

Middle-Mile Advisory Committee  
November 18, 2022  
Meeting Recap and Transcript

The Middle-Mile Advisory Committee met on Friday, November 18, 2022 at 10:00am PST via virtual conference.

**Agenda Item 1: Welcome and Overview**

Chair Bailey-Crimmins welcomed everyone to the meeting.  
Chair announced that due to AB 2256 authored by Quirk-Silva, MMAC will welcome two new government members, one will be appointed by the Senate Rules Committee and another will be appointed by the Speaker of the Assembly.  
A quorum for the meeting was established.

Member		Designee	Present	Absent
California Department of Technology	Director Bailey-Crimmins		X	
California Public Utilities Commission	President Reynolds		X	
Department of Finance	Chief Deputy Director Miller		X	
Government Operations Agency	Secretary Tong		X	
Department of Transportation	Director Tavares	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 Quirk-Silva	(Ex-Officio Member)		X
State Assembly	Assembly Member Wood	(Ex-Officio Member)	X	

**Agenda Item 2: Executive Report Out**

Mark Monroe provided the executive report out, focusing on Construction Contracts and Middle-Mile Broadband Network progress and talked through Project Timeline.

### **Agenda Item 3: Project Updates**

Mark Monroe provided the California Department of Technology's (CDT's) update of construction contracts, 2022 Accomplishments in planning and construction, and next steps for 2023.

Scott Adam provided the California Department of Technology's (CDT's) update on stakeholder outreach.

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

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

Jonathan Lakritz provided a California Public Utilities Commission (CPUC) update focused on Local Agency Technical Assistance, Loan Loss Reserve Program, California Advanced Services Fund grants received, and last mile broadband initiative funds.

### **Agenda Item 4: Public Comment**

Public comments were made by:

Scott Pohlman

Georgia Savage

Judy Horton

### **Members Final Comments**

Secretary Tong thanked MMAC members, public participation, and all partnerships.

Deputy Director Keverer thanked everyone involved and expressed excitement for the new year.

### **Closing Remarks**

Chair Bailey-Crimmins thanked Committee members, staff, vendors, partners, and attendees and noted the next meeting is scheduled for January 20, 2023.

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, November 18, 2022**

Okay, and we're about ninety-two participants at this point. So why don't we go ahead and get started. So, first of all, good morning and welcome to our November 2022 Middle Mile Advisory Committee. This is the last meeting of the year. Therefore, today's presenters will focus on providing you an update since our last meeting, but in addition, they're going to highlight the past year's accomplishments. We've had a lot of progress on this effort and we'd wanted to make sure that we ended strong before we have our next meeting in 2023. I also want to highlight that thanks to AB 2256, which was authored by our own Assembly Member Quirk-Silva, in January 2023 we will be welcoming two new local government officials as members. One will be appointed by the Senate Rules Committee, and another will be appointed by the

Speaker of the Assembly. So, we look forward to welcoming them. The first order of business is roll call, and so we'll go ahead, and Mr. Przybyla, will you please call roll?

Yes, and I'll provide a few housekeeping items up front. Attendees, please note there is time allocated at the end of the meeting for public comment. Presenters, please cue Anh 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 committee member roll call. Chair Bailey-Crimmins.

Here.

Commissioner Houk. Uh, excuse me. President Reynolds.

Here.

Chief Deputy Director Miller. Chief Deputy Director Keever. Secretary Tong.

Here.

Senator McGuire. Assembly Member Quirk-Silva. Assembly Member Wood.

Here.

Madam Chair, we do have a quorum, and we will have additional members joining in a few.

Alright. Thank you very much Mr. Przybyla. So, are there any committee members who'd like to provide some brief comments. This is the last meeting of the year before we get to the presentations and the formal updates. If so, if you just raise your hand. Alright. I see none, so let's go ahead and get started. Mr. Monroe, we will go ahead and get an update, an executive a report out. Please go ahead and get started.

Yes, Good morning, members. Glad to have this chance to...at the last MMAC meeting of the year to be able to talk through the status of the MMBI project. And we'll kind of cover we made some good progress this year. And so, we're kind of excited about the status of things. We're gonna...well, we'll start this morning by presenting a map that that overlays the more than seven thousand miles of construction contracts that Caltrans currently has out to bid. You know, kind of overlays that over the ten thousand mile maps. You can really get a better idea of where and just the magnitude of you know, of seventy percent of the network kind of going out for construction. So very exciting. We will also be talking about the small business and Disabled Veteran Business Enterprise participation efforts that we've been making relative to these construction contracts and really what the expectations are for them, and then finally, we will be reviewing the progress from this year, and what will be what to expect in the first two quarters of next year. Caltrans will be providing an update on the two types of construction contracts that they have out to bid currently and their progress in pre-construction work as well as some of the dig smart projects. The Golden State Net will provide updates on its efforts on business model components on its go-to-market plan. It's service and architecture work and it's work in assisting CDT with some systems procurements. And then PUC will be providing an update on its Technical Assistance and Loan Loss Reserve Fund. And then the Federally and State funded programs relative to last month. So, with that that will be...that's my uh...Oh, I'm sorry. I think we have another slide to go that we put up to talk through the...can we go to the next one. Yeah. And this is the timeline that we've been showing committee members that we want to you know, help remind everybody of the progress, that, or the...what has to happen in the timeframe

that we're working. You'll see that what's changed here is really moving that focus to the December timeframe for getting all of our bids back for construction lease options. And then, January where we need to take that information and go through an optimization process that as we move into the next year and make some key decisions about really what the architecture of the network will be. So, with that...that's the end of my executive report out and I'll turn it back to you, chair members.

