Vermont 2024 Ten Year Telecommunications Plan – Input Session 3

Transcription from Public Input Session held on 3-25-24:

Hunter Thompson – Telecom Director PSD
Hello, my name is Hunter Thompson. I'm the director of telecommunications. At the public service department. We are here at the third public input session for the public comment draft of the 2024 ten year Telecom plan. So as a brief overview, this meeting, how this meeting will go is that we'll get started. Alex will briefly go over a slide deck which describes the 202410 year telecom plan and then we will open up the session for public comment. Just as a reminder of this session is to solicit comment and is not necessarily a conversational piece. So we will take all the comments we get, whether verbal or written and respond to them in the final draft of the 2024 ten year telecom plan. Just so folks know, at 5:00 o'clock recording was started on this meeting. So you are being recorded and I think with that we can get started if you're all set, Alex. Thank you for covering again.

Alex Kelley - RISI
So thank you, Hunter. My name is Alex Kelly. I lead the broadband team at Rural Innovation Strategies Inc, where one of the contractors we've been helping, the public service department with this plan, just as a reminder, this presentation is not a note for note rendition of the plan, and the plan is quite lengthy and detailed. So this presentation is simply meant to drag people's memories or help frame the conversation, but encourage anyone who wants to make a comment to refer to the original text for specifics. If you have questions. Another note before we begin is that if you have your comments in writing, please do submit those in writing as well, because that will help us with the transcript that we're producing.

Alex Kelley - RISI
At the same time, Harlie, you can go to the next slide. So I'm going to start by giving a little context about the 2024 plan. Why this plan is different? What the landscape is that this plan has been created in response to I'm then going to go into some of the research and analysis that was done to support the plan, the findings and recommendations. Then I'll review some of the findings and recommendations in the categories listed on the screen. So findings and recommendations about wireline coverage, my wireless coverage, affordability, public safety and Vermont statute. So the 10 year plan as it is every year is

guided by two pieces of state. It's guided by multiple pieces of statute. Primarily it is created to advance the telecommunications goals listed in 30 VSA, 202 C and it is also created using a process. That's established by statute, and that can be found in 202 D umm at this moment in time, the state of Vermont has had access to significant federal resources for connectivity, and in particular last mile broadband deployment. That's through the American Rescue Plan Act, Capital Projects Fund and now B.

Alex Kelley - RISI
The broadband equity access and deployment resources those resources are attached to a federal planning process dictated by federal statute and operationalized by the Tia that has meant that in parallel to the creation of this plan, the Vermont Community Broadband Board has been leading a simultaneous plan that to. How those resources will be applied to last mile broadband because of all that work happening in parallel and because this plan can't supersede that federally required plan in certain areas, this plan that I'm about to talk to about addresses all the statutory requirements, but places a special focus on some of the elements that are not being addressed simultaneously by that work happening over at the Vermont Community Broadband Board.

Alex Kelley – RISI
Next slide please. Right, so here is a summary of some of the qualitative and quantitative research that underpins the plan. First of all, we did a phone survey, both landline and cellular phone numbers of a statistically significant sampling of residence. Some of the results of that phone survey are sprinkled into this presentation, but I did encourage people to look at the results and its entirety in the in the actual document. We also did online surveys of Vermont businesses, healthcare professionals and public safety professionals. We did interviews with over 55 public and private stakeholders. And we did a statewide mobile engineering, uh mobile wireless engineering and coverage analysis to look at where are the gaps in mobile broadband? How have they changed over time? What will it take to close them moving forward? And we also did use some input output methodology to assess the gaps in our current broadband construction workforce. What this basically is an analysis of based on the anticipated level of spending that will need to happen in the state to build all the broadband we want to build. What does the workforce do? How does it work? The workforce needs to grow in order to meet the construction demand.

Alex Kelley - RISI
First of all, addressing fiber coverage. I think this is probably obvious to everyone listening in. Fiber coverage is expanding rapidly as we speak in all corners of the state. Nevertheless,

through our conversations and analysis, we did identify some small challenges that include some of the challenges listed on this slide. Just to kind of go over the statistics, the houses with access to 100 Meg symmetrical more than doubled between 2021 and 2023. And as everyone knows, Vermont's goal is to pass all on grid premises with 100 / 100 service, and at this point in time, Vermont is on track to meet that goal by 2029. We also found that Vermont needs to grow its broadband construction workforce. That sector shrunk between 2018 and 2022, is right before all this construction kicked off due to kind of natural contractions in the industry and certain technological advancements that allowed these ISP's to operate with fewer workers anyways.

