder large scale convenings and various regions across the state that we've engaged in. The first is the North State Planning & Development Collective, which is a combination of two broadband consortia is up in the north state. The next is LA Deal, another consortia of LA…you know, local leaders…you know, nonprofits and other stakeholders. And then really pleased to report that this last week, we completed a series of listening sessions, with the NTIA's digital equity team in Fresno, Oakland, and San Francisco. Wanted to note that these are just a handful of engagement activities that the Department of Technology and other state partners who conducted over the last month.

This does not include the, you know, various program-specific meetings, consultations, and other efforts that have gone on as well. This concludes my update and I'm happy to answer any questions.

Thank you, Mr Adams and thank you Mr. Monroe for the Department of Technology update. I'm going to open it up to committee members, it looks like you have several questions, the first I will call on Mr. Keever. Thank you, Mr Adams for the update. I am wondering if we have any specific plans for tribal outreach. I know the maps go into many tribal lands and just wanted to see if we had any more information on that yet or maybe that's still in the planning phase. Yeah, thank you for the question, Mr. Keever. Yes, there's extensive engagement going on with the travel entities. You know, in addition to the work that the PUCs doing through their tribal technical assistance program that they can speak to, both the Department of Technology and Golden State Net have been engaging with tribal entities as well as CalTrans. And we've been coordinating on a weekly basis to make sure that those efforts are aligning and coordinated. I wouldn't point out that on May 19, we did a large broadband for all round table that included, most of the federally recognized tribes in California to really provide an update on the middle mile efforts so, tribal engagement obviously critical and a huge you focus and will…you know, continue to update so thank you for asking that question.

Yeah, thank you.

Thank you. Ms. Miller?

Thank you. Just want to shout out the team and how great the slides are in terms of the timeline and how much progress we're making. Really excited about all the RFPs coming out, and I think the work is really extraordinary and the way you laid it out really shows how much you've actually accomplished in this…in this amount of time, so thank you for explaining it so well and putting all of that together, I think it's really phenomenal. Thank you.

Thank you, Mr Miller. Any other questions for the panel members before we go to the next agenda item? Okay, I see none. Our next update is being presented by CalTrans by Ms. Janice Benton. So, Ms. Benton?

Alright good morning Chair Bailey-Crimmins, committee members, and others from the public. Hopefully, you guys can hear me okay. My name is Janice Benton. I am a division chief over at CalTrans and will be providing an update on the progress made to build the 10,000 miles of broadband middle mile network. Next slide. Across the plan, 10,000-miles of the network, we continue to perform preconstruction activities at the same time, we are expanding how we will deliver these projects and leveraging opportunities to accelerate them. By the first quarter of next year, we aim to begin construction on 20% of the network. Examples of how we are accelerating projects is through partnerships with resource agencies to streamline the process for obtaining environmental permits and approvals, as well as, formal access agreements when working in the right-of-way over federal lands. We anticipate significant time reductions in the environmental permit process from the effort…from these efforts, which I will cover in the following slides. Janice Benton: And as we are making progress on the initial 18 projects with three going