Thank you, Mr. Monroe. Are there any questions for any of the committee members? Alright. Great executive brief, and we'll go ahead and go into the actual project updates for the Department of Technology. Mr. Monroe.

All right. Very good. So, the first slide here, really want to...excited to be able to put this up. You know, we've talked about numbers in terms of the construction contracts, and I think this is a great illustration of just kind of showing where throughout the State those construction contracts are represented. Right? So, this is again a little over seventy percent of the network that would be provided for with these contracts. And so, very, very excited to be able to have this up there, and it will be working to as we move forward to provide this kind of this level of information in the months to come on our website. The other component we want to make sure we highlight is that the Small Business and Disabled Veteran Business Enterprise participation that is expected. We have put out an addendum to identify twenty-five percent we're required that the bids submitted have a twenty-five percent goal, and it's a plan for achieving twenty five percent participation by small businesses and as well as three percent by disadvantaged or by disabled veteran owned business enterprises. And so, we, we held the first of several...there will be several forums with the contracting community. Yesterday it was very well attended and we'll be having another one the week after Thanksgiving. We really want to make sure that that not only does all California benefit from this project, but that the California companies in particular, the small businesses and veteran owned businesses are able to...you know, to participate in the work that of constructing ten thousand miles. So, excited about that and just want to, you know remind everybody that you know, as we look at this ten thousand miles, you know, you see where the construction contracts are. There's also...there will be this layer of where we end up doing leases. Um, you know, so that that's the other side of it is that as we put this thing together, we want to make sure that we were able to meet the needs of Californians, not only in terms of providing access for all ten thousand miles, but to the extent that we can provide connectivity sooner. We also want to take that into account. Next slide. And so, Scott Adams is going to provide a brief update on the stakeholder outreach. Scott?

Yeah, thanks Mark. And good morning Chair Bailey-Crimmins and Middle Mile Advisory Committee members. I'm Scott Adams. I'm the Deputy Director for Broadband and Digital Literacy. It's my pleasure to present to you briefly on the stakeholder engagement efforts we've done since the last meeting. Next slide, please. So, obviously stakeholder and partner engagement is critical to align the State's broadband for all efforts with those at the regional and local efforts to achieve broadband for all throughout the State. And what we've presented here on the slide are really two categories of engagement. The first are large scale convenings that we're hosting to engage the ecosystem of partners throughout the State and provide updates and information about the State's efforts, and really to seek alignment and input from our partners, wanted to note that the top item was on October 24<sup>th</sup>, CDT and the California Public Utilities Commission hosted the Fall Broadband for All Summit, which also included a Digital Equity and BEAD planning kickoff. And as we've reported here before, the Department of Technology and CPUC are leveraging the Infrastructure Investment & Jobs Act broadband program funding dollars to support Broadband for All, it was really critical to get out there and share with partners where we're going with those efforts. You'll also know that we were at the

California Economic Summit for presenting the same type of information, and also two other events with the Golden State Connect Authority and the Caltrans Broadband Industry Meeting, which brought together the many different ISPs and service providers. The second, you know, grouping that you see here on the slide are really those individual meetings and consultations that are required beyond the group settings to work with local municipalities and partners to address any questions or local issues and concerns that they might have. And this is the strategy and approach that we are taking, and we'll continue to take and that concludes my update.

Thank you, Scott. And you know, really, really important work there in terms of reaching out to the communities we're trying to...in the various entities that we're trying to connect to. So, next slide. All right. So, kind of looking back over this last year. I hope everybody will be familiar with some significant accomplishments we have. We've come out with the...uh, identified 4,000 miles of existing infrastructure that has been mapped that is, you know, we see is potentially being able to be leased to the extent that we need to do that. And so very good information there. That's forty percent, you know, it could be up to forty percent of the network. We'll get more information on that when we get the bids back. But um, but that's important information to have. And then we through the great work of the Public Utilities Commission and Golden State Net have put together that the ten thousand mile system level design map, and to you know that really is out there to reach all of those unserved and underserved communities. And so, we're all now familiar with that map and working towards addressing those needs. In terms of construction, Caltrans is begun pre-construction on its initial eighteen projects that we announced last year, last November, as well as...um, they have continued working, exploring, dig smart opportunities, any transportation projects where we can add conduit or fiber, or any components of the network as part of the project, and they're going to be providing a bit of an update on that a little later. But I believe three of those are already in progress. We have signed a procurement contract for fiber and conduit and vaults and related materials for a minimum of three thousand miles of materials for our network and um, which is going to be really helpful for meeting any supply shortages in the future. And we continue to work with our suppliers as we plan to ramp up to plan for delivery. This last summer, we worked with some of our partners to do an additional market sounding that was, you know, it was helpful. They reached out to...responded to our...uh, several hundred responses...email responses, survey responses from local jurisdictions, internet service providers, conducted a couple of dozen interviews just to look at really the key needs and you know some of the key findings there were that you know, this system is going to need to be you know, as I think we're all planning for, it really needs to be, you know, the standard, you know, high industry standards, right? This is um...this is going to...the system we're developing here needs to...we need to make sure that it meets all of the needs of the communities and it can compete well in the marketplace. And we've also had a robust permitting process, as we've work with Caltrans and various state permitting agencies to bring the timeframe down from what was initially estimated to be to average seventeen months down to an average of ten or eleven months, and we're continuing to work with our partners on implementing the programmatic permit process there. Caltrans began installing some conduit relative for the project this last September and they're continuing to on some of the dig smart opportunities to look for places where they can do that. We also going out for that, you know, as noted previously, seven thousand miles of construction contract bid solicitations that we'll be hearing back at the end of December on. We've gone out with reference to the RF12, looking for again where can we build with or otherwise at least from work with industry partners and pulling together this full network. And then as noted previously, we held the first groundbreaking down in San Diego on state Route 67 last month. So, we were able to pull the first five hundred feet of fiber into the conduit there. So, making big steps as we move forward here. Next slide. Alright. So, looking ahead here. Um, you know, we talked about the state permitting process. We are