Alex Kelley – RISI
Long story short, if we need to build $700 million of fiber deployments over the next five years, that will require growing our workforce by about 750 workers. Now a lot of those workers are in direct installation roles, so line workers and so forth. But our analysis and encompasses the top 12 occupations that need to apply themselves to broadband construction projects. So another finding is that as part of utility hardening exercises, a number of fiber infrastructure owners may need to bury portions of their network within the next 10 to 15 years, and infrastructure owners are large, are not as clear as they would like to be on how that will be operationalized, who pays for what, and that information is important to be looking at now because the business plans and the viability of entities receiving grant money now need to have that those costs and responsibilities incorporated into their business plans now because of how utility business plans work. In order for us to be very clear and confident with how we are building our networks. Another finding is that the Agency of Transportation, which was issuing right of way permit waivers for a number of years, has recently stopped doing that. And what that essentially does is it increases the cost of deployment and unserved areas with those extra permitting fees for people who are bringing broadband to the very. Financially difficult to reach places that are very rural in our state.

Alex Kelley – RISI

So in in the mobile wireless department, you know, stakeholders were very adamant and very vocal about how critical that service is across a number of sectors and usage. And our, I think the headline is that our analysis found that coverage has not expanded very much over the past five years and that's based on comparisons of drive tests in 2018 and 2022. I believe it was. So, digging into the details here, 80% of businesses surveyed indicated that Vermont smile wireless coverage is inadequate for their business needs for a number of

reasons related to how they need to communicate with their employees to how their customers find them and how their customers communicate with the business. 64% of people surveyed in our phone survey strongly agreed that the state should use public funds to improve mobile wireless coverage. So clear majority there. We also found that even though coverage has not expanded much, minimal improvements in the actual geographic area that is covered by mobile wireless download speeds have increased by quite a bit. And that's due to technology upgrades primarily. And if you look at the state as a whole, approximately 412 miles of road do not have mobile broadband coverage from any provider. So looking at all the all the providers that were included in the road test. Lastly, and this is a really important piece, our engineering analysis showed that you know, if you look at all of the unserved places, tackling the easiest to serve areas without wireless coverage can be done very efficiently with what we are calling small wireless facilities. So a traditional tower cell phone tower, you might say is usually around 140 feet. Small wireless facilities that are 50 feet essentially placed very strategically can be an efficient way to close the easiest half of our broadband mobile wireless broadband gaps, especially with increasing fiber presence across the state. Now you still need those big towers to efficiently close the hardest 50%, but due to our topography and actually due to the curvature of the earth and the way that coverage, you get more incremental gains the higher you get at a certain point our analysis showed that these small wireless facilities can actually efficiently close the easiest to close mobile wireless gaps.

Alex Kelley – RISI
So affordability is a big concern in the state's many, many stakeholders wanted to talk about that with us. And one of the big things on everyone's mind is that the affordable connectivity program known as the ACP, which is a $30.00 a month subsidy provided by the federal government, is expiring and it looks to be expiring next month at the end of April, according to predictions of when that funding is gonna run out. So that program also importantly only offers a subsidy for either mobile or fixed service, but not both. So once that expires, approximately 24,000 Vermont households are going to lose that $30.00 a month subsidy that's helping them with their connectivity bills. There are some interesting cross tabs about who in particular that impacts, but you know, as a whole, 24,000 low-income Vermont households are going to have a harder time paying for their broadband after April. Just as an example of the importance of continuous connectivity, health care workers in particular spoke very eloquently about how important mobile coverage is that both available and affordable to Unhoused Vermonters. Because that is a lifeline to services, and it's the by far the best way and most reliable way for service providers like healthcare workers to be able to contact their clients and make sure they know when their

appointments are and know where to go or on time and just their connection to care really relies on mobile coverage and access to a device.

