STATE OF VERMONT

HOUSE COMMERCE AND SENATE FINANCE JOINT MEETING RE: TEN-YEAR TELECOMMUNICATIONS PLAN AUGUST 28, 2014

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(Recording begins.)

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REPRESENTATIVE BOTZOW: This is the House Commerce Committee. I would like to welcome you to our hearing today. This is a hearing that by law is -- it's both our hearing and frankly the Department of Public Service's hearing that was written into the bill as they were required to call a public hearing as part of the adoption of the ten-year telecom plan. So that's why we're here.

I'm going to work with Steve -- not

Steve. I'm going to work with Tim and whatever in a

somewhat improvisational fashion on how we work our way

through the day, but the key elements is Maria will give

us a sense of where we are with the legal pieces and what

I think also going forward from a legal point of view to

understand this is not a bill we're working on. This is a

plan that we have charged the Department to do. So

straighten out those pieces for us and give us a sense of

our options here.

We will hear briefly from the Department from both Chris and from Jim who will make sure that we have, you know, a thorough overview of the plan itself, the work they have done, their process, and we'll ask them also to talk a little bit about, you know, their plans going forward because there are still other public

hearings scheduled after this one. This is not the last opportunity for public -- or comment, and then we will take and we'll divide the time up. We'll see who's here and to make sure that people have plenty of time to -- right now we have seven people on our list and we'll try to divide the time up, give everybody a good chunk of time to comment on the plan because that's why we're here. Tim, anything you want to add?

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REPRESENTATIVE ASHE: Just if anybody is interested in speaking who hasn't signed up on the list anybody at this point as people -- as we get through the seven we'll obviously make time available for anyone who filters in over the next two hours.

UNKNOWN SPEAKER: So with two hours total to use I'm imagining you're going to take about 15?

MR. RECCHIA: Probably about right.

UNKNOWN SPEAKER: Or whatever. You will

understand I think that we will have probably an hour forty five, an hour and a half. I think you can divide by seven or whatever there will be and do the math.

Understand how much time each presenter has available. I don't want you to feel rushed. We want to get the full benefit of your thoughts. So, Maria.

MS. ROYLE: Hello. That's loud. Maria Royle, Legislative Council, and I have a document that

some of you have access to on your iPads and there are also hard copies, and they're basically Sections 8 and 9 of Act 190 which you passed last year, and the reason why I did that is because there are two sections of law both entitled 30 Section 202c which concerns the State's general policy on telecom planning and Section 202d which are the requirements in developing the telecom plan, and so I thought I would just very quickly go through the State's policy and note in particular the new provision that was added last year, and then also go through the legal requirements for adoption of the plan, and so you'll notice that there are — most of the changes that you see here are directly from the Act as passed and there are some minor capitalization changes, but really only I'll highlight the substantive changes for you.

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So just in general, and I'm planning to take only about five minutes for all of this so please let me know if you want more information or less, so under Section 202c basically specifics that in order to promote access to information and telecommunications in accordance with regulatory policies and advances in telecom the State policy is to direct benefits of improved telecom technology to all Vermonters and in doing so to strengthen the State's role in telecom planning, support universal availability of appropriate infrastructure and affordable

services, support availability of cell service along travel corridors in the state as well as in the state's communities, and I'm just reading down actually on page 1 looking at subdivision 4 and summarizing for you, providing for high quality reliable telecom services for Vermont businesses and residents, provide the benefits of future advances in telecom technology, support competitive choice for consumers, promote open access among providers, on a non-discriminatory basis, support application of telecom technology to maintain and improve governmental and public services, public safety, and economic development, support broadband deployment by using best commercially available technology and also not negatively affecting our ability to take advantage of future improvements in technology, and then -- well no, not finally, but subdivision 9 to encourage the use of existing facilities such as existing utility poles and corridors rather than new construction of facilities, and then what was added last year, you can see underlined subdivision 10 to support measures designed to ensure that the -- by the end of the year 2024 every E911 business and residential location in Vermont has infrastructure capable of delivering internet access with service that has a minimum download speed of 100 megabits per second and is symmetrical. That is 100 in both directions, download and

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So that is the overall statement of

Vermont's telecom policy, and then Section 9 is the

amended version of Section 202d which pertains

specifically to the plan that's the Department of Public

Service, that it's the responsible planning agency. The

goal is to ensure that consumers have stable and

predictable rates, advanced telecom network, that services

all areas in the state.

In preparing the plan the Department shall be assisted by the Department of Innovation and Information, and then you will also see the Division for Connectivity which is the new division which you created which actually does not go into effect until next summer. So it doesn't exist currently, and also receive the assistance of ACCD in terms of the plan's preparation.

The plan is for a ten-year period. It used to be a seven-year period. Shall serve as the basis for state telecom policy, and that prior to preparing the plan the Department is required to prepare -- and I'm on page 3 subdivision 1 at the very bottom -- an overview looking ten years ahead of future requirements for telecom services considering services needed for economic development, telecom advances, and other trends.

Subdivision 2, a survey of residents and

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businesses to determine what telecom services are needed now and in the succeeding 10 years. Current assessment of telecom infrastructure, an assessment conducted in cooperation with DII of the current telecom system and evaluation of alternative proposals for upgrading the system, and assessment of the state of telecom networks and services in Vermont relative to other states, including price comparisons, and then in subsection C in developing the plan the Department shall take into account the policies and goals of Section 202c which we just went through in establishing the plans.

Public hearings shall be held and the Department shall consult with members of the public, representatives of telecom utilities, other providers, and other interested state agencies, particularly ACCD and DII, whose views shall be considered in plan preparation.

The Department has the authority to survey companies to determine whether there are any desirable needs for plant improvement or greater access and coordination between providers, and then finally the reason why we're here. Subsection E on page 5, before adopting a plan the Department shalt conduct public hearings on a final draft and shall consider the testimony presented at such hearings in preparing the final plan. At least one hearing shall be held jointly with committees

of the General Assembly designated by the General Assembly for this purpose. The plan shall be adopted by September 1, 2014, and then subsection F just has to do with modifications of the plan on three year -- based on three-year intervals.

Subsection G just specifics that it's true the plan -- that minimum technical service characteristics are set and revised every three years, and I believe right now they are set at 4.1. So the next major revision will be in three years, 2017. So I hope that's a comprehensive overview.

UNKNOWN SPEAKER: I would have -- I forgot I would like to just give everybody here a chance just to introduce themselves. There probably are a number of people here who don't know all of us. So why don't we just go around the table and introduce ourselves to the public.

SENATOR BRAY: Chris Bray in the Senate.

REPRESENTATIVE BOUCHARD: And I'm

Representative Bob Bouchard from the Town of Colchester.

SENATOR MacDONALD: Senator Mark

MacDonald from the unserved County of Orange.

REPRESENTATIVE DICKINSON:

Representative Lynn Dickinson. I represent St. Albans Town.

1	SENATOR MULLIN: Kevin Mullin
2	(Inaudible.)
3	REPRESENTATIVE KITZMILLER: Warren
4	Kitzmiller representing Montpelier.
5	REPRESENTATIVE MARCOTTE: Michael
6	Marcotte, State Representative Coventry (inaudible.)
7	REPRESENTATIVE BOTZOW: Representative
8	Bill Botzow. I represent Pownal, Woodford, and Chair
9	House Commerce and Economic Development.
10	SENATOR ASHE: Tim Ashe, Senator,
11	Chittenden County.
12	REPRESENTATIVE YOUNG: Sam Young,
13	Representative from Glover.
14	REPRESENTATIVE CARR: Steve Carr,
15	Representative from Brandon.
16	MS. BOURGEOIS: I'm Kiersten Bourgeois
17	from the Agency of Commerce.
18	MR. PURVIS: I'm Clay Purvis with the
19	Department of Public Service.
20	COMMISSIONER RECCHIA: Chris Recchia,
21	Commissioner of Public Service.
22	MR. PORTER: Jim Porter, Department of
23	Public Service.
24	MR. CHASE: Corey Chase, Department of
25	Public Service.

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UNKNOWN SPEAKER: Does anybody have any questions for Maria in terms of anything from the legal point of view? I think we're okay, but I just want to say our actions going forward are to listen today. There will be opportunity for community members to comment so that those comments are also gathered and are part of the feedback we'll use unless the Department, when they come up, what their intentions are going forward in terms of next steps with the plan. Thank you. So, Chris, I think you probably want to go first.

MR. RECCHIA: Yes. Thank you very much,
Mr. Chairman. Thanks, Chairman Botzow. Thanks Senator
Ashe and to both committees. We really appreciate the
support and effort here. I think it cannot be overstated
how important we believe telecommunication infrastructure
is to the state. Being a rural state the ability to have
our businesses and homes participate fully in
communicating through internet and broadband as well as
improving wireless service and giving consumers the types
of services they are looking for is really critically
important.

The plan that is before you is a first step in a long time toward that direction. We haven't done a full plan in a while. The new law gives us an opportunity to reboot that and we appreciate that

opportunity and we're doing that.

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What you have here is the start -- the ten-year look back of where we've come and where we think things are going. One of the most important pieces of that is the acknowledgment that things change rapidly in this process. I think we're proud of what we were able to achieve before the end of 2013, but that is just a step and we have a long way to go to get to the goals of the plan and the goals that you have outlined in statute.

So, you know, even though we have been somewhat successful we still have to -- we have to continue on trying to get everybody up to 4.1 which we think we can do in the near future. Depending on how -- there are a couple of very large moving pieces here that are unknown. The Federal Communications Commission, FCC, is working on how to allocate funds and where their priorities are and that will inform how we proceed.

We also have projects that are underway of new technology that if successful give us some more tools in the toolbox to meet the ultimate goal of a hundred symmetrical that Maria had outlined. We are trying very hard to do that. This plan by necessity because of those two big moving pieces I think is -- does not have all the detail about a path forward, and I just want to admit that right upfront. We don't know how to

pay for or how to structure getting to the hundred symmetrical by 2024 yet.

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That said, I think that, as Maria pointed out, this plan needs to be updated every three years. We think that the decisions from the FCC and the evaluation of the VTel WOW project will occur in the next 18 months to two years. So we think we'll be well positioned to update the plan and have a better sense of where things are going at that point. So I would like to -- and to have a better sense of where things are going at that point.