working with a number of Federal agencies. And I think we've estimated, uh...Caltrans has estimated that roughly thirty percent of the highway system that this will be running along, that our network will be running along is federally in plan. So, we're working with our Federal partners to find the quickest approach to getting the access to those lands and making sure that we are able to address the challenges the Federally-owned land the same way we are with the State-owned land. We're also continuing to explore joint build agreements and we expect to roll out with at least one of those very shortly where it would be, for you know, a couple of hundred miles of the network that would actually provide connectivity for some communities. So, we're exploring several alternatives with partners. We expect to roll out with one soon. We also, and we hope to roll out a few others in the in the weeks and months to come. So again, just trying to look for the best opportunities there where we can share the cost of construction, you know, putting cable, putting conduit in the ground is the most expensive part of the project, and so to the extent that somebody else is doing that and we can look for opportunities to share those costs, we want to maximize that to make sure that the funding that's been provided for this project can go as far as possible. We're continuing to work with...uh, work on the finalizing and logistics coordinator contract, so that we'll be...in the in the New Year, we'll be coming out with finalizing that. We will also be working towards a procurement of the active electronics. Uh, you know uh, these...this is, these are the devices that actually go inside the repeater huts and communicate the light signals through the fiber, so obviously very key part of the system. And then we'll be working with Golden State Net and others on some other system procurement contracts that Golden State Net will be talking a bit about later. And then as we get bids for constructions, facility leases, we'll be moving forward with that optimization of the network. So, we'll...um, well we've achieved a lot in the last year. We're gonna...uh, I think a lot of key decisions and key products will be coming out in the first two quarters of 2023. Next slide. Alright. And I think with that, we will...uh, I'll turn it back to the Chair, or uh to uh to Caltrans.

Thank you, Mr. Monroe. First I'd like to ask if any members have questions, and I see that Secretary Tong is first to raise her hand.

Yes, thank you, Chair. I just want to take a moment to just really congratulate the Department Technology leadership, looking at that recap of 2022 and what's ahead, it's just...it...I don't know if people realize how much has been accomplished in a...very much a project that you know started...what they call it, what...building a plane while it's...you're flying the plane? Something like that. Sounds a little dangerous, but given the short time that it's allotted for this particular initiative, I really just applaud you all for doing so much in such a short time. And also, I heard a lot of recognition to partnership from Caltrans, CPUC, and Golden State Net, and it really does take a village to move the ball forward, and these are big borders are moving forward. So, I just want to take a moment to acknowledge all of your work in this.

Thank you. Thank you, Secretary. That's very nice of you. Any other comments or questions from the members. I also agree changing the airplane's engine while you're flying, is it dangerous? But we have been able as a team to make this happen. So, thank you. The next update is from the California Department of Transportation, and we are lucky enough to have Ms. Janice Benton.

Alright, Thank you. Good morning, Chair Bailey-Crimmins, committee members, and others from the public. My name is Janice Benton, I'm the Assistant Deputy director over the middle-mile broadband initiative for Caltrans, and we'll be providing an update on the progress being made for the middle-mile build. Next slide. And I will add that over here in Caltrans, we call it...we're...uh, building a bridge as we walk on it. So, whether you want to build a plane or build a bridge, that's what we're doing. We're doing it as we're using it as well. So, Caltrans' update

reflects the milestone we recently reached with the middle-mile broadband initiative. Over the past month, Caltrans has worked with CDT to advertise construction contracts for more than seventy percent of the network. This includes the five regional job order contracts for more than fifty two hundred miles. I mentioned it last month's MMAC meeting along with those JOCs, contracts to construction to construct an additional nearly nineteen hundred miles using the construction manager general contractor method have also been advertised. Next slide. So, not included in the miles being advertised through the JOC and CMGC contract delivery methods are the dig smart opportunities. As shared at previous MMAC meetings, Caltrans continually assesses opportunities to leverage the existing projects and implement dig smart opportunities. We have identified dig smart opportunities that cover approximately six hundred and twenty miles of the Middle Mile network. You may have noted that the number of miles potentially delivered as a dig smart project has declined. With the dig smart projects, we are adding broadband components to already designed projects, and in determining whether to pursue these opportunities, we are mindful of a number of factors, including the timing and schedule impacts both of the broadband project and the transportation project already underway as well as the cost. With dig smart, we may not be able to leverage economies of scale as we can do with the regional JOCs and the CMGC delivery methods. The dig smart projects have seen higher cost, and while we are looking at what is contributing to these, we are also awaiting the bid data coming in from the regional JOCs. That bid data will provide critical information and data on which to base decisions about the dig smart opportunities. And as with all of the broadband efforts, we work closely with the Department of Technology to evaluate what is the best path forward and we are all mindful of being good stewards of the state resources. Next slide. So, to reach the key milestone of advertising, more than seventy percent of the network has taken significant work, and that is reflected in this slide.

These charts reflect the progress made on pre-construction activities since the October MMAC meeting, and as mentioned in the past, the green shows the completed tasks. The blue shows the in progress, and the gray shows where preliminary project decisions are still to be made. I apologize. I'm getting over a cold. So next slide. So, this slide breaks down the previous slide. It shows by Caltrans district the miles assigned to projects and the advancement that has happened in each of the districts. As shown, there's been a lot of progress been made over the last month. Excuse me. Alright, next slide. So, we wanted to bring these forward just to show what projects are being out there...um, advertised. So, this represents the five regional JOCs that are currently advertised. And next month the bid for...excuse me, Donna you want to step in?

