



**NTIA**  
**First Panel Regional Approaches to Broadband**  
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RACHELLE CHONG: All right well I'm Rachelle Chong. It is great to see everyone here today. You might recognize me, I'm that bossy person that used to be with the PUC that was pushing for Broadband all the time, and then I went to the CIO's office and did the same thing there, and now I'm out in my own law firm doing the same thing there but I represent the California Emerging Technology Fund now as a lawyer and I also do work the California Telehealth Network as a lawyer.

I am really blessed this morning to have a fantastic panel truly. We are missing right now, Miguel Gamino who is the Chief Information Officer of the City of San Francisco. He is barreling down the freeway heading towards us right now and when he arrives, he's just going to slip right up and join us, but he is on the way. We had assurances that he is on the freeway. So he'll join us as soon as he can. So very quickly, here is who we've got today. We've got Jackie Kinney, raise your hand Jackie, Assistant Chief Deputy, well that is an interesting sound. Assistant Chief Deputy and Counsel to the California Secretary of State Alex Padilla. And in her prior job she worked for Senator Padilla as Principal Consultant of the Senate Energy Utilities and Communication's Committee. And I think everybody knows that the two most important people in the state legislature for Broadband in the last era was Senator Padilla and Jackie. So she represents kind of the whole meilleur of the state legislature and their role with Broadband. Next we have Assembly Member Jim Wood. Chair of the Committee on the Digital Divide in rural California. And Jim your district is number what? District two, which means really far north. That is what that means, right, northwest. He is the Chair of the Committee on the Digital Divide in rural California. He is currently very engaged assembly member on rural Broadband issues and that's why we wanted him here today. Third, Adelina raise your hand. Adeline Zendejas, Deputy Director Broadband and Digital Literacy Office of the California Department

of Technology. So she represents the governor's office and their initiatives at the state level working with the state agencies. Anne Neville, raise your hand Anne. We're so happy she is back from D.C. Anne is currently Director of the California Research Bureau California State Library. So she has a library hat on partially today, but we all know Anne because she had a couple of hats in major Broadband initiatives both at the state level and the federal level before. She helped us in 2006, 2007 do the very first California Broadband mapping when we did the California Broadband Taskforce and then the nation stole her. She went over to NTIA where she was the Director of State Broadband Initiative's and I think you had one more title towards the end too. Is that close enough? And she helped the nation with their Broadband mapping projects. And then finally, barreling up the freeway is Miguel Gamino as I mentioned the San Francisco CIO. So as soon as he gets here he will join us.

Okay so quickly I'm just going to set the stage because we don't have much time. I think most of you know California had an early start on the Digital Divide work in 2006 when Governor Schwarzenegger established a California Broadband Taskforce. This taskforce brought together a bunch of key state agencies on Broadband in addition to the stakeholders and the PUC legislature. And this resulted in a report, the Taskforce Report, making lots of recommendations many of which by the way we dusted off to give to the Broadband Opportunity Counsel when they asked for input, and we did our first voluntary Broadband mapping here in the state in 2007. In 2000, in that same era, over at the Cal PUC President Peevey had gotten a deal with AT&T and Verizon to get a donation of \$60 million dollars to establish the California Emerging Technology Fund, which is a non-profit focusing on Broadband work. The next big development was the establishment of the California Advanced Services Fund over at the PUC. That put in place \$100 million dollars of statewide Broadband infrastructure funding for

unserved and under-served Broadband areas in the state. Senator Alex Padilla picked up the baton next and he entwined the California Advanced Service Fund into the law with SB1193, which was signed in the law September 2008 and then over the years another \$125 million was added into CASF Funding [ph] and they expanded the scope of the program to include loans to CASF grantees and expanded the program to include affordable housing initiatives. Then in 2009 ARRA came along, the American Reinvestment and Recovery Act, and because of all that organization previously California went very aggressively after those grants, both from NTIA and Rural Utility Service and we were able to do pretty well I think out of the states and we got a number of big grants, Digital 395, Steven [ph], and a couple of Broadband adoption grants that were administered by the CETF. And that's all I'm going to do on history.

We're now going to move right to our panelists and I thought we'd start off with Jackie, because really the story of California starts with leadership throughout the state and her former boss, I guess current boss, but in his former role Senator Padilla was really important because he stepped up to the plate to do a lot of work from the legislature. So I wanted to give Jackie three minutes to talk about what happened in that era, in the California Senate, and why it made a difference.

JACQUELINE KINNEY: Good morning. Thank you Rachelle for that introduction and thank you to NTIA for holding the workshop and for your big investment in Broadband in California. As Rachelle mentioned, I'm here on behalf of Secretary Padilla. He assumed office in January of this year in that role, formerly serving two terms in the California State Senate including six years as Chair of the Senate Committee on Energy Utilities and Communications and I was the consultant on telecom issues during that period. And of course it was a very exciting time after the California Broadband Taskforce issued its report in 2008. ARRA

provided Broadband funds in 2009 and then the FCC released the National Broadband Plan in 2010 really providing a blueprint for Broadband action. Rachelle asked me to focus today on the importance of legislative leadership but of course that really involved the collaboration of all kinds of stakeholders and public officials, the governor's office, both Governor Schwarzenegger and Governor Brown, the PUC, our Federal partners, consumer groups, industry, the California Emerging Technology Fund, and a lot of you who are here today.