to construction, this year we are also gaining a better understanding of the dynamics to deliver the overall program of the projects, I will touch on this more later as well. CalTrans is also prepared to support CDT as they continue to explore and use the IRU leasing opportunities. Next slide. So, this slide provides an overall update for the projects and reflects that projects are more than 50% of the miles are underway. 52% of the miles have been assigned to projects and these projects are 19% through the environmental and permitting process and 11% through the design process. It should be noted that while the brown slice has a label of not starting…critical preconstruction efforts are underway. So, we are working to finalize the scope is schedule with an aim to bundle the projects based on complexity, such as environmental permitting, access rights within federal lands terrain and more, as well as, identifying the most effective and efficient contracting method so that we can proceed to construction as soon as possible. Next slide, please. So, this slide shows the CalTrans districts, the project…this…I'm sorry, this slide shows by CalTrans district, the progress of miles assigned to projects and also by CalTrans district, how far they are through the environmental in design processes. Again, while the charts show the progress happening by district, it does not reflect that the number of broadband miles varies from district to district. The chart shows the percentage of completed tasks in blue, the percentage of in progress tasks in green, and as with the previous slide, the brown shows the percentage of miles for which critical reconstruction efforts are being refined, such as the delivery strategy, bundling opportunities, and the most suitable contracting method to move these projects to construction as soon as possible. So, for example, looking at District 1, more than 60% of the miles have been assigned to projects and those projects are approximately 20% through the environmental and permitting process, and approximately 10% through the design process. Next slide. So as shared at previous MMAC meetings, CalTrans continually assesses opportunities to leverage existing projects and implement dig smart opportunities. We use criteria to assess these projects that includes compliance with the funding timeline, ability to add broadband infrastructure within the conditions of the environmental document, and no additional need for right-of-way acquisitions or easements. This slide shows the number of potentially viable highway projects that could add broadband infrastructure. We have identified at 89 dig smart opportunities that cover approximately 667 miles of the network. At last month's MMAC meeting, we shared that we were targeting 10 projects to begin construction this year. However, I'm happy to share that this…that now we have 13 projects covering 90 miles that are expected to begin construction this year. We have also identified an additional 21 projects that are expected to go to construction in the coming year. Of the 13 projects that will start construction this year, three of them are part of the initial 18 locations, which includes wanting construction and anticipated to complete the conduit installation by the end of this calendar year. And the other two are anticipated to begin construction next month. The remaining 10 projects that are expected to start construction this year are at very various stages of finalizing the contract process to add the work to existing contracts. Next slide. So, this information provides the status of the initial at locations. We continue to make progress and move these projects through the process. I'm sharing the status of the initial 18 locations in terms of where we are within the 19-month timeframe that was discussed at the last month MMAC meeting. So, seven of the initial 18 locations are up to 20% complete. Eight of the initial 18 locations are up to 40% complete, and two of the initial at locations are up to 60% complete. And if we recall location number 17 will be built by Coachella Valley Association of Governments. So, we expect that construction will begin on these projects as early as October 2022, noting the dig smart opportunities I

mentioned earlier. So, these locations have also provided valuable insights that we've been able to leverage as we navigate the middle-mile hill. We have had the opportunity to see the demands of the work before us and better understand how we needed to steer through the challenges. With the knowledge and insights from these locations, we have identified opportunities to streamline and engage a strategy of avoidance. This is where our partnerships are so critical. We are working with our partners at the state and federal resource agencies to get programmatic permits and approvals to meet the environmental and federal land access requirements which I'll cover in a subsequent slide. Next slide. We also like to highlight that CalTrans is leveraging the alternative delivery methods provided for in SB 156. Thus far, we have identified alternative delivery methods expected to begin construction in 2023 to build more than 2,000 miles or approximately 20% of the network. By using these alternative delivery methods, construction manager general contractor and job order contracting, we will be getting work in the hands of contractors with CMGC and JOC, we can segment the projects and have the contractors begin to build sections that have completed the environmental permitting and design processes while work on the remaining projects segments continues. Or in other words, these delivery methods allow for environmental permitting, design, and construction work to take place concurrently. An added benefit, as Mr. Monroe referenced earlier to these projects is that we will be able to get early cost data to better inform other projects within the middle mile network. And also, as Mr. Monroe mentioned earlier the team of CDT and CalTrans hosted two contractor forums over the past several weeks to engage industry partners on the preferred procurement approach, project risks, labor and deployment challenges and more. We heard industries feedback on key items such as the need to identify other utilities in the areas to reduce the risk during construction and reduce the cost from that work. Also, the need for longer work windows to work at night, as well as longer long-term closures, both of which will impact production rate and safety. We also heard the industry's feedback on delivery approaches and various contracting methods. They shared their input on the pros and cons of each delivery method, and we are incorporating their feedback into our delivery strategies. Next slide. So, CalTrans has a long history of successfully partnering with regulatory agencies to deliver projects. Over the past months, as Mr. Monroe referenced, CalTrans has been meeting along with CDT with the state and federal resource agencies to leverage these partnerships to benefit the middle mile initiative. Significant progress has been made to date with the permitting agencies to develop programmatic permits that would reduce the timeline for approvals and identify resource needs within each department. In addition to programmatic approaches, CalTrans has historically funded positions at resource agencies to ensure that sufficient staffing is in place to minimize permit processing delays. We have been coordinating with them on resources and staffing needs as part of this effort to streamline the permit and approval process, we joined with CDT to host a state agency permitting solutions summit that brought together the state and federal permitting agencies this past month. The summit included reports on the status of programmatic efforts, staffing, and agency reporting a time savings to meet the 10,000-mile network goal of December 2026. The summit reflected the shared commitments of the departments to continue to partner with CalTrans and CDT on this vital effort. And as I shared at last month's MMAC meeting, the average project that would have otherwise required in environmental document pursuant to CEQA could save approximately 13 months with SB 156. With the enhanced resourcing provided that I just mentioned to the agencies and to the permit streamlining efforts we anticipate up to six months can be realized for some resource