Alex Kelley – RISI
So in the public safety realm, there was a lot of ink used in the plan to discuss the potential of consolidate public safety, answering points, and this was because various legislators have been discussing this idea. So we spent a good amount of time talking about the advantages and disadvantages of taking that approach. In across New England, some states have consolidated their peace apps to some degree. Some states have not. The advantage is first of all potential long term cost savings which is one of the I think the primary drivers of wanting to consider this, but there's some flat staffing flexibility benefits. There's different ways that you can improve coverage 24/7 with that consolidation. There might be more resources for statewide emergencies as well, but there are also some challenges or potentially disadvantages to this. So there's different governance systems and processes that you need to implement. There's a upfront cost to that system migration that you would need to understand and cover. There's different issues with centralizing things means that you don't have as many people from different corners of the state answering calls. And of course, you just as part of new systems, you need new redundancy and new failover processes as you establish those new frameworks there. So other than that, you know most public safety stakeholders cited funding as well as some of the primary barriers to completing their goals. For example, the goals in statewide communication interoperability plan. And then we also looked at first net and according to our conversations and analysis, there have been 51st net sites deployed, and 1st net is the program with AT&T that provides dedicated network access to public safety and 1st responders. You know some of those fifty sites have been new builds. Many of them have been upgrades with new technology to existing tower sites. So despite the despite the 51st net sites in the state, it is well worth noting that only 5% of public safety survey respondents reported never losing mobile service in the job. So clearly we have a long way to go.

Alex Kelley - RISI
At request of the JITOC committee, we did an analysis of some of the statutes governing telecommunications, and our conclusion is that there could be more specific and better aligned with current state strategy in a few critical areas. Number one, broadband speed definitions and minimum of deployment parameters are starting to lag behind other states, and they're not fully aligned across different elements of statute. Another example that we call it on a plan is that the statutorily mandated end date for the Vermont Community

Broadband Board is likely to occur before all of the BEAD program activities will be completed, and again they're overseeing the BEAD program in the state, especially some of the enforcement and auditing that needs to happen after construction is over to make sure everyone built exactly where they said they were going to build and are offering the services that they said they were going to offer. And so forth. And then in general, the statutory goals, some of which were drafted almost 40 years ago, that contain overlapping and nonspecific language that at this point, given the telecommunications landscape and the strategy is the state is taking on, could be much more refined to really make sure that all telecommunications stakeholders are aligned and rowing in the same direction as they do their work.

Alex Kelley
Moving on to the next slide. So you know, again, I'm going to go through the same categories that I went through when talking about our analysis and findings. So first talk a little bit about wireline deployment. As I mentioned, it's ongoing. There are very specific rules and parameters that the state needs to follow dictated by the that are attachments riding on the funding that we received from the federal government from the NTIA. However, there's a couple things in here that we noted that could make those deployments easier. First of all, if the Agency of Transportation would reinstate their permit fee waivers, at least until the state achieves its goal of 100 / 100 megs symmetrical broadband, that would alleviate a cost that the entity is trying to build broadband in the hardest to serve areas and most expensive areas would have to pay. So that seems like an easy lift to make things better and more achievable. Number two, I mentioned the need to grow the broadband construction workforce by about 750 workers across a number of job categories. Vermont has some training programs they've implemented, and with a number of entities in collab working collaboration, but we encourage those entities and recommend that those entities really work as hard as they can to scale those programs to the scale of to the size of workforce that we need. And so as I mentioned, 750 jobs across a number of categories and given the challenges of broadband trades, essentially you often need to set a goal to recruit three times as many workers in those categories as you think you need because of the natural turnover that happens in the industry. It's hard work, after all, and retirements and so forth. So our recommendation is to aim high with that and then lastly on this point about the uh possibility that infrastructure owners will need to pay for the burying of their infrastructure in the next 10 to 15 years, the state of Vermont, in particularly the VCBB is in a good position to lead a study that works towards resolution on that front. This would involve is documenting an understanding the process that's going to happen, who's going to pay for what, the potential impact to the financials of all the entities, who own fiber, but

more importantly, providing a kind of centralized view of opportunities for savings and alignment. And so how do you align the work that needs to happen on the telecommunication side with the electric infrastructure side to try to create as frictionless and efficient of a process of doing that as possible?