Senator Padilla embraced Broadband as a legislative priority early in his first term. As a MIT trained engineer and a former president of the Los Angeles City Council. He brought to the Senate both the technology background and a real keen understanding of the impact of the Digital Divide on the everyday lives of Californians and on the state's economy. He was the author of three separate bills that together that authorized more than \$300 million dollars in funding for our state program, the California Advanced Services Fund, which had been established by a PUC decision. And this program really along with the Federal funds has been the pillar of California achieving, moving toward achieving its Broadband goals. And it was really critical to get the CSAF in statute, even though it had already been established by a PUC decision, and this was for several reasons. First of all, the foundation for the program is the universal service principles in federal and state law and recognition that the 21<sup>st</sup> century really requires access, universal access to Broadband. And again, because these principles were in statute, federal and state statute, it was important to have this new program in statute as well to make a real and lasting difference. And secondly, the California Broadband Taskforce report made clear that achieving ubiquitous Broadband in a state as vast and diverse as California was going to take a huge investment, and getting that funding in statute would provide certainty for those who would make the investment over the long haul that the funding would be available.

The report had identified 4% of Californians lacking any Broadband access and nearly 50% having only access to low speed Broadband.

A few other considerations important to Senator Padilla that kind of framed the discussion and was important throughout the legislative process, for him to emphasize that we needed to have both public and private investment and that to start off you really needed to have a regulatory environment that would promote private investment consistent with public safety and consumer protection. And then you would target the subsidy programs with public investment to fill in where there is really no business case for private infrastructure deployment. And also when asking Californians to invest state dollars to support Broadband, we wanted to be sure that the state was maximizing every opportunity for federal funds for Broadband. These were funds both from the ARRA program, from the Connect American Fund, and from other FCC and other federal programs. So the legislature urged review of all of our state universal service programs and were appropriate and feasible where it made sense to align those with the federal program so we could maximize the draw of federal funds every step of the way. And then also because the legislation was authorizing the collection of surcharges from customers to fund the California Advanced Services program, strong transparency and accountability requirements were critical.

To go back to the legislature three times for more funding, especially when California was struggling to get out of record budget deficits during the recession, we really had to demonstrate that the state was a good steward of the funds and that the program was being modified when data showed that changes were needed to get better results. So briefly then, the legislation the first one, the first bill SB193, 1193 in 2008 a Padilla bill that codified the decision that the PUC had made and put \$100 million dollars of funding in statute then giving clear

legislative authority for the decision that the PUC had made and keeping it permanently in statute. Two years later Senate bill 1040 added another \$125 million to the program and separated out the allocation of funds into three accounts, the bulk of it \$100 million for infrastructure grants, \$15 million to a loan account to provide another source of funding for the capital costs that were not covered by a grant, and then \$10 million for the rural and urban regional consortia account which was to fund non-capital costs for local groups that were doing Broadband aggregation and developing the projects that would then seek grant funding. This built on the work of the California Emerging Technology Fund. And then finally, two years after that in 2014 we had one final bill, Assembly Bill 740 that added another \$90 million to the program and then put some additional program details in statute all as part of a careful balance to be sure that we could keep the funding in the bill as it moved forward and also keep the focus of the program on providing funding where there was not a private investment in Broadband.

RACHELLE CHONG: So Jackie, any chances of CASF getting more funding?

JACQUELINE KINNEY: Well in my new role with the Secretary of State, I think I do not have the current status on that. But I think if there is a demonstrated need for additional funding and you can show that the program is being administered in a way to effectively expand the funds then the case could be made for additional funding, but I would imagine that Assembly Member Wood may have a more current perspective on that question.

RACHELLE CHONG: And what a fine transition to Assembly Member Jim Wood. So we are really honored to have the Assembly Member with us today. We have new leaders emerging in the state legislature on Broadband and certainly Assembly Member Wood is one of those. He has been championing Broadband issues in the rural areas representing his area. So Jim take it away.

JIM WOOD: Great, well thank you for the opportunity to be here and I'm here to learn. I'm a novice. I represent a very large rural district. So when you guys talk about barreling down, it would be barreling down from San Francisco not barreling up. I took my covered wagon and made the trek down here and I was on time. I was on time.

RACHELLE CHONG: He was.

JIM WOOD: So you talk about, you talk about Broadband and moving information and you know I know exactly how long it takes for me to get from one part of my district to the other because I don't have the traffic around here. Your traffic is like the internet access I have in my district, okay. It's barely moving. And it's not pretty. So for those of you, a little bit of a civics lesson for those of you don't understand or don't know or maybe don't care turn it off, Assembly districts to represent in an Assembly district is representing 465 thousand people. So for me to represent 465 thousand people I have a very large district. It starts at the Oregon border and goes to the middle of Santa Rosa. It takes a little over six hours to get there, to get to across the district and that's how you get 465 thousand people in my Assembly district.

So why is this issue important to me? Just traveling is a challenge. When I travel up and down the highway, I live in the city of Healdsburg, about 12,000 people. It is a beautiful wine country destination. The next big population centered north of me is Eureka. That's a little over three hour drive. In that little over three hour drive I have cell service less than 50% of the time, and that's on Highway 101. That's a problem. That's a huge problem. I can't conduct my business, people can't get ahold of me, and that sometimes that's a good thing but the reality in my world I really would rather be able to talk to people. So the importance of that is I can't just, I can't use webinars and things like that to communicate with my constituents. I need that face to face contact. So that means physically get in the car. In the month of September, between



September the middle of September and the middle of October I drove 5,000 miles in my district. That's the nature of the challenge we have. Yes, internet technology a Broadband technology would really, really help us.