agency permits, and that's reflected by the timeline from 17 to 11 months. For the state fire marshal timeline, we are identifying opportunities to bundle the repeater hut locations in standalone dedicated projects that require approval from state fire marshal. This would allow us to accelerate the remaining work to install conduit fiber and vaults potentially resulting in additional reduction of five months that would be otherwise required to obtain the state fire marshal approvals for those projects. Another item I would like to highlight is the timelines for the permits to enter or other agreement types required by federal partners, so that timeline on the bottom of the chart. These timelines do vary from entity-to-entity. Development of a programmatic or standardized agreement for each federal agents need to allow construction within highway rights-of-way that traverse over the agency's lands, we'll streamline the process for development in these areas. So, looking at all of this, that the total…the total potential reduction in timelines from the streamlining efforts to exploring opportunities to avoid and minimize impacts to biological and cultural resources and providing resources to other agencies is estimated to be up to 19 months in savings. So, with that CalTrans continues to be committed to this broadband initiative and will continue to collaborate with Department of Technology and other agencies to address the challenges and find opportunities to accelerate the deployment of the middle mile network. This concludes the CalTrans update.

Ms. Benton, thank you very much for the comprehensive presentation and always continuing to streamline the processes, so I'm going to go ahead and open it up to the committee members and see if they have any questions about the CalTrans update. I see several…first is Secretary Tong.

Thank you, Chair. And thank you for the presentation. I do have one question, I think, is perhaps and there's no need to bring up the slide…as the second to the last slide when there was a chart talking about the contracting effort with a few district was listed, which is happening now and August and September covers about 20%. I just want to get a clarification because I heard from Mr. Monroe's earlier presentation that there's also a statewide effort, a much bigger effort to try and to get you know larger than a contract out there to cover construction. Is this to coincide or are these individual effort that's taking place right now it's more of a precursor to the larger contract, which would cover rest of the 10,000-mile, you know the rest 80%...I just want to get that clarification.

Yeah, so these…the projects listed on that slide are ones that we do have anticipated to go out to advertisement beginning in whether it's July…August…September, whatever that month was in that slide. In the meantime, we are continuing to brainstorm and workshop those remaining miles with the CDT team to identify those opportunities to put more contracts out on the street.

Got it. Okay, so these because they're already underway, and probably it's a little bit of a good testing the waters sort of speak, while CalTrans and CDT is going to work on a much bigger approach to cover the rest of the mileage.

Correct.

Okay. All right, thank you for that clarification.

Thank you. Assembly member Wood?

Yes, thank you and thank you for the update, appreciate that. Question, you mentioned that you went back to the summit that you guys had with everyone. Is there going to be, and maybe I'm misunderstanding some of the language here. So, are we…are we truly headed towards a programmatic approval process through for this or because you talked about you, I think we've gone from 17 months now savings shortening to 18 months so that's a month, but still like to see that shorter obviously. So, are we headed towards something programmatic?

Yeah so, what we're doing on the programmatic part is we're actually working with each of the resource agencies to develop a programmatic permit for them for each one. We don't have one statewide programmatic permit that will cover all permitting agencies whether it's state or federal. But, but if you look at that chart on that slide that talked about the timeline that it is a little deceiving because what it shows is we went from 17 to 16 based on a lot of the conversations. But that it stopped at 16 because of two items. One, the state fire marshal and we're still working through that final timeline with the state fire marshal. And the strategy is to remove the repeater huts which then gets you know, the conduit and the fiber everything else built you know, separate from the repeater huts while we're still working on the repeater hut project. The other one is that permit to enter, so and that's on the federal side, so if we don't own if the state does not own the right-of-way land that the highways on, we do have to go to our federal permitting agency so whether it's national parks or BLM or other, we have to go to them to obtain approval for us to be able to do this, this work in our underneath or below or adjacent to our transportation highway. So those two timelines are the two that I really I was trying to emphasize that we're still working on those two with anticipation of reducing those timelines. In fact, the state fire marshal when you can kind of separate that out from the rest of them. And so, if you just look at the conduit fiber and vaults and so forth, it's really that the federal permitting with the rights-to-enter. Once we get those programmatic permits in place for those, we do anticipate that it…going from the 17 to the 16, and then possibly jumping all the way down to that 11th month timeline. So, if you're looking at that chart. So, those are…and Mark…Mr. Monroe likes to refer to them as the long stakes in the tent, you know, we can keep shortening the longest stake, then we're reducing you know the total timeline so those programmatic permits that we're working with Department of Fish & Wildlife, the Water Resources Control Board, California Coastal and so forth. Those we do anticipate those saving…saving those timelines so they bring it back you know between 11th month and earlier. So…so they are individual programmatic permits, but they're collectively getting us down to that shorter timeline.