Alex Kelley – RISI
So on the mobile wireless side, our recommendation, our primary recommendation centers around implementing what we're calling a small facilities wireless grant program. And we thank you and we think the state should implement it in a kind of pilot phase at first for some reasons that I will get into. This grant program would provide grants for the deployment of small wireless facilities again, and these are the ones that we believe are equally, if not more efficient from a financial standpoint into closing. The easiest 50% of coverage gaps to close and they also preserve the landscape and the aesthetic by being less obtrusive. Smaller, right? You can Nestle them into the hillside, and they are not as noticeable an element in the landscape, so we think 2 to $3 million is the right amount for an initial pilot program. And in the plan, we provided a list of data that we think the state should collect as part of this pilot program in order to then refine that work moving forward. And data includes everything from, you know, cost broken down by different category to you know what partnerships are coming together, where to where you know where the most viable places are to build, where you get applications, who's applying. And so, all of this will help the state refine this program and do better in the future. The second big recommendation in this category is we made some recommendations around the state's data collection practices, which we think if the state is able to make these changes, it will strengthen their planning abilities. While at the same time helping them better measure and track progress against our goal of increasing mobile coverage in the state, the drive test in 2018 versus 2022 was done using a different methodology. Obviously, we're recommending repeating the 2022 methodology so that you have exactly the same data to compare it to, do the drive test every two years. We laid out a number of very specific parameters for what a crowdsource drive test would look like, especially if the state would like to be able to collect data for all roads, not just the primary roads that the drive test covers. Some another element to this is we think the state should request that 248 a permits recipients notify the public service department when they complete their tower builds. At this point it's it is not always obvious or clear to the state if those permit permittees, I guess if and when they execute on the permit they've obtained.

Alex Kelley – RISI

On the affordability front, we are recommending that the state's first of all, umm, you know, work on affordability for both wireline and wireless service. So whereas the federal A CP program was a one or the other element based on all of our stakeholder interviews and really profound contributions across the public and private sector, we are very sure that Vermont stakeholders see these two types of services as equally important. And so acknowledging that importance means working on affordability for both at once, rather than one or the other. Our recommendation for a benchmark and a way to measure is that we believe that 2% of monthly income should be the definition of affordable for low income Vermonters. We've got kind of charts and documentation in the plan about what that actually means, but ultimately, we think a state-run subsidy, on the typical cost of those services and our benchmark for affordability. We think that a state runs subsidy program that provides $67 a month to low-income Vermonters, again for both of those services is the right is the right level to address the affordability concern for both types of subscriptions. Then lastly as an auxiliary piece to that, especially for Unhoused Vermonters and the importance of continuous access to mobile coverage, we think that the state should establish a program to provide fully subsidized devices and subscriptions to those Vermonters and work through Human Services providers just again to ensure that everyone who doesn't have a home in Vermont has continuous access to services.

Alex Kelley – RISI

So on the on the emergency communications systems front, you know, I think the state, our recommendation is this, that the state really take a look at what elements of our communications needs are available, have federal grants available to support them and what don't and it is a funding barrier as I mentioned to a number of the goals in the statewide communications interoperability plan. That's one of our primary recommendations on that front. But I think again, the kind of Marquis piece in this plan on the emergency communications front is about the possibility of consolidating public safety, answering points. The plan says that if all the stakeholders read and absorb the analysis we provided in the plan, if this still remains a consideration that the state wants to pursue again some peer states have done it, some have not. There's tradeoffs in both directions, right? The next step is to actually create a consolidation plan, should have specific costs and consolidation in Vermont's particular context weigh against the long-term savings. That is a large undertaking. This recommendation is not made lightly because it is a big lift, but that would be the next step if the state stakeholders who read our analysis of the advantages and disadvantages believe that it is appropriate to move forward with that in the state of Vermont.