But it is not about, thank you, it's not about increasing speeds for us. It's more fundamental than that. It's about actually getting access, which we simply don't have in so many areas. For me it's about healthcare. I'm a healthcare provider. As we move into more and more opportunities for telemedicine, you can't do that without Broadband. One of the tribal health clinics in my district, little community of Covelo. What went into it, I took a tour there and I went into a room and one of the rooms had a big beautiful big screen TV, you know bigger than this and it was all dusty. I said what's that? And they said, well that's our telemedicine portal. And I said, why isn't it up and running? Well we don't have the access, we don't have enough access to be able to run it with the current technologies. Huge problem for us. Economic development, huge problem once again. Most of the businesses in my district are small entrepreneurial district businesses, they can't get access to be able to interact with people on the worldwide web and it's a huge challenge. Some people are still, believe it or not, probably using imprint devices for credit cards. Yeah think about that one.

A good friend of mine, husband and wife, happen to be retired from this area and have a small vineyard about 20 acres. They are very concerned about water in our district. I think we're going to hit some of that a little later, but water is a big issue for them. They've invested in technology to actually monitor their grapes to be able to check the leaf, the leaf water content, and in that they were able to reduce their water consumption by about a third and increase their crop by 20%. The problem is that wasn't internet-based that wasn't cloud-based, the problem was that was all data collected on the ground. It had to be collected and then taken somewhere to

be analyzed to come back and tell them. With agriculture in California and water, if we could change that we could save who knows how many millions of acre field water in a given year.

I'm probably past my three minutes here, but that's the problem with politicians. So just education in general. We still have schools in the district that don't have internet, internet access. We had schools we don't know if they have internet access or not because we can't get the information from them, especially in our tribal communities. So those kids that have, in some of the communities that have internet access, may get it at school. They may get it at a library, but when they go home to work on their homework and they need to get a web-based application, they can't do it. Huge, huge issue and if you're trying to fill out a college application and you're doing it on a DSL or worse, you're going to be up at two or three in the morning trying to get enough bandwidth to be able to pull it off. And that's just really, you know that's really not, not appropriate in this day in age.

So I could talk all day but I won't. I'll hand this back to Rachelle. First of all, and then thanks again for the opportunity to be here to learn and a couple of constituents here from my district today. Glad to see them here also working on this, Mike Nichols and [indiscernible]. So thanks for being here.

**RACHELLE CHONG:** Thank you, and now we have from the Department of Technology of the State, Adelina Zendejas, Deputy Director of the Broadband and Digital Literacy Office. I asked Adelina if she could talk about some of the state agency collaboration that has been going on by her office, and so take it away Adelina.

**ADELINA ZENDEJAS:** Well good morning Rachelle and thank you so much NTIA and Rachelle for inviting me to participate on this panel this morning. I'm really excited to be here to talk about some of the, what I think are some really great efforts we've been doing at the state.

So the Department of Technology, our director actually wears a lot of different hats as well as so do I. He is of course the director over the Department of Technology as well as the State Chief Information Officer, and also chairs the California Broadband Counsel. So what our office does is we actually we're a very small office and we work very closely and very collaboratively with other departments with USDA and to really look at promoting and fostering Broadband efforts within the state. So what the counsel, I think I won't go into it but basically it was in 2010 through legislation that has already been talked about was formed and this was the first time that at the highest level a true leadership was formed to really look at, how do we improve Broadband efforts within the state? How do we collaborate at that level? And so there is nine departments and organizations that are part of that counsel and it includes of course the chair, our department director, Director Romas, and as vice-chair it is Senator Ben Whistle. We have legislation on the counsel. We also have Assembly Member Rendon who is part of that. Mark Laduchie [ph] who is over the Office of Emergency Services. I better look at my list so I don't forget anybody. We have Department of Education Superintendent Tom Torlaskson, Department of General Services Director Daniel Kim, California State Transportation Agency is also part of it, and so Secretary Brian Kelley and then of course our wonderful person and leader of Broadband Evangelist Sonny Roma Peek who is over the California Emerging Technology Fund. So we actually have all of these departments and organizations are really key in looking at and working together on how we can improve Broadband. With Secretary Kelley the Transportation Agency under that area is Cal Trans, Department of Transportation. It's also the high speed rail. It's those types of departments. KLOES [ph], they are looking at developing the first working at a national level on the first nationwide public safety network which is called First Net. And so it's really critical that those conversations are occurring now that we're looking from a collaborate effort, what are

we doing? That we're working with our departments, Cal Trans to say Cal Trans as you guys are doing these projects are you looking at Dig Once? Are you guys, you know because it's really important that the conduit is laid down, not that we're looking at it later on. An example of that is we recently traveled up north for a week and I traveled in collaboration with USDA Rural Development and also the Economic Development Administration and so as we traveled up north we were passing these Cal Trans projects and they were laying down, in some instances it was just the dirt, and then we were looking at saying where is the conduit? This is so key. And of course I understand you know there are projects and these projects start you know years ago when they're approved and things, but I think that's some of the things that we need to work collaboratively together to look at, how can we expand? How can we talk about and communicate about these projects and how can we look at, yeah it might take a little more money because we need to take a little more time to look at the timeframe or the plans of these projects but overall, you know is it, how is it going to help? Not only with the funding but the economic development of many of these areas, especially in the rural areas which we're really trying to target.