So, we…so do we and forgive me if I don't understand the process. So, do we ever convene a large stakeholder group and put everybody in the room and hammer through this so that…and working you know, working together or is all this work happening with individual agencies, because I understand the federal…the feds, federal government has a working group, where they're actually doing more of a one stop shop, so are we doing or are you having to negotiate with each of these individual agencies on the outside of a larger working group?

It's a little bit of both so for the state resource agencies, we had been working with them individually and then we brought them all together just actually just recently to kind of do a roll up of what this means. And that was the agreements with programmatic permit you know processing whether it's providing resources to those agencies and so forth, so we did have that collective conversation with them. We brought a couple of our federal partners in that conversation as well just so they could hear the conversations, understand what we're trying to do collectively as a group. For the federal permitting, there are efforts in place and there are conversations happening from a federal perspective, trying to leverage the fast 41 efforts on the federal side where they bring in all the federal partners and try to get everybody on the same page in terms of what can we do to expedite the timelines, get you know agreements in place and so forth, so we are leveraging that group as well as leveraging federal highways administration as well. They've…they've been a great partner over the last you know, several years, but just recently with this project, we've been working with them, and we think we're making great headway and getting some of those right-of-way use agreements in place that will definitely streamline the process on that end.

So, we so the federal…feds do have a group like this, but we are just beginning to do that? Do we have a working group like this that is that can do what you just described the federal government? Yeah, yup. yup,…I'm sorry, we've been in conversations with that group…um, FPISC…I forget the…it's a steering committee.

No, no, no—with *our* state agencies. Are we doing that…are we doing something similar because it sounds like it's just…sounds like you just started having these discussions, so do we have a one-stop shop sort of group like the feds do, or are we building that?

Well, so…um, like Mr. Monroe referred…we, we had a summit back in February, when we kicked off this effort and got them all together and said hey we're you know here's SB 156, this is what it brings to us and we're going to need all of your support and effort and then over time, we…you know, since then we had been working with them individually, and then we brought them all back together to say, okay this is what we're what we're where we are today, this is what we've achieved so we're---

Apologize, wouldn't it be more…that's 6 months between that and that first summit and this one, just feels like a long time, and it just feels like there could be an economy of it and I'll stop after this, but you know clearly the federal government's doing this on one level, can we not be doing something like this on a more regular basis, but I know…look, I know from my own experience, look, I have two different CalTrans agent regions in my district, and they operate differently and, and, and, and, and…I know that from experience working with them so wouldn't it…is there a way to get everybody on the same page, you know and all working together consistently all these agencies, it just feels like that would be a really good way to expedite some of this.

Okay, we you know what let me go back and I will talk to our environmental and permitting group. I think, to be honest, I think that group has gotten to a point where the programmatic agreements with each individual agency is moving through and making some great progress but let me, let me loop back with them to find out that there's an…if

there's a benefit to bring them all in again…bringing them all in at once and talking about those efforts.

Okay, thank you. Yeah, um…Assembly member Wood, one thing I would want to add is that in terms of the Federal Permit Improvements Steering Council, we're…the CDT and CalTrans are literally meeting with them later on today to go over you know, draft MOU that would include how this state would you know, be able to participate in the fast 41 program that they and potentially include the, you know, solutions that have been developed with the state resource agencies. We understand you know the…your suggestion in bringing people together and that's what we're working to do and we expect to be able to collectively report out on the progress that we've made at the next meeting as well.

Great, yeah it just feels like it would be a much more efficient process than individual meetings with individual agencies, since everybody…be nice if everybody knew what everybody else was doing. Thanks.

Thank you and I know Ms. Benton you also have named a permitting czar right? So, that is someone that is going to be a point person, the central point person so Mr. Keever, you are up next.

Thank you, I did want to follow up, so Assembly member Wood, your idea absolutely agree with it, there was a bill passed several years ago, AB 1282, that requires us to work together, multiple agencies to try to find ways to streamline the permitting process. I will just say with those efforts, given all the different missions, there isn't a quick overnight fix for this and, and so the efforts are ongoing, we are leveraging those efforts, but the other thing that we're trying to take advantage of are the relationships that we have at the local level. Many of these permits the way things are set up, there is a statewide barrier…also just like CalTrans' regional offices that know what's going on in the desert versus what's going on…on the coast. So, and you're going to have a different type of permitting requirements and issues to deal with…it's that local knowledge and the relationships that we feel that we can leverage to try to streamline this and go as fast as we can. To ask everybody to retool everything that they do overnight, I think, is probably going to be difficult, but I completely agree with you that we need continue these ongoing discussions and make sure collective issues that we all face, we're working through them and we have quick crisp decision-making, so we don't get hung up. The other thing I was going to ask Ms. Benton to talk about and she mentioned it, but the strategy that we're also trying to learn from these early projects, much of this, the intentional strategy of avoidance is important in that these timelines become a moot point if you don't need the permit and maybe you could speak a little bit more about that Janice.