Alex Kelley – RISI
Right on the statutory front. I think this is an anticipated recommendation, at least at the legislature. Who knows that the statutes need to be revisited, but a summary. This recommendation is that the state should modernize the statutes that guide our telecommunications policies and practices, and there's a few ways in which the statutory goals in different sections need to be made more specific. Again, they're overlapping and unspecific. We could make them more specific. They should be aligned with Act 71 and speed tiers and everything else across all our telecommunication statutes should be cohesive. We do recommend extending the Vermont Community Broadband Board's sunset date so that they can provide adequate oversight and monitoring of be deployments. And we also are recommending that that the legislators take a look at the statutory goals and take a look at our deployment set strategies and make sure we are creating goals and deployment strategies in concert. One example we are spending significant resources, as we should be, to ensure that in the most rural areas of the state, everyone has access to a fiber provider at 100 / 100 megs. Those are very, very difficult places to serve with even one provider. And so, you know, there is a state goal of increasing competition in the state, which is an appropriate goal. But with that goal is getting at is that we would like some of the byproducts of competition, better speeds, lower service, better customer service. Those are benefits and values that can, but don't always arrive in a competitive environment. But that's really what we're driving for. And so we our recommend our hypothesis or what we're playing 4th for the legislature is do you want to be setting a goal of competition for competition sake, which again gets very expensive when you there isn't even enough economic base to support one provider, much less multiple, or are what you actually care about some of these things that are potential byproducts of competition. And if so that a better framework for the goal? And so we're just prompting the legislature to think about some of these questions as they iterate on and modernize the statutes, which, again, should reflect the legislatures goals for the state.

Alex Kelley – RISI
Thank you all very much and I believe now we are going to go into public comments and if you could please keep your comments civil and start with three minutes till we get everyone and then we may come back to you if there's more time that would be great.

Hunter Thompson – Telecom Director PSD
That you, Alex. So as Alex said, we'll open the meeting to public comments. We'll start with anyone on the phone, have a comment? If not, we will go to the room. They can unmute

and or raise their hand. No, we don't have to do that. Ohh. Doesn't look like we have anyone on the phone. So Mr Whitaker?

Stephen Whittaker
Uh, Stephen Whittaker from up there. I'm a bit dumbfounded that even after having provided the information a week ago about the Department of Public Safety and the Public Safety Communications task force efforts that this presentation uh, it's still so misguided. Umm. Specifically regarded regarding the consolidation of PSAPs. I'm gonna cover a number of points here, and I'll probably run over 3 minutes, so if you notice anybody else jump on, I'll take a pause. Thank you. A statute is statute due to C&D in Title 30 are not to be wished away because we're trying to get away with writing half a plan or impose a new ideology on Vermonters. So found your transcript kind of useless. So statute is statute. Act 71 is not a binding factor on or it's not a notwithstanding clause that allows you to violate 202-D regarding how you go about this plan. Uh, if you've you can't even the department and the telecommunications division cannot abdicate its responsibility to make sure 202-D is adhered to strictly, even though you've signed a $400,000 contract with RISI, which I consider snake oil, they fail this last time they'll they're failing us this time, and we need to put a stop to it. Every prerequisite, as laid out in 202 D, must be met before the plan is prepared. And these hearings are held, I pointed out to you, a handful of prerequisites that have not been met. I'm see Hunter nodding in agreement. Every element, such as public participation and effective public participation process must be met. Coordination with the excess media organizations must be met. It are you not at all suspicious that only one person showed up last Monday and only one person appears to be here tonight that you haven't met your basic threshold of an effective public participation process? And you must address every element it's set in the goals and policies of 202 C those aren't optional. Where it says shall support competitive choice for consumers, shall support Open Access for competitors. These are not things you can let your contractor try to wish away and write a plan that dodges them and pretends we're going to just get lower costs and higher service by wishing it were so. That's a delusional thinking statute actually says that we'll have 100 to 100 by 2024. And yet the failure of the write a plan over the last decade has left us in the place where we still don't have a plan to get it done by the end of this year.

Stephen Whittaker
So our fiber strategy is fundamentally flawed, and yet it's also been left out of the plant this draft. Uh, the CUD's aren't even happy with this draft because you're it's all focused on, you know, wireless and other priorities that don't address the merits or the guidance or the retuning of the fiber strategy. Since this program was initiated, build costs have increased

dramatically as has have labor costs as has the cost of money. Additionally, this CUD have not built the right of way charges into their economic models, so you're headed towards a whole bunch of bankruptcy, CUD and a whole bunch of fiber getting sold to the highest bidder, which might be, you know, consolidated or Comcast. That would be a supreme disaster. And yet y'all are keep supporting this keeping of unnecessary secrets of the financial models.
Stephen Whittaker
Dying out or is that a the screen keeps going black?