So some of the milestones that we've done at the Department of Technology is we definitely are promoting the Dig Once. We're working with departments to talk about that and how we can look at that and with Cal Trans, a lot of their, a lot of the roads have already been laid but as new roads or new things are done they are going to be looking at trying to incorporate that. We have developed a geographic information system, Broadband Co-Location Map for internet service providers. What we've done is we've put that on our website and we that map aligns what we've done is we've overlaid it with CPU, unserved and under-served areas. We've also taken some of the information from USDA and overlaid with it USDA information, as well

as we've put on there from our Department of General Services all the state properties that internet service providers could actually co-locate on. And then we've added some different things. We have rest stops on their affairs [ph], because these are also other areas that typically internet service providers don't look at. So we have also, one of the other things that when I first started in the position that really came up a lot was through internet service providers, what's our permitting process? It was really cumbersome. So we have streamlined that. We actually have online videos that are educational that will walk you through that process also on our website, which I'll give you at the end of this. And then what we've also done is established an ombudsman position out of the office of Emergency Services Public Safety Communication's Office. And that person, what we've done is to try and initiate some communication ahead of time so that some of the smaller internet service providers can determine, is this something that I really want to pursue because there is some costs that may or may not benefit them later on.

And so we are really working also and established some really great relationships with the tribes and in specific, we've been working really closely with the Governor's Tribal Advisor, Judge Cynthia Gomez. We've also reached out to several of the tribes. I am now the Department's Tribal Liaison and one of the things that we have been actually able to do is through our department we have determined that actually any tribe within the state of California that is a federally recognized tribe can actually access or look at utilizing our state data center services, which you know our cloud services, email services, mail services, but on top of that, we have a Cal Net 3 Service which is a telecommunication service. So we have developed in that respect a contract and so they have the potential to leverage that contract to receive telecommunication services at state rates which is a huge, huge win I think for the state as a whole. And so we are hoping that there will be some excellent collaborative efforts and we're

hoping that some of the tribes will be able to leverage that within the first quarter of 2016. So we're very excited about that effort.

I think I've probably taken up my three minutes.

RACHELLE CHONG: You have Adelina. So let's wrap up.

ADELINA ZENDEJAS: I'd just like to say thank you.

RACHELLE CHONG: Adelina.

ADELINA ZENDEJAS: Okay so thank you very much. I just want to say, you know my office is here to collaborate so any information that you need or any projects, we're really great at looking within our departments, Department of General Services has been wonderful. So anything that we can do help to reach out to other departments, please feel free to give us a call. Thank you Rachelle.

RACHELLE CHONG: That was a lot of information. I didn't know about the Cal Net 3 and the tribes, that's huge.

ADELINA ZENDEJAS: Yes.

RACHELLE CHONG: Those are big discounts under Cal Net 3.

ADELINA ZENDEJAS: Yes.

RACHELLE CHONG: Okay. Dig Once, I just have to say Adelina you've got to make that happen. Dig Once is so important.

ADELINA ZENDEJAS: We're all pushing Rachelle.

RACHELLE CHONG: Okay and high-speed rail, rumor is they're putting fiber down.

ADELINA ZENDEJAS: Yes. The conduit should be down 2019, 2020 so and they are aware, they know the need and it is in the plan.

RACHELLE CHONG: And on the website, The Path is on there so if you have interest in where that fiber might be from High Speed Rail go look at their website. Okay, wow that was great. Okay I'm, I'm making Anne put her old hat on first before she puts on her new hat at the library and I asked her first to talk about the important initiatives that were done at the NTIA and this last era involving particularly Broadband Mapping but other initiatives too. So Anne, with your old hat on, please take it away.

ANNE NEVILLE: Thanks Rachelle. Good morning everyone. So when Rachelle and I talked about this panel we were talking a little bit about when the first time California did Broadband Mapping, which was in 2006, 2007. And at that time there were only a few other states who had tried to map Broadband and it was very, very voluntary at that time. And it took a lot of convincing, very deliberate convincing from folks like Rachelle to get that information. And as we, as those state efforts started seeding around the country, you saw at that point the Recovery Act passed and when the Recovery Act was passed it actually said that the Department of Commerce would develop an Interactive National Broadband Map. And I think it's a really great example of when things happen at a state level and enforce a national conversation. I don't think, I really haven't been first at the state level and then at the federal level, do not believe that it would have been in the Recovery Act if all of the work hadn't been done by at that point about five to seven states in trying to get that Broadband information out there. And it was, it had these amazing positives where it was clear there were economic development benefits. There were advocacy benefits where people were taking that information and saying we need more. And there were also issues with data integrity and people saying, you know this data, this data doesn't represent my experience on the ground. And part of that was because there was very little consistency, every state was doing it very differently. Every state had different standards

what they were looking at and so when the national efforts started it then became this challenge of, how do we build a national Broadband Map that is consistent in terms of the level of granularity in what we're saying is Broadband what we're saying are different speeds, but also is able to reflect particularly in the way people verify data that the wide diversity across the many states in the country. I mean the, what the state of Vermont could do to verify data was very, very different from what the state of California could do. And just geography plays a huge issue there, but as a result of these national, the national mapping efforts that were, I always like to think of and several of the SBI, the mapping grantees are in the audience and can call me on this as they don't think so, but you know we really tried to say this is your data. You own this data. We are borrowing it to put it on the map. It has to meet certain standards to get on the map, but the states own that data. And we thought this was really important because we knew this was a five year program and we always hoped that it would get extended, but you don't know how things will get extended in what form. And what we see, when the program ended and there were no more federal grants, you saw a number of states who still said, we're going to continue collecting this data in some way, this is still important to us, and it's important to us because we've owned it and we have figured out how to use it. And so it's been, I really think the three key issues have been, economic development purposes, actually businesses saying I didn't, I didn't realize that there was Broadband that was there and I'm going to move into that area. There were issues, I know Kelly in Utah is there. There are some fantastic stories out of Utah about how in areas that were under-served they were able to look at where nearby providers were and be able to help businesses find connectivity so that they could stay and would not leave rural areas. There is also the advocacy piece. You know the data, when you're talking about 11 million census blocks, there are going to be errors. That is a fact. You will never have 100%