Yeah, thank you. So, and that's a…that's a really good point that I should be emphasizing is this timeline is when we do need a permit or when we do need to go talk to another agency to get the work done, whether it's through no permanent or agreements or whatever, that is. So, going back to the avoidance strategy, what we are trying to do is avoid them, so if we've got resources on one side of the highway, then let's move on to the others, or if there's other strategies to go around them, whether it's

under…over…whatever, those other resources then that's definitely the strategy moving forward, and we do anticipate that we are going to be able to avoid a lot of these. For example, the State Historic Preservation Office or the SHPO one, we think there is opportunities to avoid a lot of that in that case, and you know, get down to that very low, you know 10% of the time we made run into that. Same thing with you know if we, we have to get some other federal permitting piece trying to, trying to avoid any of those additional federal environmental requirements that go above a categorical exemption. So again, it's about trying to avoid those, eliminate those long timelines or those long tents and the poles or uh…poles on the tent and meeting those expectations.

Secretary Tong.

So maybe just very briefly, perhaps to just put a pin on this on I think what the conversation is good in terms of there's a lot of complexity to streamline the permitting. But then I think what if I'm hearing what Assembly member Wood was asking is that even with that complexity you know, very frequent check in with a larger group would accelerate and keep everybody informed and even generate probably other ideas to how to kind of keep the momentum so I would, I would…you know, echo that and perhaps also a suggestion to the collective CalTrans and CDT, who is also helping to kind of push this but really the expert of the permitting is really CalTrans so, you know, really, I know it's a heavy lift that I think it…just in this conversation there's also this a little bit of a mixture of…there's the horizontal coordination between state, local, and federal, and the state alone already have a bunch what do we do as a state to get them a lot more streamline and then there's a vertical you know, between local, state, and federal that also needs to be coordinated and what are you know, what is this team doing to make sure that vertical integration are taking place. So maybe something to think about as we are looking forward to next month's update, that might be a good presentation to kind of really illustrate the different way of coordination, as well as the creativity, you know the strategy of what avoidance, I think that's how you call it, all put in place to tackle this beast of streamlining harmony, thank you.

Thank you, members for your questions. Are there any other questions before we go to the next agenda item. Alright, again item #4 is Mr. Tony Naughtin from the third-party administrator, Golden State Net. Mr Naughtin.

Thank you very much and good morning everyone. I'm Tony Naughtin, chief operating officer of Golden State Net. I'm joined in the meeting this morning by Ron Hutchins, our chief technology officer and also Erik Hunsinger, who is vice president of network development. Next slide, please. Since the last meeting Golden State Net submitted core network backbone designs and recommendations, and these include routes among those that have already been mapped where the actual core backbone will actually be placed. Backbone routes must of course connect to major internet exchange points of presence for internet traffic exchange. And also, once you've defined the core backbone routes, a picture emerges of logical locations where regional exchange points can be placed. I wanted to introduce now around Ron Hutchins, the GSN's chief technology officer who will briefly walk through and discuss these core backbone route recommendations. Ron?