So I would like to at this point, you know, introduce Jim Porter to go through kind of what we have seen -- actually I want to say one more thing before we do that. Although I think the opportunities are great, I want to say the challenges are also great, particularly for land line services and the ability to provide to the most rural of our residents these type of services as well as ongoing telecom -- telephone services is a big challenge.

The -- as you can see in the plan and our discussion of the history things have changed dramatically in terms of people's reliance on land lines. We continue to see that decline. There is an economic impact to that that we all need to address and acknowledge and figure out

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how to move forward and keep those residents that rely on only those services, be able to ensure that they can economically continue those services into the future.

So that I would say is one of the biggest challenges we have, and the next biggest is probably how to pay for the ability to get to the goal that we have of a hundred megabytes per second up and down. So now with that I will introduce Jim who is going to walk you through kind of the pieces of the plan, more detail in the plan, and also our process for how we have conducted the hearings thus far and where we hope to get to. We have a couple of additional hearings scheduled.

The other thing I would just like to acknowledge is we are receiving public comment. I would like to keep the public comment period open through the end of September and finalize the plan at that point.

Obviously that would mean we're not making the September 1 date for -- that is in the statute, but we're close. So our apologies for being a little behind on that, but we're trying to squeeze everything in and make it the best plan it can be. So with that I'll transfer it over to Jim who is our Senior Policy and Telecommunications Director.

MR. PORTER: Thank you very much and thank you for having us here today.

UNKNOWN SPEAKER: Senator Bray.

SENATOR BRAY: Commissioner Recchia, so

if the public comments are open until September, you have

to evaluate the criteria, do you know when you will

publish a revised plan? What the schedule will be?

MR. RECCHIA: I think we can finish it up

within a month after that at the outside. So, you know,

we are receiving comments now. We're starting to evaluate and incorporate them as we go, but I do want to give people a thorough opportunity to be able to provide comments, and I think at the end of that process we'll be in good shape to evaluate any remaining comments that have come in and get a revised plan back out.

 $\label{eq:SENATOR BRAY: So approximately} % \end{substitute} % \end{$

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MR. RECCHIA: I would say if you are amenable to that, that would be my preference, yes.

MR. PORTER: Thank you very much and to follow up on what Chris just said, thus far we have had public hearings in Barre, Burlington. We have one in Rutland tonight. We've been to Brattleboro. We'll be in St. Johnsbury next week, and then last night we had a request to have one in Orange County and actually during the day to accommodate a group of dairy farmers. We are going to do that and that's part of the reason that we would like to extend the comment period through the end of

September. We may go to other hearings and have someone say would you please come have a hearing in wherever and we would like to accommodate that if we can.

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Very briefly in talking about the plan I have to say that a lot of people at the Department, two of them are sitting at the table, Corey and Clay, have put an enormous amount of work into this. As the Legislature knows we've been commissioning studies for about the last three or four years that are really leading to enough information where we could put this plan together I think in a way that it needed to be and I'll just hit the highlights. You all please stop me, ask questions, and if you want me to go to a different topic —

UNKNOWN SPEAKER: Quick question to start so people understand. What has the attendance been at the hearings to date in terms of just general numbers?

MR. PORTER: It's been low. We have had three people at some hearings. Last night in Barre I think we had maybe 15 people.

UNKNOWN SPEAKER: (Inaudible) second question. The survey is definitely part of what you have heard. Can you tell us how many people -- do you know how many people the survey covered? I didn't see it in the quick look at it.

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MR. PORTER: Do you know, Clay?

1 MR. PURVIS: I guess we should say first 2 included in the plan for 2012 what we've -- I'm sorry. 3 had commissioned a new survey for 2014. The new survey I believe --4 5 UNKNOWN SPEAKER: 500. MR. PURVIS: 500. 6 7 UNKNOWN SPEAKER: That's all I wanted to know, 500, but it's all residential. It doesn't include 8 9 business? MR. PURVIS: We did both business and 10 11 residential. There are two separate surveys. 12 UNKNOWN SPEAKER: Just so everybody 1.3 understands what -- the comment being made. 14 MR. PORTER: And I should also say we've 15 got hard copies here today of the comments draft plan and 16 the business and residential new survey. It's also on our 17 web site. It's on the Legislative Council web site. 18 it's -- the plans, the surveys are there, but the --19 electronically. We have them in hard copy today. And so very briefly I'll just kind of hit kind 20 21 of the four major areas, and this is a telecommunications plan and I'm going to begin with the -- actually the one 22 23 thing that's actually a telecommunications service, and as 24 you have heard before with regulation telecommunications

service is actually what we have the strongest ability to

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regulate, and, as we know, and I'm generally in the sense that's talking about the incumbent local exchange There's FairPoint who is the largest and then carriers. there are the independent companies; Waitsfield, Shoreham, TDS Northfield, Topsham, Franklin, and we have generally referred to those as the independent phone companies, but those are the ones who have an obligation to provide telephone service to everyone in their service area, and generally speaking, because we'll talk about this again, for 30 years there's been something called the Universal Service Fund, and we all pay it on our phone bills all across America and what that has heretofore done therefore is to provide the more rural areas parity with the more populated areas. The independent phone companies that has been helpful to them. Most of our independent phone companies have a hundred percent broadband build out at very good speeds and we'll see that continue.

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As you have heard me say, in 1996 we had the Telecom Act which was sort of the advent of competition in the telecommunications market, and certainly in Vermont and Northern New England we have seen both the very good and the downside to competition. FairPoint is the largest provider in the State as in Northern New England and they have been decimated by competition largely by cable providers who provide telephone service and by wireless

providers. So what we're seeing is these companies that
have an obligation to serve the very rural, high cost
areas, but they have lost their market share where it was

profitable and they are struggling.

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I think you saw a survey that we did. The phone companies generally I think in 2011 had lost -- were losing 39 million dollars a year and that continues. losses, you know, people who just no longer have a wired telephone service that's declining. It continues to decline in Vermont I think at a rate of about seven percent a year. So it's a very challenging business case, and as a regulator or as the State it's very important to realize that before we talk about broadband and all of the really neat things, if you will, that have come about largely because of competition we still have a large number of people in Vermont who can only receive telephone service from one of these providers, and that is also the one area where we're able to regulate rates and we regulate a very basic telephone package. We have a maximum that they can charge for that, and we have some companies as many as 20 percent of their customers have just that basic package.

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always has to be a factor I think in looking at a telecommunications plan is cost. Vermonters are very cost

So as we talk today the other thing that

sensitive and so that's one factor that we consider. So that's going to be an issue going forward. This past year the Legislature actually activated the Vermont Universal Service Fund to make it available to these companies in part for support for offering high cost service, and we'll talk about that a little bit more later.

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On to cellular now -- do I have any questions about just the regular telephone piece?

UNKNOWN SPEAKER: The main thing I want is to let people understand what -- and I think what we really want is to hear from the public, that's why we're here, and then to have time for Legislative comments --

MR. PORTER: Okay.

UNKNOWN SPEAKER: -- to inform you.

MR. PORTER: And so I begin with that just by saying that before we move on too much to the future we have to keep in mind that for some period of time these companies remain very important.

The other thing we can't forget, and I'm going to move into cellular, is that today you really can't make a cellular call without going to one of the phone companies' central offices at the end. So they are still very integral with that, and let's move into cellular and we all know that cellular coverage in the state could be better. It's one of the most daunting

things we deal with. In my experience it's getting better. The best thing that I have seen that's happened is several years ago the Legislature amended the permitting process for cell facilities, and we're in the process of updating how many permitted facilities we have had, but it's around -- it's going to be in excess of 300. So I think -- and every one of those that has been permitted is -- either represents an increase in the level of service that's been provided or an expansion of service. That's not to say -- you know, I would like to have the entire state covered tomorrow, but we are making progress with that, and I think from the cellular companies' perspective the best thing we have done to help them do that is create a permitting process that is fair.

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That said, I get calls. Putney is an area I hear from frequently. You will hear me talk about Putney and Orange County, but you know I literally get one phone call from someone in Putney and they say what are you going to do about cell phone service and hang up the phone, and the next call will be from someone saying you've got to stop this cell tower they are trying to build in town. So it's a balancing and I think the statute's good. There were some -- there were refinements made to it this year where the towns really had more say in the process, but I think that has been a success and I

think it will continue to be, although it's still something that requires work.

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The other piece, and let's talk about this, which is cable and we regulate the cable companies or aspects of cable companies. We're not allowed to regulate their rates, but we regulate the rate at which they have to build out cable. I think you have heard me talk in one of the action items in this plan is it may be that we have a line extension policy that's -- that the Board -- Public Service Board maintains rules for, and what it says is that when there's a certain density rate of houses within a mile then the cable company has to go build out their cable plant to those houses at no cost to the customer, and it may be time -- we actually right now are in the process of renewing the Certificate of Public Good for Charter Cable and for Comcast Cable, and I think one of the things we're seeing out of those is that it may be time to look at the cable line extension policies and see if they can be refined to maybe increase that build out, although, you know, the other thing as I move into broadband and when you talk about cable, the cable companies run one wire, provide cable television service and they provide telephone service and they provide broadband.

As you know I have some regulatory

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authority over the cable service. In 2007 Comcast I believe was the first company to start offering telephone service. They said it was not a telecommunications service under Vermont law. I believe it is and we've been litigating with them since 2007. We've been to the Vermont Supreme Court once. We'll go again and I expect we'll end up in Federal Court. So when you talk about —not to be terribly negative, but when you talk about problems when you have a service that we believe is very clearly one thing I guess we're now going into year eight of litigation. So we always have to balance, you know, that process too as we talk about going forward.