and so there has to be a way, a reasonable way to be able to refute the data and I think that question of what reasonableness is, is still an ongoing conversation. There are people, I know there are people here who would say that the level of reasonableness is not possible for small community-based organizations and there are people who would say it was. And so I think that is still an ongoing conversation. The third, but it did open up a dialog in terms of allowing people who had previously only been able to say, we know our experience on the ground does not, you know we do not have enough Broadband and then go say look, it's very clear the Broadband Map shows you know a maximum of three megabits per second. Let's look about what that reality probably is that this is not enough for us to survive as a community. And then the third piece, which I think is important is this history and benchmarking piece. You know we don't, we should never collect data just for the sake of collecting data. For Broadband, it is to be able to understand how fast or how slowly we have been, how fast or how slow have we been moving? And to understand whether it is, whether from a policy perspective it is fast enough and whether we need additional or whether it is too slow and additional incentives need to be made. And we can't do that without actually a record of the data.

And so I think those, you know when you ask about thinking back from the initial California Initiative to that national statewide initiative and where we are today which is essentially a number of kind of federated efforts across states and then the FCC using 477 data. And it is going to be, I think the question of what that will finally result in several years, will we have enough data and enough good data across the nation to be able to continue being able to benchmark where we think, you know where we think we need to be in understanding whether that data is good enough? I think that needs to be an ongoing conversation and if it's important to you at the state level, you need to keep advocating for it.

RACHELLE CHONG: Now later today, we have someone from the PUC coming. I think it is Rob Wolenjon [ph] is that right? So I would hope that whoever is left here, someone make sure they get an answer to the continuing data collection at the Cal PUC, but my memory is that is going to continue. They have figured out some funding for it. And that's really important. So thank you Anne. She's one of the few people that can really address this issue in a cogent manner so thank you so much for telling us why it's important, why we need to keep gathering it, and what communities can draw from that data to understand where that community is going because really that's where the rubber hits the road.

Okay well sadly, we don't have Miguel yet. So we're going to move on to our panelist questions. This is, I'm just going to throw questions out and let people go at it for a while and hopefully Miguel will come rushing in at some point and we'll have a chance to hear from him. But Jackie, I wanted to go back to you. I know that Senator Padilla now Secretary of State Padilla he is really genuinely passionate about Broadband. And so, what was interesting to me is I wondered when he was elected to Secretary of State whether he would bring some Broadband initiatives over to that role involving you know elections, democracy, and so can you tell us whether he has done any Broadband initiatives relating to his current job as Secretary of State?

JACQUELINE KINNEY: Sure. Thank you. Well once a Broadband leader always a Broadband leader. In his new role as California Secretary of State, he definitely has continued to focus on the importance of Broadband. You might say this initiatives have really shifted to a different chapter of the National Broadband Plan, the chapter on civic engagement. So just a few examples of where Broadband is enabling citizens more opportunities to participate in democracy through civic engagement and voter participation. Of course Broadband enables online voter registration. California launched online voter registration in 2012 and is one of

about 26 states that have that. There is a functionality on the California Secretary of State website and on a number of websites for county election officials and also accessible in a mobile format called “Find my Polling Place” where you just type in your address and it will show you your polling place, when you can vote, what the time and the hours of your polling place are and different ballot information. That is a project of the PEW Charitable Trust and Google called the Voter Information Project. And Vote Cal, this is a California Secretary of State IT project to establish a single uniform centralized statewide database of voter registration information that currently is held separately by the 58 county election official offices. It’s being launched, deployed right now in waves throughout the state, expected to be fully operational in June of 2016. And it will enable more efficient administration on the backside but it will also include a public facing, a public website that will enable voters to go online and provide different functionalities that they can do. You will be able to register to vote similar that you can now, you will be able to go in and update your mailing address, look at your status or your eligibility for voting in upcoming elections, change your political party preference, look at your voting history, all of that will be available online through that public facing website. It will also allow you to opt in or out of receiving the sample ballot and the voter information guide and choose to receive it electronically. You’ll be able to track the status of your vote by mail ballot, whether it has been accepted by the county elections official and if it’s been counted or not. So a number of things there.

And of course Broadband is really the backbone of this new voting model called “Vote Centers” and Secretary Padilla is sponsoring a bill that is pending in the legislature right now, Senate Bill 450 which will move California toward a model that is adopted in Colorado already so that you can, it really is enabled by real-time verification of citizen’s voting at different

locations within a county. And so rather than just having one single precinct base neighborhood polling place, you will be able to vote at any of these vote center locations within you county.

RACHELLE CHONG: Wow.

JACQUELINE KINNEY: And so, yeah so that is a bill that is pending. We'll look forward to your support on that. But I just want to emphasize too that these are great advancements utilizing Broadband but election officials will maintain all opportunities for participation in places where there is not Broadband. But just to highlight though, as these opportunities for better access to participating in democracy of voting are made available, it really just underscores the need to have Broadband everywhere because the last thing we want is for our Digital Divide to translate into a democracy divide. So support all efforts for continuing to get ubiquitous Broadband throughout the state.

RACHELLE CHONG: Any follow-up comments from the panelists on that topic, no. Jim, you look like you want to say something?

JIM WOOD: Well I would just like to say, those will all work great once we have access in rural areas where quite frankly, a lot of the folks there struggle even with the paper at times. So yeah those are great, those are great initiatives but until we have it in rural areas we're potentially disenfranchising a lot of people.