Thanks Tony. If you can go to the next slide, please. So, there's several ways to think about networks. One way is just to think about the fiber, which is what we generally talk about. The fiber design that we have approximately 10,000 miles of fiber that's on the map here that we were showing is the core of the network, the basis of the network but it's helpful if we think about it to consider the network is something other than this undifferentiated massive fiber and to think about it in different layers. If I'm a last mile provider and I need dark fiber, this network will provide that in this form without anything else on top of it. But what we find is many or not, most of the last mile providers really want what we call lit services, which is services that they can plug into and get internet service, package-size service from it. And in order to do lit services, we really need to build a core backbone. The backbone does a couple of things. It builds redundant rings specifically connected together for reliability, it also…it's an interesting fact that sort of the opposite of politics, where all politics are local. On the internet and most of the traffic goes from any location to the backbone and then towards the larger internet at these exchange points and the points of presence that Tony mentioned. So, in order to do that, we have to think about the backbone and an efficient way. We can't build out the entire network to the same speeds and capacities that the backbone should be built to so what we've done is created a backbone architecture which is on the next slide. We took the routes, as we had them on the on the map, you can still see and we created larger rings with about 18 major points on the map, where we put huts with extreme equipment in it for large capacity and high performance. We built them into rings for redundancy and reliability in case any one of the legs is cut or impacted from high traffic. The traffic can be rerouted to these other rings and this subset is what we're calling our core backbone. Next slide, please. Of course, the backbone consists of fiber, but it also consist of the huts. This is a map that's showing the huts of the entire network. And you can see on the backbone, we've got key major cities such as San Francisco, Los Angeles, which are called out very clearly as a proposed backbone path, but also backbone paths that span pretty much the rest of the state and gets the backbone very close to the population in the state. The capacity of the backbone as I said, is the largest where we have those cuts that are off of the main core nodes of the backbone, we can save money by lowering the capacity, but still a backbone traffic traverses these so they're more than the lateral huts or the spurs, or non-backbone paths, which has the lowest capacity. And that helps us to be efficient and effective with the funding, but also gives us the pathing that we need in order to provide the network. And on the next slide, we show the points where network traffic is aggregated or drained. The red, the yellow, and the blue are the major drain points of the network which connects to internet service providers that have international network paths. Those are the major ones that we want our traffic to get to from an efficiency standpoint because the cost of accessing the internet from these points is the lowest that we can get. But from a regional standpoint, we have points of presence as you can see on the map, where the regional traffic will drain to get to these points on the backbone, which then will feed to these other points. We are focusing as we've said many times on resiliency, we're focusing on lowering latency, the delay that happens across the network for reasons, such as the video that we're on right now. Latency is an enemy of video. Latency is also an enemy of high-speed doctrines and gaming, so we're trying to build a network that will be efficient and effective for the future and we're also trying to put these points in proximity to unserved and underserved communities to lower the cost for last night providers to get to them. Next slide. And Tony if you want to hop back in here, let me know what you need from me on this. Thanks Ron and I'll just add on top of the presentation Ron made in

addition to this core backbone work, we spent quite a bit of time at GSN focusing on certain application software systems that we will have to have in order to oversee the development of the network, as well as operate the network once it's in production. These software application systems include a fiber management system, which has a map-based system accessible by key parties involved in the physical construction and development of the network. And that includes individuals in the field, who are managing the project in multiple locations. A fiber management system provides route map details and location information to support the fiber construction effort while it's in progress. It maps and captures the route location details after construction is completed and these are commonly called as built maps, as many of you know. It maintains an inventory of all fiber pairs physically being used on the network, whether for lit services or under dark fiber IOU leasing arrangements we've made with third parties who want to lease dark fiber capacity. And it generates reports, the fiber management system generates reports that can be provided periodically or on an ad hoc basis in a very detailed fashion. In addition to the fiber management system, we are also evaluating at Golden State Net, the other necessary software systems to operate and develop the network. These include an inventory management system to track and manage all the physical components of the network, such as active and passive electronics. A customer relationship management system or CRM as it sometimes is referred to, which manages and records all customer account details, service and billing history, and all really comprehensive information about customers who are using services on the network and, of course, a billing system to generate invoices for middle mile network services being purchased by those customers. Bloomsday Net will be making recommendations to CDT for each of these application systems to be purchased and we will thoroughly inform CDT of the details and basis for each recommendation of course. It's important to note here, Golden State Net is also carrying on with considerable work and refinement of various items we've mentioned in previous meetings, these are ongoing detailed efforts for ILA retransmission hut development, active electronics, architecture and planning, interaction with telecommunications providers both on potential joint build opportunities as well as potential dark fiber least what is known as IRUs. And we are also advancing our work on the business model for the middle-mile network and its service offerings. And this of course is to project operating costs and revenues with a view towards being able to support the long-term operation and maintenance of the middle mile network. That pretty much wraps up our report. Are there any questions that Ron or Erik or I could answer?

Thank you Mr. Naughtin and Mr. Hutchins for providing the third-party administrator update. Committee members, does anybody have questions? I see, none of this time. Thank you very much. We're going to go ahead and go on to the next agenda item. Our final update is before we hear public comment is from the CPUC, Mr. Robert Osborn. Mr. Osborn, we apologize your video or your audio is not working at this time. Do you want to try it again?

Can you hear me now?

We can. Thank you.