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One thing we've seen with cable subscribers though is that they are declining. They are declining in Vermont and they are declining around the country. Vermont has a good bit of satellite penetration, but many people, and particularly younger people I think, they get their video content over the internet through Netflix or through an Apple box and Hulu, and one of the interesting things that we've seen from that is that in Vermont the Federal Cable Act allows for a franchiseing authority to give -- they are entitled to five percent of the gross revenues of the cable company. In Vermont that's the Public Service Board and they give that money to the public access stations, and as we've been going

through the Charter Cable renewal process we've seen how important public access is to the people that have it, and yet we're seeing as the cable subscriptions decline so are the revenues that are made available to these -- to these groups who provide this service, and more and more people are watching public access via the internet. And so a question we're going to have is are we going to be able to take some of the revenues from the new way that video content is transmitted and be able to give that to the public access people. It is more and more my job we work very closely with the federal delegation because as you have all heard me say many times before really at the state level we get to regulate what the Feds allow us to regulate. This year in Congress they are talking about actually looking at the '96 Telecom Act and seeing whether it needs to be revamped, and we're already working with the federal delegation on this. So it's very much a federal and a state process from my perspective.

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And then I move to broadband, and I think as you also heard me say many times before I think during the ARRA funding, I guess it started in about 2009, Vermont got more federal money per capita than any state in the country. That has allowed us some enormous projects and some projects that have been of great value. One project in particular -- let me go back and say one

other thing.

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Also as the FCC, you know, has started redistributing funds from voice to broadband one of the things that was funded was a mapping initiative. In Vermont we're very lucky because we're able to take every E911 address and use it, and every six months with every provider of broadband we do surveys with them as to what they are providing at every address and what speed they are providing.

The federal money is about to run out for that process. The Commissioner has told me that we can continue doing it with our budget in the future, and I think it's very important because we have -- literally know address by address what's available and what's coming, and when we talk about that as we talk about the goals, the broadband goals that we have, and I think we have an initial goal of 4.1 speed for everybody. About 77 percent of the state can get 4.1 today, but there are two sort of wild cards and the Commissioner went into those. One is the VTel WOW project, Wide Open World, which is a wireless broadband project. If I'm correct, they are supposed to cover I believe 44,000 addresses in Vermont.

As we all know that project is behind, and this summer I think they turned on their first site, but I really think before I can come to my boss or come to

the Legislature and say here's what I think we need to spend money, I think we've got to see whether and how that project is going to be completed and look and see what service it's brought to people, and if it's the service that it's supposed to be, then those are -- those will be addresses that have been covered.

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So when we look at trying to pay for this, these speed increases, which is really where we are now I think trying to keep speeds where they need to be, and if you are an AT&T customer, a Verizon customer, a Comcast customer, those companies I assure you are going to make sure that you have whatever speed you need. It's not going to be cheap, but I think they will keep up with that. So what we're looking at really or I think what the plan is looking at is Orange County and other areas like that which are the first places I think we need to go.

The other -- the FCC, you often hear me talk about this, and it's 2011 which was the FCC transformation order but finally we're seeing it somewhat put in place, and we're on the precipice of having the Connect America phase two become to Vermont and what that will do is allow actually FairPoint because they are a price cap carrier, it will allow them somewhere between 45 and 50 million dollars for broadband build out to areas that don't have it or have sufficient speeds, and the

speed they will have to build out to is 4.1, although it seems to me that the FCC is getting strong indications that it's going to be a 10.1 speed.

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If the FCC does that, then I'm going to be coming back to you and saying I think we just need to bypass 4.1 funding maybe and just go to 10.1 because I think it makes sense to stay in line with the -- with what the Feds are doing with that.

So I think we need to move -- and I think Chris alluded to this too, I think the most important thing we're going to see as far as getting to the hundred megabit symmetrical goal is how -- how much we're actually going to have to kick in and fund to get -- to get everyone up to a minimum of 4.1 or 10.1 speed and quite frankly we just don't know. We -- we're doing everything in our power to see that the VTel project -- UNKNOWN SPEAKER: Jim, if there's a

question why wouldn't (inaudible.)

MR. PORTER: I think that's a good question. Let's take the case of a DSL provider which is the phone company. The FCC is going to offer them money. We know what the addresses are and the one kind of problem with the CAF funding is that they started out and they said we have this much money and so we're working with a fixed budget, and many people say it's not going to be

enough money. So in the essence of a FairPoint they will say you have available to you \$800 per address and you have to build out 4.1 or 10.1. There's a price differential, you know, in what it costs, and so it will be more expensive incrementally for that company to build out to 10.1, and so if the FCC is funding something at 4.1, I actually think it's going to be 10.1, and I think that the first awards from the connectivity fund at a minimum are probably going to need 10.1. I don't think we're going to know until December what the actual FCC rule is, but that actually kind of brings me another way to answer this.

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UNKNOWN SPEAKER: Actually can I just add one in there?

MR. PORTER: Yes. Yes.

UNKNOWN SPEAKER: I just want to make sure we get as concise a policy because of our (inaudible.)

MR. RECCHIA: So, Senator Mullin, I think if the FCC says 4.1 is adequate, we can cover more addresses with the same amount of money, and if they say 10.1 is necessary, we're going to be able to cover fewer of those addresses for the 10.1. So going to 10.1, if not required to do that, will mean the money doesn't get spread as far. It means we don't reach quite as many

addresses. I think that's probably --

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UNKNOWN SPEAKER: (Inaudible.)

MR. RECCHIA: Okay.

MR. PORTER: And sort of in response to that as you know I've been trying for several years to activate a fund that we could use for providers to come in and build out at higher speeds and this year it happened. The connectivity fund got established, which I think is I'm not sure -- and the way I anticipate that is hopefully we're going to have money available and providers, whether they be a local fiber provider or whether they be a wireless company, will be able to come in and make a bid for the really initially underserved areas, and I think to Senator Mullin's point one -- you know you develop many criteria that we'll be looking at to award that money. If someone comes in and can offer a fiber service that's marginally more expensive, I think that's where you send the money, and so I think we've put that in place to build that out.

I think it's going to be interesting sort of to see the first round of what we get, who is interested in taking the money, and at some point talking about this connectivity fund once we know what's going to happen with the first round of the CAF II money, once we know how the VTel project shapes out, then I think we'll

be able to make a better assessment to come back to the Legislature and say okay we've established the connectivity fund and here is what I think we need to do and here's how much money it's going to take, and I think that's it's very important and it's not exactly the most exciting thing to say, but if we had approached this plan and said we are only going to build from this day forward to 100 megabits symmetrical, you are essentially talking fiber to the home, and if you look at the two fiber projects that we have in the state, one is of course Burlington Telecom and then the VTel traditional phone service territory also got a grant for about 75 million dollars and they have provided fiber to the home for roughly 18,000 customers.

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UNKNOWN SPEAKER: I think we're digressing. We asked you basically to make sure people understood what's in the plan. I think all these points are largely in the plan. Is there a key -- if there's another key point, what is the structure of the plan so we understand what's before us today, do that because I think now we're getting into --

MR. PORTER: Okay. I think the key piece of this plan would be to first go to the addresses that do not have 4.1 or 10.1 and get everybody in the state a 4.1 or 10.1 speed, and I think that needs to be

the first priority. Many people have DSL that's insufficient and I think it's extremely important to get at least that minimum level of service out into the rural areas.

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Once we've reached that then I think we ought to look at our funding in areas for the increased speed, and largely I think what -- you know I certainly don't want to turn away federal dollars before we have to come to the Legislature and say I think we need state dollars.

UNKNOWN SPEAKER: Okay. I'm sure there's tons of questions, but that's not why we're here today. I think we're really here to hear from our witnesses I would say for ten minutes max in your comments because I think we want to leave -- also for conversation once we've heard everybody, comments that the legislators may have.

So first up is Charles Larkin. Charles, welcome and when you get here I think you know the drill to introduce yourself and your affiliation for the record.

MR. LARKIN: Thank you. Good morning.

My name is Charles Larkin. Morning, Senator Ashe, and I'm a former telecommunications engineer for the Department of Public Service, a little over 30 years, and I wrote a letter to the Commissioner of the Department by e-mail

suggesting that he withdraw the plan and inform you people what he was doing and why.

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The reasons why I suggest this were that the public review draft plan is missing many statutory components such as an assessment of the current state of telecommunications infrastructure, an assessment conducted in cooperation with the Department of Innovation and Information of the current telecommunications system, and evaluation of alternative proposals for upgrading the system to provide the best available and affordable technology for the use by government, and an assessment of the state of telecommunications networks and services in Vermont relative to other states, including price comparisons for key services and comparisons of the state of technology deployment.

Secondly, the current hearings are being conducted on a public comment draft not on the final draft which was done in the 2004.

Third, the plan encourages the construction of more copper and ADSL development.

(Inaudible) symmetrical bandwidth required to meet the 2024 goal as defined in statute. Such infrastructure will soon be obsolete, if not already so. This is directly contrary with the goal of 30 V.S.A. 202.

Fourth, they required the survey of the

residents and businesses was only made available to the public on August 25th. The draft plan was made public on August the 11th. I wonder whether the survey received by the Department was received in time for them to incorporate its findings into the plan. If not, then this is another absence from the proposed plan.

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Fifth, the plan evades the statutory goal of open access with specious argument. The plan should have analyzed both sides of its position making and presenting actions aimed at this important statutory goal.

Fifth, the plan evades -- I'm sorry. Six, the plan promotes further building and even public funding of insufficient bandwidth. It should have set forth specific actions aimed at the statutory goal of a hundred megabits symmetrical.

Seven, the plan does not have any actions to encourage the use of existing facilities in the employment of broadband infrastructure. Overbuilds of fiber are a waste of the public dollars and pole attachment space in the public right-of-way. The public failed to deliver — the Department failed to deliver a 2007 plan three years after the 2004. It failed to deliver one in 2010 or 2013. Actually it's worse than that. Each year after 2007 there should have been a plan and each year they failed. So it wasn't three failings

but it was ten failings.

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As the 2014 public comment draft is sadly deficient, I suggest with a letter to the Legislature withdrawing the plan would not be really a violation of the statutory deadline to adopt it by September 1 as the so-called plan does not begin to qualify as a plan, and its adoption and issues answered by the Department would be an empty act.

I suggest that your letter,

Commissioner, inform the Legislature and acknowledge the prime missing plans, acknowledge the deficiencies of the 2014 draft, and its attempt to immediately begin work on a real and complete plan with the added benefit of the supposedly forthcoming — supposedly forthcoming, I hope in December, of the action plan for broadband now due in December from the Agency of Administration as it realized the benefit of fervent oversight and input for the convenience of the Legislature in January.