RACHELLE CHONG: So Jim, do you know whether the FCC's wireless grants are going to impact your district too?

JIM WOOD: I have no idea.

RACHELLE CHONG: Okay. So you're up. This Assembly Member is very concerned about Broadband for the reasons he mentioned in his intro. Only 50% of Highway 101 gets you cell service, that's pretty bad. I think Shawn McLaughlin told me that recently, you're back

there Shawn. He was telling me between here and here you can make a call Rachele, but after here you're dead meat. You've got to have everything done by the time you hit the city when I was up there last. So you've been holding some hearings up in your area, Assembly Member, can you talk about those hearings and what you're trying to achieve and what you've learned?

JIM WOOD: Yeah thank you. But first of all I wanted, I just wanted to say one of the first things we did was to establish the select committee and that was important, but we introduced AB1262 which was passed and signed by the governor. And what that did was that took \$5 million dollars from the Broadband infrastructure revolving loan account to these rural urban Broadband consortia grants, and what that did was allowed some of these consortiums to actually continue operations for the next couple of years and that's significant because these are, these are the groups that are actually doing the work in rural areas.

We had our first hearing earlier a couple of weeks ago and some takeaways that were significant from that. Number one, we need to clarify what and create sort of a common understanding and definition of what we mean by access. So are we looking at access for 95% of Californians? Or are we looking at for access for 95% of Californians in every county? So if you're just looking for 95% of all Californians, you could do that and you could leave out a whole bunch of counties including three that I represent, which would not have access. So need to have some sort of common definitions around that. I think that would be very, very helpful going forward. 5% of the people live in 95% of the land mass in California. 95% of people live in urban areas, and guess what, they have a lot better access then to the internet for us. So you know it sounds, so reaching 95% of the people sounds great, but the reality is, unless it's 95% in every county we're not going to close to achieving the goals of some of the things like what the Secretary of State wants to accomplish.

We also need to be looking traditional competitive business models don't work for expanding access, quite frankly it just isn't going to work. This is not the population base in rural California. There isn't, there isn't the population based in rural California to justify expenditure by some of the legacy carriers to install and maintain and actually, and maintain is important. We should underline that. There is money to install but not a lot of money to maintain just the service models. We need to know, how, you know what do we need to incentivize carriers to actually do this, but also what sticks may be need to ensure what the services is consistent. And then finally, we also find the criteria for providing funding needs to be re-examined and updates as well as assessed for adequacy. Programs providing funding are numerous but they operate in silos. So can we not like get all together and figure out ways to put this funding together and actually complete projects rather than trying to pick a little bit here pick a little bit there and actually move a project forward. I think there are a lot of resources out there but because of the silos it's really difficult to access and that's one of the things going forward.

One of the challenges, you know we have people in our district that are getting increasingly frustrated. Some affluent areas in particular, Sea Ranch. People may know of Sea Ranch, a very affluent little area. They can't get access out there so they've taken sort of the bull by the horns to try to get their own. Interested that we're trying to streamline things and break down barriers but my understanding according to their testimony and our select committee, they've spent over \$300 thousand dollars on permitting and fees and they're not even close to getting started yet. And I'm sorry, that's unacceptable.

RACHELLE CHONG: I'm familiar with Sea Ranch. We had one CASF grant, a small one in that area and it is a problematic area. Any follow-up from the panels, panelists on anything that Assembly Member Wood brought up?

FEMALE SPEAKER: I'd just like to say that I agree with a lot of what he's talking about especially after recently visiting the area and I think one of the really key important things is really looking at, how can we really work together to leverage as much funding as possible?

JIM WOOD: Could I add something, I want to add to something that she said earlier about Cal Trans and about road construction. So actually we met because she was at, she was at one of our tribal communities. And one of the things that I notice, I come across on Highway 299 which is, these are numbers that are not familiar to you folks around here, but I5 that one you might recognize. You go up I5 and you take a left in Redding and you go across 299, it's about two and a half hours to Eureka there. They are doing massive construction in that area and so my first question was, are we putting conduit in the ground there? Nope, not doing it. And that's happening all over and that's one of the things that we're really going to be looking at. If it takes legislation to make sure we put conduit in all these open trenches we're going to do it, because I believe it was you or it was one of the people there that said, you know the conduit itself is like forty-five cents a foot, is that correct?

FEMALE SPEAKER: Actually I think it was Michael Org with [indiscernible] but yes it is very low figures compared to.

JIM WOOD: So it would be about, my understanding it was about \$15 dollars a foot to put the conduit in the ground when you add all the hard costs. You go back and dig it up and put it in again it goes \$200 dollars a foot. So what the heck?

FEMALE SPEAKER: Opportunity.

FEMALE SPEAKER: Can I make one follow on to that. I think one of the things that is really challenging/frustrating is that these are the same conversations we've been having since. This was, on the Governor Schwarzenegger's Broadband Taskforce this was one of the

conversations in 2000, you know in 2007 and one of the things as a result of that was Cal Trans created this sort of this online platform that was going that all the providers could sign up for and it was going, it was going to alert them whenever they were doing digs and you know providers were going to go in and the idea for them is it would allow them to split costs. And we were talking, you know how do we build conduit in? And that was hard because it was sort of the beginning of the, you know, in some budget crisis and you know there was that question then. He said, well conduit is so cheap, why can't we just build it in? And Cal Trans said, we don't have the money, you know someone and it was this ongoing kind of, it was this, and I think that is that challenge and when you say you know like if we have to get legislation and I think sometimes that is, you know you can. You start with voluntary and then you have executive orders and then, but if it doesn't work legislation is the only way to kind of, I mean come closer to ensuring it's going to work and here we are all these years later and it's so frustrating that it's still. We're still, it still hasn't, we haven't figured out why we can't resolve the barriers.