Hunter Thompson – PSD Telecom Director
Uh, I don't know. I was paying attention to you, but I'll watch the screen now.

Stephen Whittaker
Alright, only if you can read sign language.

Stephen Whittaker
The secret financial models will not lead to affordable broadband. We need a network design. Overall, the whole state and this was defeated by the language was put it Act 71 to allow a unified statewide resilient engineered fiber design and the Broadband Board ignored it and proceeded with this hodgepodge of different strategies of non network architectures that don't support competition that don't support failover in resilience. We need remotely reconfigurable, we could have and should have built on the Velco architecture and required every CUD to buy a compatible remote, add drop multiplexer that can be even managed by Velco and keep and reroute around fiber breaks during big storms, all from a single console in Rutland. That would have been the most affordable way to go about this, but the back call trunking in in place on an existing network. We need to be using First Light's, CCI's fiber. We have Open Access conditions on some of first light fiber because we granted the money to sovereigns in the beginning, that has never been elaborated or elucidated in the plan. Exactly where do we have what rights of access at what cost to sovereigns' fiber that we paid for under the big top program?

Stephen Whittaker
Uh, similarly with consolidated communications as a condition of a service quality investigation, they accepted the millions from the FCC and they built the inner office. Fiber to the remote terminals. We should have Open Access to that fiber too, before they get another incentive, right? Plan approved and this same firm recommended. Oh, don't type Open Access fiber tier inside of brake plans. That's the only lever we have with regards to

incentive regulatory plans is the teeth in this telecommunications plan. I would encourage you to get familiar with 226B in Title 30 and understand that this plans most effective statutory leverage is in no incentive, reg plan can be adopted or approved by the Public Utilities Commission if it's not found to be consistent with this plan. So that's a way that we could have and should have implemented Open Access to the interoffice fiber that was paid for by that settlement.

Stephen Whittaker
There's been some talk of carrier grade. There's someone else this would which is useful, and then you have. Evan Carlson, who was here for the foe TCAB meeting. Saying that we're all building terror grade and FX saying we've been out of 13 years and we're nowhere close to providing carrier grade. So you gotta disconnect there. But public safety grade carrier grade utility grade. The distribution utilities are implementing an architecture of distributed storage and distributed generation. Big battery containers and solar fields and wind turbines that can be accessed and access the grid and even fail into microgrids to keep folks online when the whole regional grid might go down. Ah, that can't be done with consumer grade fiber. That that requires a level of engineering that we have failed to do here and we can't afford to waste this money and do 1/2 baked job. So we need an integrated. Planning process it it's gonna be challenging to change paths at this date, but we must. If we're not gonna waste this money, ended up with the job half done. We need integration of dense wave division multiplexing building off of the could the Belko network we need active fiber. Ethernet. We of course need Internet. That's what you were seem to be fixated on. We need fixed wireless access. It's not gonna be economical for the Northeast Kingdom and many other areas to do, you know, an extra mile of fiber to serve one address. You know it. It will never pay itself back everywhere. That fixed wireless access can provide a final or replacement fiber. Drop. It'll leave more money to get the job done in the uh, more dense areas. We need neutral host LTE to fill the dead zones and to provide a public safety failover when FirstNet fails. Again, we need a failure analysis.

Stephen Whittaker
We've had fiber cuts, I believe three in my memory in recent years that took down all the state systems, and yet there's no analysis of that. What caused it or how to prevent it in the future? In this plan, in this draft, we need an analysis of cloud hosting. Our state government come system our zoom and teams video platforms, our Cisco video platforms are all hosted on out-of-state cloud servers that will not be functional after a big storm and a lot of backhaul is taken down. What state applications are dependent on remote cloud and what needs to be hosted on in state cloud? So to in order to support restoring from a disaster.