That basically is where I stand. I think the plan simply doesn't do anybody any good. To build 4.1 is a waste of money. To build 10.1 is a waste of money. You want to build toward 100. I could be fairly wrong, but I understood that the biggest bulk of the money in building the fiber network was building the network and that the equipment utilized to drive the

signal down through that system would not be that expensive. I'm not saying it's cheap, but not that expensive a piece of the total operation. We've got to have -- again they could tell us that. The plan should be able to describe that. How much does it cost to build it without driving any light down it and how much does it cost to put light down on it at different levels. wrong, I'm wrong, but I think it's possible that maybe the light is the cheapest piece of this thing, and so they don't put in the hard light right away. They can certainly put down something, and if they put in the Connect America money, 45 to 50 million dollars, for new DSL and copper, obsolete equipment, to be given as corporate welfare to FairPoint who didn't keep up with their job, which is why they went bankrupt the first time and apparently aren't doing that well right now, yet they are going to be given all this money to build plant they'll own. Deficient plant. That money should go into a revolving loan fund, and I would request the Legislature and other parties to work with the FCC and work with their Congressional delegation to try to get this accomplished.

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If the State had that 45 to 50 million dollars and lent it out to those who are qualified to build the fiber plant, such as ECFiber has been doing with their own investors' money, that if they start going into

the black, and hopefully they would, they can return that money to the fund enabling the fund to loan it to other parties to build. More fiber. This would be fiber, not DSL copper, and it would be more than 45, 50 million because it would be revolving and get to more and more parties who could build it. This is how I think we should be going.

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Cost is a problem. If we stop these overbuilds, four, five, different fiber plants on the same set of poles going down Farrell Street in Burlington, we don't need all of that fiber. 72 fiber in a sheath. We got more dark fiber, unused fiber than you can shake a stick at. It's time we had some kind of prevention of overbuilding of fiber today so that those who are thinking about building, if they had the opportunity to rent space on this fiber, could put their money into building out to where it's underbuilt right now. I think I have said enough.

UNKNOWN SPEAKER: Thank you very much for your comments. Appreciate it.

UNKNOWN SPEAKER: Inaudible.

UNKNOWN SPEAKER: If anybody is leaving, you know, just so when we get to the end I want to leave time for legislators and they may want to ask a question. Even though somebody spoke, if we just have a lot of

people here, we move that along. Okay. John Roy. John, welcome.

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MR. ROY: My name is John Roy. I live in Vershire in the heart of Orange County. Full disclosure I am the Town of Vershire's representative to the ECFiber Governing Board. I am also the Treasurer of ECFiber. Also for the hundreds and hundreds of volunteer hours that I have put in, I have access in my home to 750/750 internet. Not 100/100. Not 10.1. And so I don't have any personal interest in this moving forward. Also I am speaking as an individual rather than on behalf of ECFiber. I have colleagues here who will regale you with all sorts of ECFiber details, but I have two -- two comments. First my background.

I graduated in engineering in 1961. I wrote my first computer program in 1962, and in the intervening 50 plus years I've been involved in information technology one way or another, mostly as a manager. So I've seen the IT industry.

A couple -- a few interesting facts. I am sure this is known to many of you. The August 24th issue this month of PC Magazine lists 24 cities that have available gigabit service. Web site last year talked about places you could move to get gigabyte service. The recent Wall Street Journal in July noted that Comcast is

running fiber to the home in some areas to be able to compete with Google and AT&T, and they are also working on a project called Giga Sphere whatever that means. They didn't know, but I think the point is that right now gigabit internet is being talked about, it's being developed, it's being used, and the plan developed by the Department right at the beginning says this technology is moving very quickly.

The other thing from my background is that software developers or app developers as they are called will always use the full capacity of the existing hardware, and so as gigabit technology becomes more and more available that's the kind of application that will be out there on the internet and that's what a lot of people will need to use.

So just based on those facts I think a couple conclusions are perhaps evident. One is that if we try to get 100/100 in all of Vermont by ten years from now we'll be way behind the rest of the country, and, secondly, which comes from that spending money now on technology that's incapable of delivering gigabit plus, I think is a waste of money.

So that's -- those are my observations on that for the consideration of the Department and the Legislators, and then the other thing I just wanted to

talk about because it's not mentioned much in the plan and where it is it's not necessarily favorable, and that is municipal telecom of which there are a couple around, and the advantages that it offers, and the first is cheaper cost of capital because ECFiber as a municipality is able to issue notes which are exempt from federal and state income tax which allows us to offer a lower rate mitigated by the risk involved. So it's still a relatively handsome rate but cheaper than could be achieved elsewhere, and, secondly, the way the legislation is no general obligation money can go into starting up a municipal telecom which means that there is no equity, and that's bad and hard when you're getting started, but once you're rolling it means that as opposed to a commercial organization which is looking for a return on equity to its shareholders of 10 percent or 15 or 20, municipals don't have that requirement. So this makes the cost of capital a lot less, and then, secondly, with lean organizations and lean control, local control -- I'm sorry. I don't know what lean control is. Lean organizations and local control, sort of not lean and mean but lean and keen, it's possible to accomplish buildouts with a lot less money -- with a lot less money.

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The plan mentioned \$65,000 a mile for fiber. ECFiber has a lot of plant in place and it's less.

It's about \$30,000 a mile. So that's just a few comments for consideration on municipal telecom and those are my two points.

UNKNOWN SPEAKER: Thank you very much.

All right. Okay. Steve -- No. I have John Block next.

John, welcome.

MR. BLOCK: I'm John Block and I live at 7 Liberty Street, Montpelier, Vermont. I have listened with great interest so far in the proceedings. First thing is I want to say to the Chairman -- or rather Jim that what you asked for is it in the plan and Jim said yes. It is not in the plan. I'm a slow reader, but I read through the whole thing. It's more like a bedtime reading material for consumers. Everything is fine. Everything is not fine.

As some of you know the speed of change in the telecom industry ten years from now we will be the laughing stock of the United States regarding telecommunications and its deployment. Right now in Calais, Vermont, ten miles from here, people are buying DSL that's so damn slow they go and do their laundry and come back if they are downloading a film or a complicated document. DSL is not the answer. It was great as a stop gap. We're way down the road.

I know that you were very concerned

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about service so that full flowering of economic development can take place, and you also I believe are very committed to the rural residents of this state. We have wicked topography problems. The only system that works is fiber to the home so you can get hundred up, hundred down, and just turn the laser up, two hundred up, two hundred down and so forth. There is not the optimum level, but we're so far behind even the first step that I ask you to seriously hold the Department accountable for producing a reasonable plan.

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I will tell you right now if I were managing the office and somebody brought quote unquote the plan to me, I would consider where the layoffs should It is laughable and I don't mean in a haha way. The plan says nothing about how we might increase revenue for the 24 access stations that you have in this state. Other people are envious of the fact that we have the state blanketed with access stations. With the demise of newspapers the way they get the information that happens here is to turn to their access station, Channel 17 here, but it doesn't matter. You can assign anything and people have come up to me on the street or in social gatherings they said I didn't understand what was going on in the State House for years. We cover committees. We cover hearings like this. So people are getting their civic

education and information from the access stations. CAX isn't running it because it's not profitable, but we're not talking about profit frankly.

This state has a long and honored history of citizens taking care of problems starting with the REA and roads, passable roads. So citizens have a wonderful history here and it's known, I don't know how many of you all know it, but it's known out there that an -- once upon a time right after World War II they disbursed REA, Rural Electrification Administration, lines to the deepest darkest corners.

Now if we can string steel wire everywhere and it goes on poles and do it in a relatively short time, roughly from 1945 to 1955, with the exception of Victory Bog which was 1970 or something like that, I see no reason for this plan to have a less than favorable comment on municipalities getting in the game. Full disclosure. I'm Chairman of the Board for the local access station called ORCA, but it's only one. We are full PEG. We have educational, public, and general, and believe me, if we could beat Comcast some sense into them, they would give us a bigger pipe and more channels. We're bursting at the seams like I got a gallon bucket, but I've got better demand for five gallons but I can only carry one gallon.

So that aside I also serve on the Governing Board of ECFiber. I'm the City of Montpelier's rep. There are people screaming for fiber in this town. The business community has come to us because I'm the most notable guy on the block. When they call up and try to talk to our newest game in the telephone company they are laughed at. Even though 75 feet from my office in City Center the hub for FairPoint's fiber sits there not used by the City of Montpelier.

This is -- people are saying when in the hell are people in the state government going to come to our rescue. Yet as you ask Comcast and they look at you like you're from mars. They have a 12.2 net net return. I know a lot of businesses that would like to have 12.2 percent of their gross as a net net. We're not talking about a poor company. We're talking about an our guy (phonetic) in this country and we're just yesterday's trash. I don't take it seriously.

Now I would urge you to ask the

Department to withdraw this document and then put a lot of
commentary, and the benefit of that commentary be
incorporated in what a number of people here have said and
let's get real. I'm not an aspriational person. People
are yelling for fiber in this town are not aspirational
people. They are real facts on the ground and I'm sad

these small businesses are breaking their backs. We need to be there for them and we need the Department that really responds to the citizens' needs not the telecom companies. They can go pound sand.

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Two other points. These have been addressed by other people. We have a boat load of dark fiber that's not lit. We need to take command of that because they are like in the public right-of-way. The public owns those and we need to put them to use.

Two, the electrical utilities got a hunk of cash from the Feds so they could electronically read meters, but it doesn't take a bundle of 25 fibers to read a stupid electric meter or to send information to it. We need to say to these utilities you need to demonstrate by your acts not your utterances to make that fiber usable and just cut out the game, but we don't have it out for me.

This state is not poor. It's very rich in its representatives and senators and the population in general. Certainly we rank higher than a biotech firm in Newport where the State paid for a fiber trunk from Hardwick to Newport. You should get more information on that fact. That's existing. And yet Hardwick, which is one of the most exciting towns in the state for emergent technologies and aspirations and building, has no fiber.