JIM WOOD: We shouldn't have to legislate common sense. And we have 1547 assembly bills this year. We didn't need 1548 to mandate that Cal Trans would figure this out.

RACHELLE CHONG: So I had Adelina's job in 2010 to 2011 at the CIO's office and I worked directly with Cal Trans officials trying to achieve this goal and it was very frustrating because I think they got it. You know the number two there that I was working with really understood why this needed to happen and so we got as far as actually calculating how much it would cost in terms of the amount of fiber that would be put in, and then we handed it over to the industry at that time to say, okay guys how do we equitably figure out how people will help pay for this. And we got bollixed up there. But and then, I know that Sonny has been working



further on this in recent years with Adelina and it's still a challenge. I don't think we've achieved it yet. I think we're getting a little closer with data but not on this particular one.

Okay the good news is, the person barreling down the freeway has arrived. I am so please.

MIGUEL GAMINO: At the speed limit, I was observing.

RACHELLE CHONG: I'm sure you were. You were not in an autonomous car though correct?

MIGUEL GAMINO: No.

RACHELLE CHONG: All right, Miguel is here. The Chief Information Officer of the City and County of San Francisco. The reason we wanted Miguel is you know, when you're on, when you're at the [indiscernible] that's where the rubber hits the road on Broadband. You know they do the permitting, they're actually implementing the projects for their health providers and their schools. So we thought it would be really great to have Miguel Gamino here to represent the Muni perspective and what challenges you have, and he's got a very simple little city called San Francisco, which you know is pretty unique. It's my city. So I know a lot about it, but I asked him to talk about what kind of initiatives are going on in San Francisco, what are some of the challenges? You know they're doing some really interesting things up there. You've got dark fiber up there, quite a bit of it running around. 170 miles did you say?

MIGUEL GAMINO: Yep.

RACHELLE CHONG: You know they've been trying to get Wi-Fi to the public. They now have quite a bit up along Market Street. And that's free and they are going to do more I hear. So Miguel, you've got three minutes to regale us with your challenges, with your initiatives from a city perspective?

MIGUEL GAMINO: Thank you and yeah sorry I'm so early. If only I could get that update instead of the Ludacris for the auto-pilot you know the Hover Craft would be awesome on the 101. No, so thank you. Sorry for being late and I'm glad to that I was able to get here just in time to join the conversation. Hopefully add something of value to the conversation. So, in San Francisco I think, I tell people that I have, I feel like I have the best job because the best public sector CIO job because I'm close enough to where it really happens to see the outcomes, good or bad, of the decisions we make and the initiatives that we sponsor and the ideas that we have. And so we've been working really hard on our connectivity plan, which is to design to in some cases really formulate solutions and in other cases start some conversations frankly on broader topics. So I thought I would talk a little bit just quickly about that and what it means for San Francisco and then what I think it might mean for other cities.

I think that the Federal conversation, the global conversation, the state conversations are really important but in the city's space is where we actually have the rights of way where people actually live, work, and play and consume the outcomes of all of these ideas that we have. And so we're trying to be very active but responsible with how we leverage those rights of way. So our connectivity plan focused initially on a couple of things, Dig Once which I think you all were talking about as I walked in, but also building out fiber to the premise. And we have an ability I think in municipalities to justify some of the build-out for our own purpose, so we build our fiber to our city facilities and it's largely justified by our own kind of organic demand. But what happens is, as everybody in this room knows, you don't pull four strands of fiber. You pull two hundred and some odd, or however many you want to pull and so the cost is relatively insignificant. So you end up with what San Francisco has which is a big dark fiber network and so that adds to the asset pool. So I think our part in the conversation to the last components of

our connectivity plan are on public Wi-Fi and frankly Broadband choices to ever premise, home and business in San Francisco is enabled by the assets we already have, poles, permits, power, and how to make those assets more readily available to public and private sector partnerships or conversations around delivering connectivity. But now we've added to that mix, this dark fiber network and Dig Once was really important because as I think was being discussed, it's the least expensive when the street is already open by orders of magnitude right? And so by just doing a couple of those things smarter you set yourself up for the more challenging conversation in a much better way. And so, and then at the end of the day the one thing that is the most valuable asset of all is the one that was there when we got there, which is the rights of way themselves. So there is no other Market Street, there never will be. And so we have to be very careful and diligent with how we leverage that to this conversation.

And then big picture really briefly is, why this is important to San Francisco is frankly bigger than San Francisco. So I have the joy of going around the world literally having this conversation about connectivity and why it's important and why cities in particular matter, and I think that my brief analogy is that we can only talk about autonomous vehicles today because someone decided that organized paved road systems was a good idea for a completely different use case thousands of years ago. The electric grid, the government had to get involved for a different purpose but got involved to make it pervasive and high capacity, but because of that we now have things like the internet, data centers, the Internet of Things and connectivity. All these things we're talking about today are only enabled because you know light bulbs were the killer app and that was enough to instigate a pervasive build-out of the electric grid. And so even the use cases that we're talking about today in the cities are the light bulb equivalent. The Netflix, the Ubers, the IOT applications of Smart Lightening and Smart Trashcans and Smart Traffic

which I wish was smarter on the 101 is the equivalent of the light bulb. We'll look back on that a few years from now and think, gee that was insignificant in the scheme of things in the future. And all of that I think, kind of the ultimate theme is all of that is going to get delivered at a municipal level where people live where people are actually consuming the benefits of all of this.