Stephen Whittaker

GMP underground.There's slight scant mention of that. GMP has begun and done a few pilot projects of a underground. Burial of power cables. It's called a vibratory plow and it can bring 4 tubes at once. Very four tubes at once in one pass. Repacking over the top four feet deep, that's typically going to be 3 phases of AC current and as a second conduit for that can be used for communications. That begs the question which communications carriers gonna get in there? First, or are we going to insist that that be a neutral host, top neutral host platform that any carrier can ride in those spans? This is urgent, because once those ditches are open and closed, we're not going back to reading them in the same place, and that machine can only reach so far off the road. There needs to be statutory authority to constrain what municipal officials can make unrealistic expectations of how far off the road they're asking the vibratory plow to go. So the machine can't reach 20 feet off the road. So if we're going to do this, who's gonna pay for settling later? If, as this ditch settles, and culverts or whatever need to be fine tuned, is that the electric ratepayers is that our Green Mountain power? Is it on the fiber conduit? Is it on the contractor? You know that these things need to be addressed or we will have another huge missed opportunity to not get. I'm especially concerned with getting buried cable up to the mountain tops where our emergency communications are located already, or will additionally be located because we can't afford to have a windstorm or an ice storm tear down our backhaul to our emergency radio systems, so.

Stephen Whittaker
The poll owning utility should be building and maintaining the fiber, including repair obligations. That's the only economical way to make take maximum advantage and to put to adhere to the Open Access statutory requirement. I mean have y'all not called your contractor on the absurdity of ignoring the Open Access requirement that's in statute and pretending? Ohh, we'll just fix that with changes in the statute later. Are you really thinking That can't be. You can't have written a contract that allows that, the contract says you will adhere to statue and are you just overlooking that that smoke and mirrors? Anybody who need to talk?

Hunter Thompson – Telecom Director PSD
No, still you, Stephen.

Stephen Whittaker
So we need to rethink our design and pursue a statewide integrated design. We need to address the secrecy of CUD's and what is legitimately critical infrastructure. What is legitimately uh security sensitive and what is legitimately trade secret? And everything else should be public. Again, that information analysis is missing.

Stephen Whittaker

So again, either the integrated planning is required now with Green Mountain power First Light, CCI, tell the CUDs, Velco and lumen umm I know AT&T still has a few strands of fiber from the old days. I'm not sure if we would try to get on any of that. Umm. The neutral host LTE infill strategy is going to require spectrum. It's going to require towers. It's gonna require engineering and maintenance expertise. It's gonna require billing. It's gonna require roaming agreements. The pathetic proposal uh to try to pick it off 1 little pilot project at a time, you know, is really absurd. It will not get, we will not see success and this has to be totally integrated with the work that mission critical partners is doing for the public safety communications task force. And you really need to get up to speed. I don't have any, uh illusion that we're going to be able to do. Turn this Sal's ear into a silk purse by June. I think we're going to need to postpone the adoption of this plan for another year and figure out what team is gonna clean up the mess after RISI bumbled it for a second iteration and $600,000 of public money later, or go after return of some of that. So you need to get busy with the prerequisites for a plan, and the Amo coordination to get the public involved to participate in this. If you can't just run on and pretend you're gonna get away with carrying on a charade of a statutory required process and implement this plan.

Hunter Thompson – Telecom Director PSD
Thank you. Thank you for having that Stephen. Still have 13 minutes left.

Stephen Whittaker
I'll better few more comments.

Hunter Thompson – Telecom Director PSD
OK, go ahead.

Stephen Whittaker
Uh, distance education. Public meetings. Statewide. Uh public meetings. Managed by the statewide channel that was part of the settlement with the access media organizations. Uh prisoner visitation, courts, arrangements, etcetera, we need high quality sites, more along the VIT model. Uh, where the lighting, the microphones, the bandwidth, the speakers for people who are present in the room are all first rate. We cannot compromise the rights of prisoners. We cannot have the historical archive of our public meetings be unintelligible as some of these transcripts and as some of these recordings are based on insufficient attention to detail of where these people are trying to connect from. Uh, it may be that remote participation in legislative process or in these hearings should have to be at a certified site that has the proper lighting, microphones and bandwidth to support proper participation and recording.

Stephen Whittaker

Same with distance head, the nursing program wanted everybody out when the college is switched to, you know, Adobe platform. Literally more than half of the students flunked out. It just didn't work. And so we're and else touch briefly on the wireless, the initiative that we did at the beginning of COVID throw a lot of wireless access points out there and and not check whether the backhaul connectivity was sufficient to support any number of users at a time. And then let that whole system after be we should have planned that properly and strengthened it so that the next storm or disaster, people know where they will be able to go and pick up some Wi-Fi if all of their home systems are down.