They are hanging by their thumbs. I don't live in Hardwick. I'm not from the Selectboard in Hardwick. I'm telling you a fact. It is -- and I think Orleans County is very likely served, but I'll let the representative from there comment.

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The poorest array of people live in inconvenient places. That's why they are called rural. They are not all clustered in an apartment building. So we need to adjust our thinking at the board level to how that work benefits those citizens that are out there. They are great citizens. Thank you very much and any questions now or later I would be happy to answer.

UNKNOWN SPEAKER: I think we're going to make sure everybody gets a chance --

(CD 1 ends and CD 2 begins.)

UNKNOWN SPEAKER: -- withdrawn. The proposed draft plan should be withdrawn and reworked completely. Alternatively I believe the Legislature has authority under 202d to, by joint resolution, require that the pace be accelerated. So theoretically this could be adopted because you really don't have much to say about it, and then in January a joint resolution could potentially direct the process begin again to fix its deficiencies.

I think the deficiencies are too great

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to -- I think it would be an insult to the public and the Legislature's intelligence for the Department to adopt the plan as it is. Many of the deficiencies of the draft were laid out in Mr. Larkin's letter. I would point to a few examples. In a description of state telecom infrastructure the 10 gigabit network that was recently turned up by the DII is not described in there. It may or may not be an architecture for redundancy and self-healing architecture. It's been funded with Universal Service Funds which were not reviewed by an independent expert review and life cycle cost benefit study as required under statute. That's one example.

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The state libraries have another network, 45 libraries all connected by fiber, and I applaud that effort by the way. That's the best thing yet to come from the federal grant is SoverNet's connected 43 libraries at one gigabit speeds. 10 gigabit speeds. I believe one gigabit of that is available to -- for the internet, but that allows full symmetric video conferencing without the defects that of lag and delay. I believe other expert engineers and fiber builders will refer to jitter and latency. I'm not qualified to speak about jitter and latency.

I would offer an example of the overbuilds that were referred to by a couple of your

witnesses. I'll show you this and then let you pass it around. I didn't make copies for the whole committee, but that's one example on I believe the street that runs between UVM and Trinity College campus, but Comcast has about seven sheaths of fiber there, each probably 72 or more, and then there's three or four more fiber vendors on the same pole all in one — that one corridor.

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Now open access is stated and has been for some years in the goals of the telecom plan. They are dismissed by the Department's draft. We don't know what it is. We don't know how to do it. It's deeper than that. I think they don't want to do it. There is authority. I've consulted an attorney and there is authority under the pole attachment public right-of-way for the state to exert jurisdiction and require the sharing of Comcast's dark fiber. There's no argument to be made that the unlit fiber that Comcast has in place is being used for information services and therefore unregulated. It is plain old infrastructure in the public right-of-way and we need to know how much of it is where, how many strands are lit, et cetera.

The Department claimed that it had -- it didn't have the authority to share the maps and it didn't know where the fiber was. You did pass in the recent Act 190 I believe it was proprietary protections for

voluntarily supplied data from the telcos, from the cable companies, under the section that requires the broadband plan, action plan to be developed by this December.

Should hold it over until this December, but 202d includes provisions — already includes provisions for the Department to require submission of data from the carriers under supervision of the Public Service Board. So the Public Service Board is the proper venue to decide what needs to be public to inform this process and what needs to be legitimately deemed as proprietary. Okay.

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So you've got two conflicting statutes.

One says that the -- 22/22 says that the companies may voluntarily supply their infrastructure information. 202d says the Department may require submission of that information and the Public Service Board will determine what needs to be secret. The state microwave network is not detailed; its capabilities, its options. The Agency of Transportation's fiber running down the interstate from Sharon to Hartland is not detailed in the plan. On and on and on.

I mean I've been doing this role of accountability of government information technology in telecommunications for over 20 years, and early on in the process I put together the maps of these networks and the Legislature viewed those and realized that we were

uninformed, and Act 188 of 1992 was very similar circumstances. If you're not familiar with that history, I do have a few copies of it and she can make some more. I mean your staff would. In that context the dominant telecommunications company at the time was NYNEX. They proposed an incentive regulation plan. Incentive regulation plans are required to be measured against the Ten-Year Telecommunications Plan. The Ten-Year Telecommunications Plan was not done.

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Similar circumstances we're in today.

The Legislature passed a bill Act 188 of '92 and directed that the Public Service Board would suspend proceedings on that incentive regulation plan while the Legislature convened a joint committee to review the telecom plan and determine if it was truly up to the standards of statute and whether it met the needs of Vermonters. That's exactly what needs to happen today. I mean the precedent is there. The language is already drafted for the most part. Here's a few copies of it. I believe I've already given it to some of you, but --

UNKNOWN SPEAKER: You know you can always submit these things electronically.

UNKNOWN SPEAKER: (Inaudible.)

UNKNOWN SPEAKER: They will be on the web site. They will be part of the record. Anybody who

has anything they are bringing on paper they will be in there just as we've been doing all winter.

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UNKNOWN SPEAKER: I think I would like to stay general right now in the sense that I believe that the Department of Public Service, whose charge is to be the public advocate, has lost its compass and it's been years in the making, ten years without a plan, and this plan only came forth because I demanded copies from the Department under Freedom of Information request of the plans and the drafts, and they basically said we don't have any and that got the ball rolling.

years ago and the stakes are even higher now because of the enormous amounts of money being plowed into Vermont. The VTel grant did not include open access provisions. The proprietary language to protect the infrastructure information so that we can't plan for different scenarios or give you informed input on where infrastructure should be built, the Department should have been arguing against those being put into law. They already have the law that allows them to get what they need, but we can't plan a network or network alternatives if we can't know what was paid for. A quarter of a billion dollars of public money has been invested in Vermont's networks and we're -- all secret. I mean this is absurd.

I mentioned that incentive regulation because that was the context in which the joint committee was convened. The following year the Legislature passed a bill to create the Joint Information Technology Oversight Committee, and again that is warranted or possibly because you have DII running haywire with internal service funds and billing all the agencies. They are actually competing with the private sector by collecting money for a full time equivalent network engineer to manage the libraries network. I mean there are plenty of companies in Vermont, and we need to grow more, that manage these networks. We don't need to have government competing with the private sector doing those functions. Most of those libraries are not state libraries.

Under incentive regulation there is a provision where the State has to hire a public advocate, an independent public advocate. In that era it was Dick Saudek, former Commissioner of the Public Service

Department, former Chair of the Public Service Board. He was hired to represent the public interest because the Department was compromised. It had already signed on to the contract. I have three handouts that I've given to Agatha. They all have them. Okay. The third one -- the first one is Mike --

UNKNOWN SPEAKER: What I want you to do

is focus -- you're at your ten minutes. I would like you to focus on the two or three, whatever, points very crisply, what you want to get on the record, and you -- we want to make sure you get heard.

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Of how much time I was running. The e-mail to Chris
Recchia suggesting a process whereby the public engagement into this process could be reinvigorated was not responded to. Was ignored outright. The ten years without an opportunity to speak to the plan has resulted in two or three people coming to each of these hearings. I've been to each hearing so far and literally only two or three people speak.

There's a detailed process of what should have -- could have, should have happened. It's fairly elaborated on in the e-mail to Charlie which follows, and the third one is from Seven Days, this week's issue of Seven Days, and it appears that the Department and the Governor have already signed off on the Comcast deal which will incorporate -- subsume Charter Communications into Comcast in Vermont. No investigation. So if that is a parallel to incentive regulation, then it's time to hire an independent public advocate to pick up the slack for the Department until they get their bearings again.

These are things that I know you can't do today. It's between bienniums. These are arguments for why the joint committee should be reconvened and these issues should be explored in more detail. Thank you very much.

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UNKNOWN SPEAKER: Thank you very much. Irv Tome (phonetic). Irv, welcome.

MR. TOME (phonetic): Thank you. For the record I'm Irv Tome (phonetic) from Norwich, Vermont. I'm a retired software developer and other things. I represent the Town of Norwich on the Governing Board of ECFiber and I have been Chairman of that Board since November of 2012.

I apologize that I have not prepared written testimony. I will do so. I am grateful that the comment period has been extended and I will prepare some written testimony. My energies have been consumed this summer by a misadventure running a primary in which I was unsuccessful. That means I have more time going forward to put into this issue which is very close to my heart.

I have two set -- two types of comment.

I wanted to make a couple of factual corrections first.

There's a paragraph in the plan that summarizes the state of ECFiber, which is one of the two municipally owned fiber optic networks in the state at present, and this

paragraph says that ECFiber has extensive networks in rural villages such as Barnet and Bethel. Even at the time this was prepared that wasn't true. That was -understated our presence considerably. We are now in about 10 towns. As of last Friday we have 810 customers We have raised over 5 million dollars, almost all of that by borrowing money in unsecured notes from individuals. We have more than 380 people who we call investors, but they are not equity investors, they are lenders, and I want to put these facts out there because we are -- we reached positivity earlier this year, and by the end of this year we will be completely cash flow positive meeting all of our obligations, and we've done that in about three years and that's a benchmark to keep in mind when it's asserted that fiber optic is hopelessly complex and expensive. The figure of \$65,000 per mile, our average cost to build a mile and connect six customers is \$30,000. If we were able to borrow money in larger increments and build plant more comprehensively, we could probably bring that down some more.

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We think that the VTA in building the OCFC, which doesn't include connections to customers but provides for them, we think that cost was probably in the neighborhood of \$20,000 per month and the cost to connect each customer is about \$1,000. I'll come back to that,

VTA's project, because I think it's an excellent example of what the state should be doing more of.

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With all due respect, Mr. Commissioner,

I think this plan greatly understates the importance of
broadband for the -- for Vermont's economic sustainability
going forward. Only in our largest metropolitan areas
where there is an overbuild of fiber and of broadband
capacity are people really able to compete in the global
economy today, and in the rural areas where young people
can afford to settle largely high speed connectivity is
unavailable, and if we don't change that, then rural life
in Vermont is going to become a more and more impossible
proposition except for those who are already wealthy and
that's not my concept of rural Vermont. It's as far from
Vermont's egalitarian traditions as I can imagine and I
think it would be a disaster for the state.