Sorry about that. Good morning, MMAC members and members of the public. I'm Robert Osborn, director of the communications division at the California Public Utilities

Commission. Next slide, please. So, I'm going to provide an overview of or an update on the last mile programs that we're implementing at the PUC. In February, the CPUC adopted final program rules for the local agency technical assistance program. We began accepting applications on August 1st to encourage local agencies and tribal entities to start planning for broadband deployment. On our website, we posted a grantee manual and recorded a webinar of the grant rules and the grant application walkthrough and those are available on the PUC's website. We also provide further information on the website about the application process and the window for application is a recurring window so you can apply. We evaluate each set of applications on an ongoing basis. Grantees can receive up to 100% of technical assistance project costs up to $500,000 for local agency or tribe through commission resolution, which means that may…it uh, it uh…sorry…through ministerial review, which means it doesn't need to go through commission resolution. Anything above $500,000 requires a resolution and must go through commission votes. As you can probably sense we're excited about this grant program and we're excited to work with local agencies on their broadband solutions. Next slide, please. So, the California Advanced Services Fund, we opened windows for three grant accounts…sub accounts in July. We received 133 applications requesting a total of nearly $41.5 million. For the public housing applications, we received 19 project applications for a total of 1.4 million. For the consortia account, we received 15 applications worth about 11.5 million. And for the adoption activities…the adoption sub account, we received 99 applications for a total of 28.5 million. Finally on the tribal technical assistance, we continue to receive applications for that and this allows tribes to develop market studies, feasibility studies, and business plans. And to date, we've awarded almost $2 million to 25 tribes. On the California Advanced infrastructure…California Advanced Services Fund infrastructure account, we're working on a staff proposal to be issued. We receive reply comments and we've incorporated those into the proposed decision so that will be coming out shortly, and that proposes changes to the existing infrastructure grant program for CASF. Next slide, please. So, this slide really just provides an overview of the different funds and their status as touched upon the technical assistance. On Loan Loss Reserve, just to recap the Senate bill 156, tap the CPUC with designing and administering a Loan Loss Reserve program of $750 million for local governments and nonprofit entities. And this is to assist local governments and nonprofit entities to finance and build their own last mile broadband infrastructure. The fund provides reserves to enable better borrowing rates and terms for bond issue to deploy broadband infrastructure, and this is being implemented through the CASF proceeding. We're working on a staff proposal to be issued in August of this month and a final decision is expected in early 2023. Finally, the Federal Funding Account, which has 2 billion available for last mile broadband infrastructure grants. The timing of this we plan to release priority areas that are in GIS format and have cost components associated with them. And we're focusing on identifying those party areas and providing those as a meaningful way to interact…for applicants to interact with the data. There is a web-based tool that we're putting together, webinars, and technical support the local agencies have requested in advance of getting applications in for the grant program. We've been talking with number of stakeholders about having the latter grants available and having those as sort of a precursor to the federal funding account, so we'll be releasing the priority areas first and then the applications…uh, application window will be opened. So, the priority areas really are the building blocks for the entities developing the last mile grant applications. That concludes my presentation, thank you.

Thank you, Mr Osborn both for investment fund and overall CPUC progress. I'm going to go ahead and open up to the committee members. Does anyone have questions about Mr. Osborn's presentation? All right, I see none. Will go ahead and transition to public comment. Ms. Stein, will you go ahead and please provide a public comment guideline and began the process.

Certainly. In order to ensure everyone who wishes to make a comment has the opportunity to do so, we respectfully request one speaker per entity and two minutes per speaker. We will go in order of online submissions prior to the meeting. Zoom, please raise your zoom hand. If you're calling in via phone, please press *9 to raise your hand. And then online submissions that were submitted after the meeting began, we do have two online submissions that were both from Will Micklin regarding San Diego locations and tribal access. Is he here today or is anybody here for him? I am not seeing that, so I will go ahead and Mr. Blagg, please go ahead. Mr. Blagg, we've unmuted you. We're not hearing anything. I'm going to go ahead to Mr. Neufeld, then we'll come back to you.