So, Donna Berry will be stepping in just to give Janice a break on her voice. So, Ms. Berry?

Absolutely. Hopefully you all can see me.

Yes, we can hear you, and we can hear you and see you.

Trying to catch up with the slides, I apologize. So, currently this slide breaks down the previous slide and shows by Caltrans district the miles assigned to projects in advancement that has happened in each of the districts. As with the previous slide, sizable progress has been made over the last month. Not only do we see an increase in the miles in progress, which can be seen in blue, we are also seeing the amount of green or completed tasks. It should be noted that while the charts shown show the progress happening by district, it does not reflect the number of broadband miles. Broadband miles varies from district to district. The progress can also be seen in the contracts to construct the middle mile broadband network. We're still on JOCs, sorry...being advertised. To begin with, there are five regional job order contracts. JOCs currently out for bid. And next month at the end of December, the bids for approximately fifty two

hundred miles of the broadband network will be open, allowing Caltrans to provide cost data to CDT in January. Next slide, please. Building on the regional JOCs, there are also contracts being advertised to construct segments of the network using the construction manager general contract delivery method or CMGC. These slides shows...excuse me, this slide shows not only five CMGC contracts currently being advertised, but also the remaining network miles approximately two thousand that we are working with CDT to advertise. Additionally, and what is not listed here are four CMGC contracts, where the bidding has closed. You may recall from earlier MMAC meetings that the first of these contracts in San Diego and San Bernardino counties were advertised over the summer. We are moving into the final phases of the CMGC process and anticipate beginning to award these contracts in early 2023. As we bring the CMGC contractors on board, we'll be able to gain further insight on potential costs for the network build. This is cost data that will be shared with CDT and can feed into their model, their cost models. Next slide, please. Last month, we saw progress being made in Southern California, and this slide reflects the progress being made in the northern portion of the State. Here you can see a crew installing conduit, and Yreka along State Route 3. In closing, Caltrans continues to take the necessary steps to move projects forward and have contracts out with the commitment to have bid data to CDT in January. Last month, Caltrans advertised five regional job order contracts that include approximately fifty-two hundred miles in the middle mile broadband network. Since July, Caltrans has advertised nine CMGC projects, covering more than nineteen hundred miles with an additional two thousand miles being packaged for advertisement. As we look ahead to the New Year, we look forward to issuing the work orders and work packages that will translate into construction underway and progress we can share with the committee. Caltrans remains committed to this broadband initiative and will collaborate with the Department of Technology to address challenges and continue to find opportunities to accelerate the deployment of the Middle Mile network. This concludes Caltrans' update. Thank you for your time.

Thank you, Ms. Benton and...ah, Ms. Berry and Ms. Benton for a wonderful update. Do I have any questions for any of the committee members? Secretary Tong.

Yes, I again I, just amazed seeing all the progress and I just also wanted to do a shout out to specifically Ms. Benton, and so sorry that you're not feeling well today, and also as Ms. Berry for stepping in and assist with that. I had a privilege to meet in-person with both of you and you know, firsthand seeing the partnership that is undertaking with Department of Technology. And then also all the transformation that has been taking inside of Caltrans from you know the update that I'm hearing. Seeing the number of contracts that are on the street in this year from you know...very early, early when I was still with the Department of Technology last year, that I remember the dates for contracts were in the 2024 or the late of 2023. Now that seeing you know, majority of them all of them out, not only out, but potentially bid open at the end of this year, it's just simply amazing. I just wanted to give a shout out for all of your work and just to really appreciate continued partnership and looking forward for so many great things to come.

Thank you, Secretary. I have my hand up so I guess I'll call on myself. So, I also want to just say that the Caltrans has been a wonderful business partner and we have been making significant progress. In addition, and maybe Ms. Berry or Ms. Benton...just questions...know there was recently on the 17th, which is just yesterday, and then we have another one on the 29th, there's been a lot of outreach engagement that we're trying to do in relation to small business and DVBE, I did want to know if you had any highlights that you could maybe share with the public and the committee members.



Yeah, I'll go ahead and thank you. Thank you, Ms. Berry for stepping in. So, the small business we have done two outreach events initially. Goodness sakes. Alright, Donna. It's all you.

Sure. So, we've done a couple of outreach events. We're continuing to make sure that we are getting the message out as much as possible to show the goals that we have on the project. Within the meeting yesterday that we had the first one in this next round, we got great feedback and we're looking to working with the small business community moving forward.

Thank you, Ms. Berry, and it sounds like the 29th there will be another opportunity, another workshop, and so we will be making sure...and if anybody has information, we can always put it in the chat for any of the members...so any of the public that is interested in attending that event.

Absolutely, thank you.

Thank you, Ms. Berry. I see Assembly Member Wood.

Yes, thank you. And just want to say thank you to everyone. This is a sign of great progress, and I'm very excited about what we're seeing here. And I'm just gonna I'm just gonna ask or just make a comment. Um, I hope that this kind of effort doesn't just end when the broadband projects end...uh, that we can continue this kind of progress that happens quickly and more efficiently going forward not just here, but in another...in other arenas as well. The amount of time that happens in prompt planning and permitting, and so on is really, really challenging, and I'm going to give you an example which is unrelated here. But I was on a project on a watershed restoration project, and there was money, emergency, drought, relief, money that came up, and there was a permitting efficiency process that went into place that allowed this project to be completed this year and eliminated two years of challenges that the applicant would have face. And this is a watershed restoration. So, this...there's opportunities for throughout government I think to be more efficient and move forward on projects that are really important, and I hope it doesn't just end in 2026. I hope this is an opportunity to go forward and be more efficient for everyone in the State. Thank you.