Okay. State and FCC standards. Whether you talk about 4.1 or 10.1 are -- it's been -- the problem with them is that they are asymmetrical. That one -- when you talk about 4 megabits or 10 megabits down or 50 megabits down and only 1 up, upload speed is essential to serious work. The focus on a high download speed is a focus on entertainment delivery, and entertainment delivery is economically significant to content providers and large corporations who have built their business on

delivering entertainment. It is not economically significant to the economy of this state. It does not permit our citizens to contribute to their own personal family and community and state economy. We've got to take the serious symmetry requirement which is built into the 100/100 goal that's set by Act 190 for ten years from now, but as my colleague John Roy has pointed out, ten years from now 100/100 will be laughable. What we've got to focus on symmetry from the beginning.

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DSL now is a short term fix. With all due respect to the hard working people at FairPoint DSL cannot -- is not designed to deliver symmetry and it is not capable of delivering speeds, the speeds that are becoming necessary for serious economic activity. Nor do we -- does the plan even recognize the fact that the bandwidth the DSL delivers depends on the distance from the remote box in your neighborhood. You can get excellent speed now from a DSL subscription if you happen to live close to one of those remote boxes. If you're a couple miles away, you don't get such good speeds. Three miles away it just about doesn't work at all. That's why investment in DSL is money wasted if we look long term.

I want to focus instead on the fact that the rural -- I want to go back to the Rural Electrification Administration as an example which took a

goal of delivering service to everybody no matter how far out in the deep backwoods they were. The plan does discuss the difficulty, the economic difficulties, the cross subsidy issue wherein our existing local exchange carriers, whether price capped or competitive, they count on the customer base in the high density areas where the cost per customer is low to subsidize the higher average cost of reaching people farther out. So they aim for an overall average cost.

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Now on municipally owned telecom has the same economic tradeoff to make, but the balance points are more because our cost of capital is lower, and as my colleague Treasurer John Roy has pointed out, instead of having to satisfy investors with 10 or 12 or maybe even 18 percent return on their equity we need -- we have a much lower operating point. As a start-up we're paying on the five million dollars we've borrowed the average over all of our debt is probably about six and a half percent, but it's tax free. So we're able to get investment despite moderate level of risk. As we grow risk goes down.

I'm not here to advocate for ECFiber.

I'm here to advocate for us as a model for what the state
can do statewide, and if we're able to be cash flow
positive after three years of start up, that could be done
elsewhere in the state. Municipalities could band

together, borrow money from a revolving fund, contract with a local incumbent carrier, an independent local exchange carrier, to build out fiber and reach every home. That's a more creative use of money than simply awarding grants.

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I would like to point to the recent project completed by the Vermont Telecom Authority, the Orange County Fiber Connector, which was designed from the beginning as an open access fiber trunk. There are fibers which are being leased by cell carriers, there are fibers being leased by -- for long term trans -- long distance transport from one municipal center to another, and there are fibers being leased by ECFiber to deliver customer service fiber optic to the home to the end users of that cable passes. This is not wasteful overbuild. building cable where there was none. This is small amount where we build -- we have a small amount of overbuild sometimes. We put our hub in the middle of a town we have to build through the inskirts to get to the outskirts that we're trying to reach, but we're not there to compete with either the phone companies or the video cable companies, and I find astonishing the statement in this plan that alerts everybody to the dangers of municipal -municipally owned telecom.

Vermont policy makers, this is on page

seven of the Executive Summary, Vermont policy makers should carefully consider the potential negative outcomes of state and municipalities directly competing with private firms in the provision of telecom services especially in areas where consumers are adequately served. Vermont should refrain from policies including financial incentives that have a net effect of diminishing competitive choice in the marketplace. Yes Vermont should refrain from those policies. Vermont should refrain from giving tens of millions of dollars to commercial entities that don't want to provide service deep where they can't afford to do it and are determined to suppress alleged competition from the municipal groups that are trying to get out there. This makes no sense. This doesn't pass the laugh test. Is little ECFiber a threat to poor Comcast? I don't think so and I don't think any other municipal organization would be either.

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I mean no disrespect to the hard working people who prepared this plan, but I think that there's been -- I think there's room for more imagination. I don't think people have thought beyond the box we see right now and I think that's what we need to do. We don't need to be describing 100/100 as aspriational. We need to be concentrating all the creative intelligence of everybody in this room and many more on how we can get

there, and there are ways we can do it if we don't tie our hands behind our backs, and if we don't feel that we have to continually take care of those poor struggling cable companies.

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Okay. I think that's most of what I wanted to say. I want to bring one more practical concern and this needs, seems to me, legislative involvement and that has to do with make-ready and this is a technical point. I'll make it quickly. Utility poles is a public There is a defined Public Service Board tariff whereby the owner of the poles must rent space on the pole to another telecom as we come along, but there are no enforcement mechanisms on the time frame that is required to make that space ready for the newcomer. The PSB says it will take two months from the time we file our application fee until we get a quote on the cost, and it says it will take 120 days from the time you pay to the time you will be ready to go.

We have had make-ready that has been delayed as much as ten months beyond the stated four months from payment, and there's no enforcement mechanism except to file a docket with the PSB and that automatically implies another six-month delay, and for any entity that's borrowing money and having to pay interest on it waiting that long to begin to get a return on that

borrowed money is a very serious problem, and my friend

Jim Porter has been promising me for two years now that
he's going to convene a conference again about make-ready,
but it hasn't happened and we really need to do it; and,
in addition, a new issue that's come up is over the past
18 months the amount of money that is being requested per
pole for make-ready from our largest electric utility has
quadrupled and there doesn't seem to be any cap on that.
Okay. Thank you very much for hearing me.

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UNKNOWN SPEAKER: Thank you very much.

Pam McKenzie.

MS. McKenzie: Hi. My name is Pam

McKenzie and I Chair the Vermont Telecommunications

Authority, and I would like to thank Chairman Botzow and

Chairman Ashe and members of the House and Senate

Committees for joining us today and giving us the

opportunity to speak, as well as the hard working folks at

the Public Service Department.

I've served as the Chair of the Vermont Telecommunications Authority since 2011. My fellow volunteer board members appreciate the hard work and the engagement of the Legislature. You after all did create the baby that we started out as. We also appreciate the hard work of the Public Service Department. You have for all intents and purposes a very thankless job.

Over the past six months the Board and our staff have spent a significant amount of time meeting with the Legislature to discuss the future of the VTA. We are in the process of working together with the Administration and the Department to move that along, and we have the good services of two members of the Legislature, Senator Gray and Representative Young, who are on our board as well. Kiersten Bourgeois is also on our board, and our counsel, Holly Groschner, is here today.

I -- one of my other grand adventures is serving as the Chair of the South Burlington City Council, and I have the wonderful opportunity on the first and third Mondays of every month to have people come in and tell me how ugly my baby is, and I don't plan on doing that today. Okay.

UNKNOWN SPEAKER: Thank you.

MS. McKENZIE: You're welcome. What I have done is to take the experiences that we have had as a board and take some of the comments that we have shared with the Administration about the transition and about our experiences with the Telecommunications Authority and pulled those out and tried to go in a visionary and aspriational manner because actually my good friend Irv set me up rather well for that frankly.

One of the very first things that we learned over the past three years, or that I have learned, is ubiquitous broadband and cellular service are really crucial for economic growth in the State of Vermont. We will not grow without those two.

Broadband and cellular services are equally important. You can't do one without the other. We should be focused on collaboration and not regulation. The vision of providing ubiquitous service requires collaborative and reliable service provider relationships. There's not a service provider in the state, other than two that I will not name, that we have not been able to partner with in open access fiber.

Entrepreneurial flexibility is required to support our success. So the opportunity to embrace this success can require a major mind shift. We all need to replace risk adverse statements with risk positive statements. So I know I'm getting out there, but hang with me for a second. A risk adverse statement is the timing isn't right. A risk positive statement is the timing will never be perfect.

A risk adverse statement is the ideas aren't good enough. The risk positive statement is the ideas are good enough to get started. Risk adverse, we don't know what we're doing. Risk positive, we won't know

what we're doing until we do it. Risk adverse, we don't want to make mistakes. Risk positive, we have to make mistakes in order to grow. And finally, risk adverse, we will regret it if we fail, and, risk positive, we won't regret it if we don't try. Thank you very much.

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UNKNOWN SPEAKER: Leslie Nulty.

MS. NULTY: Thank you, Committee. My name is Leslie Nulty. I'm a resident of Jericho, Vermont. I have wonderful DSL of 768 up and 3 down and I've been informed I can't get anything better. I've also been project coordinator for ECFiber for six years from inception when I was part of the committee that organized ECFiber until January of this year when I graduated from ECFiber because it is now self-sustaining and doesn't need the kind of expertise and skills that I was able to bring during the development stage, and I'm very, very proud of its accomplishments, and I second and urge you to pay careful attention to its history and accomplishments as a potential model for Vermont going forward.

I have submitted -- Senator Lyons on my behalf had submitted an earlier draft of comments to this Committee. The same draft has been submitted to the Department of Public Service via their link, but after conversation I had with Jim Porter after the Burlington hearing where I also testified I decided to add a little

section particularly for this committee flagging a few areas that in my judgment could warrant legislative action, and what I would like to do is make a brief summary of the way I view the plan document and then point to my concluding remarks where I'm trying to point both the Department and the Legislature to better ways to approach this challenge.

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I hope you all leave this meeting today with the understanding that Vermont's economic and social future depend critically on adequate broadband connectivity. It is especially important for a rural place such as Vermont not merely with respect to business development, but also with respect to the quality of education that small schools can offer and with respect to the development of the creative economy that so many envision as the linchpin of Vermont's future, and also with respect to improving rural health care systems which increasingly need robust connectivity so that people don't have to travel hours and miles to see specialists when there are -- there's now technology that permits remote diagnosis, remote exams, if you have adequate bandwidth.

When you're talking about these kinds of applications you have to address the quality of upload connectivity, and as Irv pointed out the emphasis in this document on download speeds misses the point of what a

rural economy needs. It needs robust upload. That is the only way that Vermont's artists, musicians, software developers, web designers can get outside the confines of the small Vermont economy and address a national and international market. They need to be able to move their rich files all over the globe. They can't do it with the kinds of bandwidth that are being put forward in this document. This document is obsolete today. That needs to be addressed. It is crit -- if it's not addressed, Vermont will become very rapidly a back water.