RACHELLE CHONG: So Miguel are you going to expand the Wi-Fi system in the city? I know you did Market Street but are there plans to do other parts?

MIGUEL GAMINO: Yeah so we've got Wi-Fi on Market Street from the Castro to the Embarcadero. We have Wi-Fi in 33 1/3 parks.

RACHELLE CHONG: A third of a park?

MIGUEL GAMINO: Yeah the other part of it is still under construction. Not Wi-Fi construction just the actual park is being renovated. So that's our joke. We're waiting on them. But, 33, 34 parks, all of Market Street, all the public libraries now, and doing two things. We're pragmatically expanding where we can in response to either organic demand from the organization or demand from the community either by an event. We've got a little football game coming up in February.

RACHELLE CHONG: Super Bowl.

MIGUEL GAMINO: Super Bowl.

RACHELLE CHONG: Yeah small one.

MIGUEL GAMINO: So that's an opportunity to, as a forcing function, to deliver better connectivity because we're, you know among many things we want the Super Bowl in San Francisco to be the connected Super Bowl experience, the most technologically advanced Super Bowl experience. So we're using both of those things to organically grow it where we can, and then in parallel through the connectivity plan really laying out a path for where else we should

expand it responsibly and in what order of priority and what cost and investment is required either by the public sector or the private sector, and most likely we hope to create an environment a conversation around a public/private partnership with one or several private entities to help co-create the kind of the next wave of Wi-Fi deployment, but absolutely it's, my aspiration my dream to have connectivity in public spaces.

RACHELLE CHONG: Okay so with Miguel's later arrival, we're going to, I'm going to give each of the remaining speakers one minute to talk about one thing that you wanted to say and the last part of the panel, so just take a second to think about the one minute that you want to say something. Someone ready to go first?

ADELINA ZENDEJAS: I'll go first.

RACHELLE CHONG: Okay thank you Adelina.

ADELINA ZENDEJAS: I would just like to say that I know that we have many challenges but from the state perspective, we are really looking at those stovepipes. We're looking at trying to get those down and collaborating really with not just state departments. We're also looking at USDA leveraging again funding from their perspective, as well as working with a lot of non-profits and private industry. So it is a challenge, but there is lots of opportunities there. I think there has been a great focus brought to Broadband as a whole from the nation, also looking at First Net, Public Safety Network for emergency responders. So it is moving slower but I think with a lot of the work, especially with the Assembly Member Wood and looking at how we can you know partner. I'm not saying, you know I know it may have to be legislation sorry, but bringing focus to that and a lot of leaders at these departments are finally you know, they realize the importance and those conversations are happening. So thank you.

RACHELLE CHONG: That's great new Adelina. Who would like to go next?

JIM WOOD: I'll go next.

RACHELLE CHONG: Okay Assembly Member Wood.

JIM WOOD: One of the other issues I've worked on this last year was actually marijuana and the regulation of medical marijuana, and we have an estimated 50 thousand small farmers in northern California and one of the earlier conversations we had with law enforcement was, they want to be able to track marijuana from seed to sale, but you can't do that in my district because we don't have access to a lot of these farmers. There's a reason they grow where they grow and so they don't have access to the internet and so who knows, maybe you know marijuana will give us the key to Broadband access for northern California.

RACHELLE CHONG: Okay I like that.

ANNE NEVILLE: From marijuana to libraries.

RACHELLE CHONG: Yeah let's go straight to libraries with that natural segue, Anne Neville.

ANNE NEVILLE: So 78% of Americans think that local libraries should provide digital literacy and internet training, and that's really important to remember especially when in most cases at least 80 and often 95 or 100% of local library funding is funded locally. So these are local decisions, these are your decisions about where your community wants to go. And in California and across the county we have amazing examples of what libraries are doing to serve their communities using Broadband from San Francisco's new mixed teen media center at San Francisco public library to basic digital literacy classes happening in Al Centro to classes that you don't think of as internet-based. Things that libraries have always done, particularly adult literacy. Those new adult literacy programs are sometimes you and a mentor sitting next to each other, but in many cases they are in online formats. The state library is funding an online high

school program that is piloted at a number of libraries across the state. All of these things require Broadband for the libraries, and when those library's funding, when library funding is primarily local and many people want to see it, we have to figure out how we prioritize, how we prioritize library funding and as the Assembly Member said, figure out how we leverage local, state, federal funding opportunities so that as Jackie said, we can be able to get as many dollars coming in to California as are going out. Thanks.

RACHELLE CHONG: Great, okay last work Jackie.

JACQUELINE KINNEY: I would just say in terms of meeting the biggest challenge of getting to the unserved areas and the advocacy needed to get the public funding for the Broadband infrastructure in unserved areas, it's how important is to frame that advocacy in terms of the concepts of universal service. Using public funds to bring Broadband to Alpine County or to Mendocino County it doesn't just benefit Alpine County and Mendocino County. It benefits everyone. It allows people or businesses in San Francisco and LA to now engage in ecommerce with a whole new universe of individuals and communities, or in Los Angeles. It is, just the going back to the basic definition of universal service, the more people that are connected the more everyone that is connected benefits as a whole, and to always go back to that point so that you get widespread support for these programs and these specific projects, not just support from the individuals in the particular location where the infrastructure will be deployed.

RACHELLE CHONG: Wow, okay we're right on the button timewise so I will not docked. So I'm going to hand it back to Doug and I want to thank our outstanding panel Jackie Kinney, Assembly Member Jim Wood, Adelina Zendejas, and.

[END]