Stephen Whittaker
Locating what's in the public right away needs to be a priority. Comoast has been hiding for years behind the fact that they're amplifiers that power the nodes the green boxes the you know 2 foot cube boxes. Those when those lose power from a car accident or a meter getting smashed or whatever, an entire section goes dead and no one can make a 911 call, and that can't be allowed. We need to strengthen that network and as well as strengthen solutions for all point customers, new and emerging current and emerging to have . emergency calling access. Regardless of this, the grid status.

Stephen Whittaker
I think those were the couple of points I've forgotten.

Hunter Thompson – Telecom Director PSD
Thank you.

Stephen Whittaker
Sure, nobody wants to talk about why there's nobody here. You've got a cricket recording on there, Aaron for us?

Aaron Brassard – Fiber Optic Project Manager
That was my doorbell recording for my kids. You know what would make these meetings a little bit more interesting? Snacks.

Hunter Thompson – Telecom Director PSD
I have fun.

Aaron Brassard – Fiber Optic Project Manager
That’s how I got my kids to work for me, with snacks.

Hunter Thompson -
We made healthy chip cookies over the weekend. But they're gone.

Stephen Whittaker
What was the problem with the screen?

Hunter Thompson – Telecom Director PSD
I'm unsure I came in earlier today when I was in the office, and it was working. I don't know if it may be needed to be rebooted. If someone rebooted a weekend I know Friday they continue to have issues with it, so could have been a Windows Update. I know Windows updates happened last Tuesday statewide, and that's caused other issues elsewhere, so. It's hard to tell with this device. This is the only thing that's used for. It's like the camera

connected to its not really a tablet, cause it doesn't really do anything except children meetings. Connected to the TV.

Stephen Whitaker
Well, had it been a full BIT site with 50 people in the room, we would have been wishing we hadn't used HP slices.

Aaron Brassard – Fiber Optic Project Manager
The ID doesn't exist anymore.

Stephen Whittaker
Next Gen BI T exists on paper.

Aaron Brassard – Fiber Optic Project Manager
Yeah, the original was all run on TDM stuff now and really obsolete near the end.

Stephen Whittaker
So if you go up the same workout for a company and these kind of this will not work, there's no reason they can't run on Gigabit Ethernet. It is that'd be broadcast quality and scale to stream the governor statewide addresses and things like that. That would be a good chapter. That would be a fun chapter. Alright, for your plan, got all your to do it. It'll be interesting to see how the telecommunications division team can develop the courage and the integrity to either persuade Jim Porter or June Tierney or go to the legislature and the governor directly and expose this parse this hoax and we should go after RISI for some of the funds they've accrued without delivering. Specifically, every count of blessed plan that was not did not beat the statutory requirements for their congratulate requirements, and similarly this time maybe we can cut bait for 100,000 and have 300,000 to find another contractor.

Stephen Whittaker
The little rabbit ears in your ORCA bag? Ohh, I see you're streaming had some forgets the signal up to the college.

ORCA Media – Camera operator
I guess I guess though. Just know how to put them together.

Stephen Whittaker
Gradle point.

ORCA Media – Camera Operator
I think it's connecting to.

Stephen Whittaker
You don't know if it's using LTE or is it using the Wi-Fi in the building and that's using. The other lately frequently fades to unreliable. WCAX, they have like a box multi $1000 box or even 10s of thousands with four or five LTE cards in it. So there being together bonding together, LTE data channels to get the bandwidth they need 80.

Hunter Thompson – Telecom Director PSD
It is 5:59pm, so we are going to wrap up the meeting in anticipation that it takes me roughly 60 seconds to get through this last piece. Thank you all for attending again. If you have comments and you would like us to receive them in writing, that makes it much easier. Otherwise, we'll go through the transcript and we'll improve your commentary in the final draft of the 10 year telecom report. Umm, I think that is about all we have. Any other comments before we close?

Stephen Whittaker
Number reports supposed to be a plan.

Hunter Thompson – Telecom Director PSD
Thank you for your input, Mr. Whitaker. All right. Thank you everyone for attending. Have a good evening.