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So what I suggest is that from a planning point of view there has to be a commitment to fiber to the user. That is simply the only method by which the kind of robust upload capacity can be delivered to Vermont businesses, to Vermont medical health care institutions, to Vermont schools, and to all those 15 percent or so Vermont households that have a business in the home and want to grow those businesses.

The second thing is that sufficient attention has to be paid to the true costs of building fiber. If you are thinking of building a robust ubiquitous system that reaches every potential user, the fact of the matter is that fiber is probably cheaper than DSL. Because DSL is limited in its reach it cannot compete with fiber on an ultimate cost per user basis if

you're thinking about ubiquity.

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Secondly, we know today that 4G LTE is comparable to DSL. You find this in any discussion in the industry literature. This is not something we have to wait three years to prove out. It is known today. Even the Department's own document cites the example of Verizon in Long Island when its copper infrastructure was destroyed by Hurricane Sandy and it proposed replacing that with 4G LTE the citizens went berzerk and said this will not do, and Verizon was forced to put in its fiber to the user FIOS service.

I don't think this government wants to have the citizens of Vermont up in arms three years from now because of an inadequate system. There's enough pressure right now in the rural parts of Vermont by frustrated citizens to get something better than what the state has been able to offer them, and certainly this vision of the Department is not being responsive to what the citizens know they need. You know, guys, you're all politicians. You've got to respond to your constituents. Remember Abraham Lincoln. You can't fool all the people all the time. So it's only a matter of time these chickens will come home to roost.

In my concluding remarks I made some very specific areas of potential legislative action which

I hope you will take under advisement. The first has to do with updating the definition of broadband. I've already spoken to that.

The second has to do with the standards of -- for evaluating applications for the Vermont Connectivity Fund funds. These are -- Irv was quoted by VPR as thumb on the scale. There's a big fat thumb in those -- in those legislated provisions and they need to be eliminated so that there is in fact a level playing field.

In particular, you've got to eliminate the reference to economic feasibility. How can an administrative department of the state determine what's economically feasible? The party applying for funds will have determined whether it's economically feasible. All the government needs to do, the State of Vermont needs to do, is to ensure that the goods are delivered. That once funds have been expended the deployment is done in a timely fashion and according to what has been awarded.

It needs to eliminate the prohibition on the overbuild of wired infrastructure by prohibiting overbuilds of wired infrastructure. The use of the criteria for use of funds inadvertently or maybe vertently, I don't know if that's a word, favors wireless. The funds can be used to overbuild — to have a wireless

overbuild of current infrastructure. So that's more 4G LTE. If you want to have fiber built out as Irv explained to you, the fiber is going to have to come from a hub that is probably in a -- in the center of town and will have to pass through an area that yes is currently served by other wired infrastructure if it's going to get out to the rural areas.

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Next, as Irv said, there's got to be some legislative action that provides a more effective way of imposing penalties for utility pole owners that fail to comply with the Department's rules for pole attachments. If you're going to have -- if you're going to be committed to a serious build out of fiber optic service, you're going to have to address the process of attaching to poles, and right now it -- you can't expect -- it's not feasible for -- either to file a docket and wait another six months as Irv explained or to put in an urgent call to Jim and have Jim start making calls to non-compliant utilities. There's got to be a method where a penalty is automatically payable for failure to comply, and that penalty can be assessed by the complaining aggrieved party, and then if there's an objection, you can have some kind of adjudicatory process, but I really think you need to look at this if you're going to be serious about building out an adequate network.

I recommend using revolving loan funds rather than grants. Again another issue that the Department doesn't seem to have contemplated because that way you get a lot more bang for the buck, and as others have stated I think the Legislature really needs to restate and emphasize its support for municipal initiatives because there are going to be circumstances where you cannot rely on the for profit private sector to take up the slack. They have too many requirements, whether it's SEC regulations to keep the interests of shareholders foremost or other kinds of issues that are going to be a barrier.

My concern is right now that if this plan is accepted and adopted as it stands it will in fact create a barrier to Vermont getting the kind of network development that it needs and it will be a recipe for retrograde -- for a backwards movement on economic and social development. I think this is something the Legislature and the Administration need to look at very, very seriously. It's a deep, deep concern. Thank you for your kind attention.

UNKNOWN SPEAKER: Thank you very much.

Before we go to legislators that want to comment is there anybody here today who would like to comment on the record? Anybody in the audience?

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I want to just now so I don't forget would just like to thank everybody for their very thoughtful comments. I know they worked on these issues for a long time and for many, many years and today we received the benefit of that work and your thoughts, and I do know that everybody shares a very similar goal which is the best possible telecom service for the Vermonters that we serve. So I know there are two or three legislators -- who know -- who would like to go first?

UNKNOWN SPEAKER: I'll go first. I just appreciate the testimony today to kind of, you know, give me the sense of what's happening out there, but I do have a question for the Chair. How does -- how do we go forward as a committee? Do we have -- you know, how are we going to go forward in the process?

UNKNOWN SPEAKER: I've asked that question and, Maria can correct me or not, I did have a few questions about it, is that the way the legislation is written we are fulfilling the requirements to meet and hear from the public on the plan. We ourselves are not required to take any action for the plan to go forward. It's not like a law. It's not like a rule and as you know we are out of session. A full body could -- would want to vote on anything that was different from the laws that we've already passed. Basically we said we wanted a plan

by such and such.

We do have the ability, if we so wish, to always -- to the extent that speakers and pro tems let us meet as much as we would want, and we have the ability to write a letter and to -- you know, considering any number of points. We have the ability, even more important is this, to -- right now is to offer our comments that will be part of what the Board will gather. In a short conversation with Jim is that what I understand is their steps is to gather all of the comments, including ours, and to create an addendum to what they put out so far and in that addendum address what has been heard. That will actually be in their hands.

I think each of us individually could basically request these are key points that we want you to address in that addendum. We could even say we would be disappointed if they are not addressed in that addendum. We will also be back in January. Committees will be reconstituted and I think -- I don't think there's a single person who believes that telecom will not be a discussion item in the next session as well it should be, and that the complexities of our all reaching that goal should well emerge and hopefully, you know, good legislation will emerge.

The Legislature will always have the

1	power, if it can get agreement with the Executive, to make
2	changes and to move things in a variety of ways. That is
3	the way it works. I hope that answers your question. Do
4	you have more comment? Do you have more comments?
5	UNKNOWN SPEAKER: Well I'm still
6	confused. Is this a plan or is it a draft of a plan?
7	MR. RECCHIA: We will be we will be
8	taking the comments into consideration in revising, in
9	part, an addendum; in part if there are provisions of this
10	and direction of it that we feel need to change as a
11	result of the comments, we'll be making those. So
12	UNKNOWN SPEAKER: So this is a plan?
13	MR. RECCHIA: It's a draft. It's a
14	comment draft.
15	UNKNOWN SPEAKER: Let's be clear. This
16	is not the plan. This is the draft plan.
17	MR. RECCHIA: Okay.
18	UNKNOWN SPEAKER: Right?
19	MR. RECCHIA: It is.
20	UNKNOWN SPEAKER: Subject to people's
21	comments you might or might not make revisions to reflect
22	them and then you will propose to adopt the plan?
23	MR. RECCHIA: Exactly. I wish I had
24	said that, that way.
25	UNKNOWN SPEAKER: Okay. So there is

time to affect the actual plan.

MR. RECCHIA: Yes.

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UNKNOWN SPEAKER: Thank you.

UNKNOWN SPEAKER: Mark MacDonald.

SENATOR MacDONALD: I am very pleased at many of the public comments today. They seemed much more incisive and informed and go to points that I think the Natural Resources and -- and Finance Committee and the House Committees have talked about the last couple years.

I represent a county that's about -- has been a backwater in Vermont. It was maybe in the 1860's it was at the top of its form. You know we have leadership in Congress. We look forward. In the 50's and 60's it was a tough place to live and it was a tough place to operate schools. In the 80's one thing happened that was extraordinarily important. The state set as its goal and its priority and mandated touch tone telephones and suddenly Orange County was a place where any American, any Vermonter could conduct business in the world. That was the state of the art.

The next decade we had some change in school funding and suddenly the schools in Orange County could compete with the rest of the state and participate in a level of education that was -- that worked, and people moved into Orange County and bought homes and

started businesses and our schools improved and the place thrived.

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Today in the age of I guess -- what was the expression -- risk adverse attitudes of what we're talking about, what we can't do or won't do, we have watched in my county people leave to go where they could get access to the world's business structure, and I look at this draft report with its emphasis on public private partnerships, which is a terrific buzz word that makes everyone feel good, but the private sector in the telecom industry has several goals. One is to build as cheaply as possible, to not build more than they have to when they are considering how to get money to their stockholders.

The private sector hates competition except in theory. They want to build out in an area and then once they have built out to prevent others from coming in and competing with them. The private sector wants the freedom to charge all the market will bear.

Whether it's copper or anything else they want to charge every penny they can get and don't want anyone telling them what they can do.

The private sector also wants to cherry-pick. They want to take the good areas to serve and not be bothered with the ones that are more difficult, and with the notion of public private partnerships they

want to get grants paid for by taxpayers to do all of the They want someone to give them a grant to build a tower to cherry-pick the customers that the customers they can charge whatever they want to once they have them, and they wish to be able to come in and lobby us against anything that would give them competition, and I don't think -- I look back at the history of this state and its history of people and bipartisan fashion working together to solve problems, and I look at the electric build out where the private sector was free to build electric lines around the state and make a profit, but when -- when those companies no longer thought it was profitable, then government and tax dollars were put in place to get those -- get electricity out to everybody. The government funded cooperatives with reduced interest rates to get everybody on electricity.

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Today under the Recovery Act of several years ago companies were given tax dollars to send to the easy places and to cherry-pick, and they were given those tax dollars without any requirement -- without any -- given the tax dollars and the companies were allowed to behave like monopolies and charge all the traffic would bear.