Thank you, Assembly Member Wood. Any other comments or questions? Alright, we'll go ahead and get an update from Golden State Net, our third party administrator, Mr. Tony Naughtin.

Sorry. Uh, can you hear me now? I think my microphone and camera had been blocked by the moderator. I'm not sure if you can see me or not.

Yeah, uh, Mr. Naughtin, we can hear you. We cannot see you. So, we can...

Now it's been unblocked. There we go, okay. There you go, there you go. Uh, thanks. Good morning, everyone. Tony Naughtin with Golden State Net here to provide the progress update for this month's MMAC meeting. If you can go to the next slide, please. So, we've been doing quite a bit of work over the last several weeks, even since before the last time MMAC meeting focusing on projected revenue in the business model for the MMBI network, and in particular building assumptions around the modeling for revenue projections. And these would be not just for the next five years, but well beyond the duration of this network's operation. It is an iterative process, continuing to refine the model, refine the model for the revenue projections. And that will go on for quite a bit into the coming year as well. Part of the process, it also involves providing product descriptions for virtually every type of service or product offering that will be sold to customers of this network as an open access network, so that, of course, is product offerings for last mile providers, particularly those in areas that are unserved or underserved, as

well as other customers who will utilize the open access nature of the network, whether they be enterprise customers or government agency customers as well. We're also continuing to refine and review the operating expenses going forward, which is an important aspect of this. We want the network as much as possible to be self-sustaining for long term cost, operation, and maintenance. Next slide, please. There we go. An important part of this, which accompanies the business model is a go-to-market plan. We have submitted a what I'll call a foundational version of the go-to-market plan, which initially focuses on product management marketing and sales as we're showing here. The product management piece is of particular importance where those product and service definitions are matched up to what is determined to be requested or required or needed in the marketplace. Pricing refinement around those products as well as projections in a product management sense of penetration of those services and products into the markets being served. The marketing plan, of course, focuses on the messaging and promotional activities to create awareness and interest in purchasing services from the network and the marketing efforts will really begin in earnest in the coming year, but well before the actual services are offered and available on the network. The sales plan and pieces of the process involving the sales of services to customers has also been initially defined. We will have a very what I would call a carrier-looking, telecommunications ISP-looking type of sales organization in order to build relationships with customers, sell those services and continue to work with the customers as more services, bandwidth, dark fiber...those kinds of offerings are needed by those customers over time. The whole entire go-to-market plan also includes an execution timetable and staffing plan. Generally speaking, those are not yet completed in the plan as they are interdependent on some of the other aspects that we're talking about, not just from the GSN standpoint, but also availability of the network once segments of it are turned up for production readiness. The go-to-market plan will, of course, be an iterative process as well as the business plan for the network. If we can go to the next slide, please. We've talked quite a bit in the last several meetings about the work we're doing with our interagency partners, CDT and Caltrans, in particular on the infrastructure and services architecture work. We've mentioned over the last several meetings quite a bit of work that's gone into location and development processes around the retransmission huts, and most of that work we're engaging in with Caltrans along with CDT. That work now as far as defining locations that approve for hut location is nearly eighty percent complete, which is significant progress and something we appreciate Caltrans' efforts on as well. We continue to work closely with CDT to refine and make minor changes to the GIS mapping platform that all the interagency partners are using in this program, and of course, the two main guiding documents we've talked about in the past, the system layer design as well as the program plan. Those continue to be refined and edited as time goes on as well. Again, the system layer design is really a pronouncement of operating policies generally speaking, and the program plan itself is the playbook, if you will, on execution and operation of the network going forward. An additional amount of work, significant work has been done to begin really to create the approach and processes that will be used for the Network Operation Center, the NOC as we refer to it. This is really the brain of the network. The NOC is responsible for seven twenty-four three sixty-five monitoring of all connectivity coming in and out of the network. Uh, it really is the place where any sort of monitoring, remediation plan or scheduled maintenance...any activity relating to service or operational support of the network commences at the Network Operations Center through a ticketing process that will be used. You can go to the next slide, please. So, as we've talked about in the past, and Mark Monroe mentioned this earlier, we've been working closely with CDT on RFP for the fiber management system has been issued and will be received from respondents by the end of this year. Again, the fiber management system is a key essential platform which uses GIS mapping to a project, plan, document actual fiber build in the field as well as capture and archive the as-built mapping once the system is completed. It's interesting because it's an interactive system, meaning players and participants, managers, certain staffers, not just from GSN and CDT, but also from

Caltrans and some of the contractors involved, I should say, will also have access privileges even from the field as the documentation and mapping information that the fiber management system provides will be available in real time to support the development activity as it's actually taking place. I've mentioned before the inventory management system. That will be key as well, and a request for proposals will be coming on that one next. That will be after the first of this coming year. Other systems I've mentioned will also then work towards procurement in the coming year for custom relationship management, billing, and other important applications related to the operation of the network. As Mark also mentioned, continue to work closely on procurement of active electronics. These are the switches and routers that actually receive and send traffic across the network from last mile to core locations where traffic is exchanged with the rest of the global Internet or other carriers for other applications. Again, this is an open access network so will be providing more than just internet access. The active electronics process is key. The build materials are complex, so that we need to work closely in the procurement to make sure they are completely accurate. And, as I said before, also work closely with CDT to make sure we're getting the best pricing possible on all of that electronic gear. Next slide, please. Oh, there we go! That, that's...ha! Thank you. That's, that's the end of my presentation. Are there any questions I can answer here today?