First, thank you, this is Philip Neufeld with the Fresno Coalition for Digital Inclusion. First, wanted to thank you for the outreach and improved engagement with local coalitions by the State of California's…by the State's departments involved in the broadband for all initiatives. We appreciate the improvements to and the progress on the middle mile routes. The CPUC maps continue to underrepresent or not count the underserved and unserved urban areas of poverty and within low-income multi dwelling complexes. Yes, the maps have improved and it appears efforts are being made to improve data gathering; however, we need to move beyond the surface level fabric to reflect the human experiential layer representing the quality, affordability, and accessibility of internet. And we need to use crowd scale modern methods together. Such data…Fresno Unified and the present coalition for digital inclusion have done so, and we think it's a model that can be followed. We want to make sure that can be layered upon the existing CPUC data. It's important to recognize that fifty to a thousand, to a hundred-fifty thousand unserved residents in the city of Fresno who don't show up on existing CPUC maps. This should affect middle mile routes and does affect where last mile services are most needed. We trust that these areas while previously ignored by CPUC maps, will be included in the priority areas for last mile funding. Otherwise, we will walk past these same residents once again like we've done over the last 20 years. We also ask that middle mile routes leverage existing fiber like the use of IRUs to further reach of middle mile routes. Thank you for including a regional exchange in Fresno and Bakersfield. We have numerous local entities, including the city willing to lean in and be party to that. That's super important from an investment standpoint and will bring substantial value to the central Valley, so thank you for that. Finally, thank you for partnering with the Fresno Coalition for Digital Inclusion and the great work everyone is doing leaning in in this moment of great opportunity to improve digital inclusion for all.

Thank you, Mr. Blagg you have the ability to unmute yourself. It's showing you are unmuted Please go ahead. We're not hearing anything. If you'd like to submit something to the middle-mile mailbox, you can either do it now or later, and we will attach it to the meeting minutes. We're gonna go ahead and with Mr. Bullard. Please go ahead.

Yeah, hi. I'm Larkin Bullard with CDWG and I had a question for the Golden State Net network group. The question is what's, what are the plans, maybe it's CENIC-based, but what…what are the plans for the network devices that are going to be needed to light up this network. Maybe you can talk a little bit about that.

So…Ms. Stein, typically with questions, we use another means, correct? And then make that available to everyone?

Um yeah…yes, you can go ahead and submit something to the email account so that could be added to the questions and it is noted for the many presenters to consider for the next medium or future meetings. Mr Blagg, would you like to try one more time? We're currently not showing any additional people for public comment, Madam Chair.

Thank you. Would any committee members like to make any additional comments before we close and adjourn the meeting? All right, I see none. So, I want to thank the committee members, the presenters and attendees for their contributions today. It is a very busy time of the year, and we appreciate everyone taking time to participate. Our next meeting will be Friday, September 16th from 10 – 11:30 am. With that, the Middle-Mile Advisory Committee is adjourned and we look forward to seeing everyone in September.

From: Microsoft Power Apps and Power Automate ███████████████
Sent: Thursday, July 28, 2022 1:22 PM
To: CA Middle Mile Advisory Committee
Subject: MMBI Public Comment Form Response

Sent by: Will Micklin
Email: ███████████
Organization: Ewiiaapaayp Band of Kumeyaay Indians

Middle-Mile Initiative Comment:
The Middle-Mile Broadband Initiative should extend to east San Diego County via S-1 (Sunrise Highway) to SR-79 and on to SR-78 in Julian. Without this extension east San Diego County is largely omitted from access to high speed broadband facilities and services. Backhaul connections for the great majority of east San Diego County to the now planned Interstate 8 and SR-78 middle-mile facilities are too costly to be feasible without additional middle mile facilities along S-1 and S-79.

If you want to unsubscribe from these emails, please use this form.

From: Microsoft Power Apps and Power Automate ████████████████
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Subject: MMBI Public Comment Form Response

Sent by: Will Micklin
Email: ████████████
Organization: Ewiiaapaayp Band of Kumeyaay Indians

Middle-Mile Initiative Comment:
The Middle Mile Broadband Initiative analysis for Regions Served by Middle Mile Access erroneously depicts the Ewiiaapaayp Indian Reservation Big Ewiiaapaayp section of 5,460.13 acres in east San Diego County as "not unserved by middle mile access." The Big Ewiiaapaayp section if off-grid to all wireline, fixed wireless, and mobile wireless services. Broadband data maps that depict these services as deployed to Big Ewiiaapaayp are in error.

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From: Microsoft Power Apps and Power Automate ████████████████
Sent: Friday, August 19, 2022 11:13 AM
To: CA Middle Mile Advisory Committee
Subject: MMBI Public Comment Form Response

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Email: ███████████
Organization: PSREC / PST

Middle-Mile Initiative Comment:
Regarding Caltrans presentation/slides Fri Aug. 19, 2022 meeting Ms. Benton provided a map of the first (18) projects and then a timeline on a following slide of the projects called out by numbers in circles. Would it be possible to see a future slide that shows a district breakdown of Caltrans and the project number called out numerically and whatever other naming convention they have? Thank You Jeff Blagg

If you want to unsubscribe from these emails, please use this form.