So I'm $\operatorname{\mathsf{--}}$ I passed a little note around to the committee members, and when we're talking about

adequate broadband I don't know where this standard that we have fits in, in the world's broadband from between 1 and 10 and 10 being the best service, but it seems to me we're spending money to get something that's rated 2 or 3 on a 1 to 10 consortium, and I sent around a note and I asked what is adequate housing; a brick house, a stick house, or a straw house. Somebody was talking about once upon a time, but we were taught, you know, as young people and growing up that you didn't build straw houses. You didn't build stick houses because someone would huff and puff and blow them down, and we have a plan here before us that proposes to build stick and straw houses using public private partnerships and they are going to get blown down.

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In the Natural Resources Committee I have —— and I will be brief, but I have repeatedly tried to use the analogy of the biggest most powerful Navy in the world, the British Navy, that ruled the seas because they had developed coal to operate their ships and their battleships, and along came Germany and Japan, the United States who began to use oil to operate their Navys.

Faster ships. They could refuel more quickly. They had greater range, et cetera, et cetera, but the British government had fallen prey. Its Navy had fallen prey to a culture of coal and it insisted upon making sure every mine sweeper, buoy tender, every vessel was equipped with

coal because that was their goal. They catered to the coal industry. They did the coal industry's bidding and they watched their Navy get surpassed by people that — others that had bigger visions, and I wonder how we are willing to sit here in Vermont, a state that has a tradition of working together to solve problems, and to say yes, yes, and yes to the telecom companies who want cheap infrastructure, no competition, the opportunity to cherry-pick, and want the public to pick up the tab, and I would hope that a plan that is presented to the state for us to follow would reflect the Vermont tradition of how we do things and not what we see in Washington where the special — or in the British Navy where the special interests by Congress and get what they want.

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UNKNOWN SPEAKER: I heard you say

(inaudible) planning for the future and not in the past
investing in technology that's obsolete. I would just say
the (inaudible comments).

UNKNOWN SPEAKER: I have a quick question for the Department. I believe it was the first witness who spoke about the relative merits of doing a rough process what it would take to achieve different levels of deployment of technology, and I'm just wondering how that factored into the document before us. What it would take, for instance, to get fiber in the home? What

it would take for wireless? What would it take to do 4.1, 10.1, whatever the levels of technology? Is that something that influenced this document?

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MR. PORTER: It absolutely did. What we've used as examples was Burlington Telecom where you had approximately 50 million dollars invested, passed 22,000 homes at a cost of \$2,000 something per customer. That's the most dense area in the state. Presumably the least expensive area.

We then looked at the VTel territory where they spent somewhere shy of 80 million dollars to bring fiber to the home for 18,000 customers and they came out to about I want to say \$4,000 something per customer. then we took the E911 addresses left in the state which was what, 239,000 roughly, is that right, and we think that the -- for the rest of the state that the VTel model is probably more appropriate because we're further apart and different terrain, and if you estimate the cost of \$4,200, \$4,400 per person per address, we came up with \$1,000,033,000, and so I do -- and I agree if we -- if we were starting out today with nothing, then I think you would -- I would certainly be saying we have to do a fiber to the home project for everyone, and ultimately I think that's where we want to be, although we have some providers who provide very good speeds, not fiber to the

home but not DSL, and so, you know, I think the first place that I would suggest that we invest the money is in areas that don't have that, and to be very clear, I don't think I have been clear about this, I think what we've done with the connectivity fund is allowed for that, is for the projects that did come into these areas that are not served but that offer higher speeds, I think they are going to be favored, and I really think that's what the --you know I don't look at that fund quite frankly as a DSL build out program.

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UNKNOWN SPEAKER: And one additional question gets to something Senator MacDonald was talking about, and as you read through even just looking through the table of contents, but once you get into the meat of the document necessarily navigates back and forth between sort of public role and private role, and wondering is there a simple assessment in this document that speaks to roughly what the Department's sense and expectation is about how much the deployment in the future of this technology will be done by public sources versus private sources.

MR. PORTER: That's a great question and to go back to two quick things Senator MacDonald said, he talked about touch tone dialing, and I think many people here have been doing this for a long time and I think we

still have the mindset that when we had a monopoly telephone company we were able to do things like that and we were able to mandate that they bring service here.

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We do not have that authority over many of these services, and so actually we have the wireless representatives come up every so often and about twice a year some of the bigger mucketymucks come up. Corey and I met with one of them a few weeks ago. We said, you know, just for fun what if we talked the Legislature into a big pot of money for you and we'll give it to you no strings attached but we want you to go build cell towers because it's ridiculous, and they said won't take it. Won't take it if you hand it to us.

So with cellular I think that's an issue. With broadband providers I think if we can provide the money they will take it, and so depending upon what we're talking about I think -- which is mostly wired broadband, I think we will have takers to go build into these areas.

UNKNOWN SPEAKER: I just have a practical question, or at least I hope it's practical, is that there is a document here albeit addenda, et cetera. I really want to know -- you to speak to how the plan will be used, what effect it will have. I want to know if there's any consideration of it being time lined of any being resourced, responsibilities being assigned. In

other words, implementation. This seems to be at a level that doesn't get down to -- if this even -- if this -- if we wanted to call this lightning or whatever rain or whatever the heck it is, how will it actually reach the ground? How will it be used?

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You have been operating for a long time without a plan. Now you're going to have a plan. What will be different once the plan is in place in terms of goals. People can have different ideas of how to get to those goals, but how -- what effect will it have?

MR. PORTER: It's certainly very helpful to have the goals in place. Depending upon the technology I think that we know that we talked about cable and we need to look at what cable can do further.

Beyond that the way I view this and part of the reason that there's a little less detail is, you know, we're in the process of trying to move from the VTA to the Division of Connectivity, and so that study, if you will, is still in process being done by the Secretary of Administration.

One thing we have thought about since you have set up a fund is, you know, we have a Clean Energy Development Fund at the Department and we have a person whose job, and please correct me, but basically she goes out and she helps people who want to do energy projects

and says this is how you do this, this is what you should do, and here's where the money is available.

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Administration or certainly to Chris is going to be that we do that same type thing with telecom and that we actually go out and talk with many of the people you have heard today who we do have informal talks with about permitting and whatnot, but someone who can go out and say here's an area that needs to be served how can we help you do it, and so you know I think that's one thing.

I think education is something that we'll be looking at, but some of those actual pieces as to what the Administration is going to recommend we do, you know, I don't know what that piece of it is yet. I can just tell you what my ideas are and that I think that the plan and the legislation that we have had allows for that implementation.

MR. RECCHIA: May I add for a second, you know, I've been managing budgets and people and goals and plans for a long time in different capacities, and the way that is done is you do develop a plan which has to have vision, and I very much appreciate the comments that we've gotten here today which of course were not positive, but they were helpful. So it is — it is helpful to know what the vision needs to be and where you need to go to.

1 In the immediate future the way you need 2 to roll that out and decide how to implement it or how to 3 get the lightning hit to ground, if you will, is you need to have a good sense of the resources that you have 4 5 available and how you are going to then maximize a 6 leverage of those resources to accomplish your goals can 7 be determined at that point. I mean we can come up and we 8 have come up with ideas of how to do better faster, but 9 without knowing the order of magnitude of the resources 10 that are going to be dedicated to these efforts it makes it hard to have the order of magnitude of vision that what 11 12 you have heard here today would like to be achieved, and 1.3 then to understand what exact programs would be best to 14 leverage those resources that you have.

There are also, as I mentioned at the very beginning, a couple of very big moving pieces here that we need to have resolved by the FCC in order to be able to understand what the rules of the road are and then figure out that path. So I do want to acknowledge I guess Irv said this is a start. Well -- or maybe it was Pam with the appropriate risk assessment.

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This is a start and we have to get started and there are going to be things that are answered along the way that help us reevaluate and readjust. What we heard today I think in a lot of respects I am taking very

much to heart and we will go back and look at the plan and the vision that it provides and whether it is trying to balance between what would be ideal, what do we really need, and what's realistic to achieve and how we -- how we present those to guide our work and give the citizens of Vermont an understanding that we do believe we must remain competitive in this -- in this arena, not only in this state and equity throughout the state, but competitive nationally and globally in order for Vermont to be where it needs to be, but I don't have a billion dollars today, and I also count on the fact that this technology and the -- and the advances have changed very quickly. I am counting on technological changes also to get us to a goal that otherwise might seem out of reach now.

UNKNOWN SPEAKER: Wrap up. I think my one comment is that the plan at its best will clearly articulate priorities so that you know with the resources that are and can be available through a variety of sources of where and how you can best meet those priorities for all of the reasons that we just said here from economic health, education, you know, the public good in a sense.

I'm not sure if in reading the plan we could really see where the priority -- where the priorities are amongst the landscape that you have laid out. So thank you.

MR. RECCHIA: Thank you.

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UNKNOWN SPEAKER: Is there any other comments? Chris.

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UNKNOWN SPEAKER: Yeah I just wanted -you know, I appreciate the challenges presented in the
plan, an order of magnitude between very modest funding
and robust funding. I don't know if we can frame this
plan so it considers or offers funding, a vision of how it
might roll out at two varying levels of funding.

My concern about Vermont's plan, you know, (inaudible) something like that is that appropriations (inaudible) fund raising and that members of the committees end up going to Appropriations, have discussions and a very modest plan it might get funded but might not, but a much more compelling and vision that moved us a lot further a lot faster might be what -- might help us mobilize a lot more money than seems reasonable sitting here today. So I don't know.

UNKNOWN SPEAKER: I hear you.

UNKNOWN SPEAKER: It's a bit of chicken and egg thing, but I think if we are so frugal that we come up with a too modest plan we might not be able to mobilize -- engage, mobilize the money we need to make the sort of gains that everybody in the room is hoping we will be able to make.

UNKNOWN SPEAKER: Thank you. Thank you

everybody for staying a little longer. Thank you everybody. I note that both committees made a quorum today. Thank you, Agatha, for organizing this so well and I know that you have a way to send public comments, and I think also anything that will come hopefully would be sent to Agatha for our committee pages, and with that if nobody has any further comment I would like to thank you for your time today.

(End of recording.)