Thank you, Mr. Naughtin. Any committee members that have questions? Secretary Tong.

I'm just on a roll because this is our last meeting for the year. Just again, I...we never take enough moment to appreciate you know, the work that our team put in. So, I also want to do a special call out to Mr. Naughtin, and I say, uh, Mr. Hunsinger is on this panel along with the team...and also Mr. Hutchins on the team from GSN. It's one of those again, you know coming together quickly, lots of different thought at the beginning, but um...you know, seeing how things have really progressed, and looking at the continued work that's going to be ahead is exciting and scary, quite frankly, looking at the market viability and the marketing plan going out. It almost makes this a network become a lot more real than when we first had a concept about this gosh, a year ago. So, I'm really, really just excited to see how this is going, and really appreciate Golden State Net's and continue to help push this ahead especially on the marketing of things. So, thank you so much.

We appreciate your remarks Secretary Tong and we have continued to build a strong working relationship with CDT, Caltrans, and other interagency partners. And the real work, the work has been steady and if not feverish over the last fourteen months, we've all been putting a lot of time and effort into this. What I was gonna say is the real work once we really start working towards a construction and activation of network segments, that's going to require even more continuous collaboration between the agencies. We look forward to that and we appreciate the opportunity for many of us involved in this effort, this type of effort, and I'm going to say that's particularly true of our colleagues at CENIC who is our parent company. The fulfillment of a dream, if you will, to provide high quality last mile bandwidth broadband services to the many, many homes in California that have either been unserved entirely or underserved. That's been a mission for many years, for many who have been involved in internet-working such as myself, others on my team such as those you've mentioned, as well as our colleagues at CENIC and this is a great opportunity to achieve that. We appreciate the involvement and the opportunity and as well as the growing partnerships we have with the interagency partners. Um, Ron Hutchins I saw you come on camera there for a moment. Did you have a remark you wanted to mention?

I was just going to say, thank you for the recognition. That, that's appreciated.

Thank you very much, very much.

Alright, thank you. Thank you, Secretary for your comments. I'd also like to recognize that chief deputy director Michael Keever has joined us for uh...Tony, director Tony Tavares from Caltrans. So, thank you, Mr. Keever. We will go ahead and go to...I don't see any other questions for Mr. Naughtin. Thank you very much for your partnership and making 2022 a very progressive and eventful year. We couldn't have done it without you. So, thank you very much. We're going to go ahead and shift to the California Public Utilities Commission. We have Mr. Jonathan Lakritz, who's going to provide an update.

Thank you, Chair Bailey-Crimmins. Good morning, committee Members and members of the public. I'm Jonathan Lakritz with the broadband infrastructure branch in the California Public Utilities Commission's Communication Division. I'll be providing an update on a number of the CPUC's last mile broadband initiatives. Next slide, please. This slide provides a summary of the Local Agency Technical Assistance Grant program. It's similar to previous slides. Fifty million dollar grant programs for local agencies and tribes provides grants of up to one million dollars to plan for and start broadband infrastructure projects to serve their communities. A broad range of local agencies are eligible and grant funds can be used to form joint power authorities and co-ops. Activities that are eligible for funding include, but are not limited to environmental feasibility and engineering design studies, needs assessments, and broadband plans. From August to first half of November, the CPUC has received a total of eighty-four applications that requested nearly thirty-seven million dollars. They are from forty-one county governments, thirty-seven cities and towns, five joint power authorities, one local school district and one tribe. As of this week, we have approved fifty-two applications with the grant awards totaling almost twenty-three, almost twenty-four million dollars. We're currently in the process reviewing the thirty-two additional applications requesting approximately 13.2 million dollars in grant funding. The map on the right is a snapshot that highlights each county that the CPUC has received an application for either a county and/or local agency. November window remains open until the end of the month, and potential applicants are welcome to apply at any time. We anticipate approving additional applications before the end of the year. The CPUC continues to encourage local agencies and their partners to apply for technical assistance grants and for anyone who is interested in applying, please don't hesitate to reach out with questions. Next slide, please. Loan Loss Reserve program is another key component to provide funding for last mile infrastructure. The Loan Loss Reserve program is a seven hundred and fifty million dollar fund and supports local governments, nonprofits and tribes in their pursuit of building broadband infrastructure. The premise of the Loan Loss Reserve Fund is that public broadband infrastructure can be cost effective and revenue generated solution to provide high-speed and reliable service in areas with limited for no broadband access. They also lower costs and improve customer service. The fund provides these entities the authority to participate in CPUC programs and offers credit enhancements to help them secure private financing to construct and operate new public high speed broadband networks. The program also includes providing collateral to enable better borrowing rates and terms that allow them to establish a funding reserve for paying down the principle of interest on bond issuances. We issued a staff proposal in September and the CPUC received comments in October. On November 8<sup>th</sup>, the CPUC hosted a public meeting to receive additional input on the staff proposal. This meeting featured an overview of the proposal, Q&A segment and opportunity for further public comment. Staff's overview from this meeting as well as other information is available on the CPUC's Loan Loss Reserve Fund webpage. A proposed decision should be issued sometime in the first quarter of 2023 and all parties will have the chance to provide comments prior to the Commission vote. Any questions about the Loan Loss Reserve Fund could be directed to [broadband.loanloss@cpuc.ca.gov](mailto:broadband.loanloss@cpuc.ca.gov). Next slide, please. This slide provides a further update on the grant opportunities available to a member of the California Advanced Services Fund

accounts. These grants fund activities that support the last mile broadband infrastructure. The Broadband Adoption Grants fund projects by public affinities and community-based organizations to promote digital literacy and broadband access. As of November 2022, seventy-four projects have been awarded 5.9 million dollars by the CPUC's ministerial process. There are projects in 19 counties, including 32 projects in Northern California, 6 projects in Central California, and 34 projects in Southern California. The CPUC intends to act on the remaining grant applications before December 31<sup>st</sup> 2022. Grants from the rural and urban regional consortia accounts help regional organizations to develop broadband projects and complete the application process. We have received 15 applications requesting 11.57 million dollars and to serve 50 counties. The grant window is closed and we will be reviewing the applications. All 15 of the grant applications will be considered into one resolution. And we anticipate issuing the draft resolution next month for public comment and the Commission will consider it by January 2023 voting. The third opportunity is for grants to build broadband networks, often free broadband services for residents in low-income communities. We have received 19 applications for projects in public housing facilities requesting a total of 1.4 million dollars. At the December 1<sup>st</sup> 2022 meeting, the Commission is scheduled to vote on a draft resolution approving these 19 public housing infrastructure grants. Next slide, please. This slide provides a snapshot of the CPUC's activities to the last mile broadband initiative programs and I'll briefly highlight a few things. The broadband Technical Assistance program and Loan Loss applications continue to be accepted monthly. For the Loan Loss Reserve program, the next activity will be issuance for a proposed decision in the first quarter of 2023. Next initiative is the last mile initiative for Federal funding account. This program will award grants to fund last mile broadband infrastructure projects in every county. We're developing priority areas and publicly releasing those areas prior to accepting applications. Watch for the release of priority areas soon. We anticipate publicly releasing the priority areas before the end of the year. On the right, you can see the suite of CASF programs. As I just mentioned, CPUC will continue to make awards under the adoption consortia and public housing accounts. At yesterday's Commission meeting, the Commission adopted decision to modify the CASF infrastructure account application process. And applications continue to be accepted for adoption for public housing accounts. The current window for both of those accounts closes on January 1<sup>st</sup> 2023. More information on these grant opportunities are available on the CPUC's public webpages, links for which are on these slides. We're also happy to respond to inquiries, provide contacts for each of the grant programs discussed today to those who email [StatewideBroadband@cpuc.ca.gov](mailto:StatewideBroadband@cpuc.ca.gov). This concludes my remarks. So, thank you very much.

Thank you, Mr. Lakritz. A great presentation, also a lot of progress over the past year. Any questions or comments from...of course, um first off is Secretary Tong. She has a few comments she'd like to make.

Yes, thank you Chair. And Chair, I want to let you know I believe Ms. Miller is the audience, so I probably need to pull her up as a panelist, but...

Okay, thank you.

I think this specific comment to...I'll say to President Reynolds and Mr. Lakritz for the wonderful work that CPUC have accomplished, and I know at the beginning it was a lot of activity working together on developing a map, and then after that you know, sort of separate it for good reason that you know CPUC continue to focusing on the last mile while rest of the team focusing on middle mile. But I feel like that converging is going to come back again because the very fact that the middle mile would not work without last mile, and um...so, I just once again, really, you know appreciate all of the collaboration. And President Reynolds, this is what...it's gotta be one of those like proud parent moment. I know you and I, and probably Assembly member Wood, I

think. Uh, I'm trying to look at other panel, of course, you know, and Mr. Adams and Mr. Monroe are one of the first few and of course, Ms. Miller. Um, this is just tremendous progress.

Thank you very much.

Thank you, Secretary. And President Reynolds.

So, is it fair for me to weigh in at the end and echo all of Secretary Tong's comments throughout...um, just for CDT's work, for Caltrans' work, and GoldenState.net, and then also PUC staff. It just, it's really incredible to have this meeting, as Secretary Tong noted last meeting of the year, and hear all of the progress. So, I really did want to add my appreciation to everyone, and it was really apparent from all of the presentations today that a lot of just, really incredible and careful work has gone into the activities of the last year, and then the coordination has just been extraordinary, and so I wanted to commend everyone on working together, working through issues, and really making progress. So, thank you.

Thank you, President Reynolds. Oh, and Secretary Tong. Did you want the...uh, it back?

Yes.

Okay, Alright.

One more. Sorry. One more thing. I see Ms. Miller is here, and then also Mr. Kever. Um...talking about the group that really have hung together from the very, very beginning, and those have consistently joined. Um, just thank you. Continue for you know, the just relentless support through good times and challenging time, and we all know at the beginning as any teams coming together, there is the...uh, or forming, and then there's a little bit of a churning and then when things becomes you know, all working together and excelling, so I just wanted to acknowledge our business partner. But I also want to do a special call out to Assembly Member Jim Wood. I believe he's probably one of the member that have never missed a single meeting, and also made a special trip you know to the groundbreaking event down in San Diego, and I know his Staffer, and also the Committee staffer Emilio, probably in the audience, have been a great supporter and facilitator and communicating, or channel of communication of what the administration is working on, as well as, what the Legislature is looking forward to so, I think that level of partnership, it's also very, very heartwarming. I am using that word specifically because seldom you see this type of partnership taking place. And this project continue to prove that we all have a common goal and people serving a different role does not need to be, you know, adversary by any means with each other, but is really focusing on this common goal and play our individual roles to make things happen, and I think that is what truly what public servants all about. So, I just wanted to make that acknowledgment.

Thank you, Secretary Tong. And as Assembly Member Wood had mentioned you know, this is an opportunity for us. We came together, but that this doesn't end just with this project, right? That we are as public servants much stronger together than we are necessarily individually so wonderful, very, very nice, heartfelt comments. Any other comments or questions from any of the members before we go to public comment. Alright, I see none, so we'll go ahead and move to public comment. Mr. Przybyla, will you please provide public comment guidelines, and begin the process.

Yes. In order to ensure everyone who wishes to make 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 \*9. We have received one public comment prior to the meeting, so we will start with Scott Pohlman if you would like to unmute and share.

Okay, I think I'm on...I'm unmuted.

There you go, Scott. Yep, we can hear you.

Yeah, this is just a quick comment/question for Director Monroe regarding the procurement of active electronics. Uh, will there be more information coming about...coming out in the near term about how that procurement will take place. Will there be an RFP, will be other public vehicles that will be used, and just how that procurement will go. Thank you.

Scott, thank you for the question. We typically, as public comment, we take the questions and then post them for everyone to see. And so, Mr. Przybyla, do you want to quickly just explain the process so that we can make sure that Mr. Pohlman's question gets answered in the appropriate forum.

Sure. And we do have Mr. Pohlman your question in email, and so we will appropriately respond when we have the information for you.

Thank you very much.

Thank you. The next hand I see available to unmute is Georgia.

Hi, everyone. Thank you so much. My name is Georgia Savage, and I work for Open Undivided. We just want to thank you for your continuous engagement with our city. We're really excited for this partnership, moving forward. My question is about the middle mile policies surrounding municipal fibers. We're really excited to hear that the State is putting protections in place to prevent any one commercial entity from co-opting this public investment. Oakland does propose a tiered system in which Tier 1 would be free or at cost for public municipal fiber, as well as, nonprofit use. Tier 2 would be discounted pricing for commercial entities like innovative wireless ISPs or co-ops if they provide higher speed at lower cost. Some portion of the total clients receiving the service for free and or committing to leveraging strands to connect the most unconnected communities. Tier 3 would then be the highest rates for commercial companies. So, our question would just be, will there be a tiered system like this? And then, when should we expect those specifics for pricing differentials to prevent the network from being monopolized? Thank you so much.

Thank you, Georgia. We'll take that question and follow the same process. Thank you very much for participating today.

I'm going to pause a moment to see if there are any additional hands raised or phone hands raised. Oh, looks like we do have one more hand raised from Judy. Judy, you can now unmute.

Hi, my name is Judy Horton, and I represent a small underground construction company in Southern California. And I just want to find out is it too late to register for the 29th, the event on the 29<sup>th</sup>?

So that uh, thank you very much Judy and we will make sure that there's additional information. I realized that chat is not enabled, but we will be um...Przybyla, will you please? That's the

same process when we get everyone's information, make sure that they're aware how to register to the 29<sup>th</sup> event. Thank you.

Absolutely, and all the resources from today's meeting and emails will be shared with appropriate registrants of this meeting and our stakeholder base.

Thank you.

Director, that seems to be the last public comment, and I will pass it back to you.

Thank you very much. I would now like to open it up again once more to the members of the committee. If they have any final comments before we...how did I not know? Any last comments before we end today's session and Secretary Tong.

Chair, thank you. I promise that the meeting in the New Year, I will be a lot quieter. But I again, with the public comment, and also take an opportunity to thank a lot of public participation. This is one of the meeting that consistently attended that have more than one hundred attendees over at zoom and on a Friday, and it just shows the interest and engagement from our public stakeholder industry and Oakland Undivided is one of those I have heard and continue to be hearing in their participation throughout this entire process, so just wanted to do a special shout out to not only the industry but the local entities who is advocating for their local participation and all of that. Again, just can't emphasize enough that this is historic in so many way that it is the digital highway that is gonna continue to elevate the State of California for many, many years to come. And it does take a village and you know, down to the individual. So, industry, local government, state government, federal government, and all our partners. It, it's...it's...this is really how do I say it? Without this level of engagement, it will be very difficult to close the digital divide, and we want to stay true to that mission, and really have broadband for all, and so for the forty million Californians that we have in California. So, I just wanted to really take a moment to acknowledge all the patience, all of the great input, and all of the understanding as we collectively working through this process. Alright.

Thank you, Secretary. Do any other members want to make any final comments? Alright. Oh, yes, Mr. Keever.

So, apologies for joining late. Ms. Miller and I were in another board meeting...public board meeting. So, I just want to express my appreciation very much like Secretary Tong mentioned there. It's been full of ups and downs and adventure, but it has been great to see the progress that we've made together. I also want to acknowledge we have a lot of hard work ahead of us. I think Tony talked about that, but we have certainly set that foundation. So, I look forward to working with you all continuing through this. May not have a board meeting, but we'll still be working together all through this and hopefully we'll come together in January, and we'll have a really good picture where we're heading next. So, look forward to that. Thank you.

Thank you, Mr. Keever. Alright. Do I see any other hands? At this point I do not. So, I just want to thank all of the committee members, the presenters today, all the hard work of even people that are not here. We know that it, as Secretary Tong, it takes a community, it takes a village. We have a lot of hundreds, hundreds of team members, construction workers, vendors. It takes all of us to make this happen. And so, even though you may not have presented, you are here in spirit. So, I want to thank all of you for their contributions today and for the past year, and where we're going. I also...this is, since it is our last one before the holiday season, I just want to wish everyone a safe and joyous holiday season, as we kind of finish up the year, and as a



reminder, our next meeting is Friday, January 20<sup>th</sup> 2023 from 10–11:30 AM, and with that, we will adjourn today's meeting. Thank you.