



1 Ms. Connie Lee Greene Nyholm  
2 The Honorable Edward Owens  
3 The Honorable Frank M. Ruff  
4 Mr. Thomas E. West  
5 The Honorable Thomas C. Wright, Jr.

6

7 COMMISSION STAFF:

8 Mr. Neal Noyes, Executive Director  
9 Mr. Ned Stephenson, Director of Investments  
10 Mr. Timothy Pfohl, Grants Program Administration Manager  
11 Ms. Britt Nelson - Grants Coordinator, Southside Virginia

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14 DELEGATE HOGAN: Good afternoon, everyone,  
15 let's get right to it. We've got a pretty full agenda.

16 Would you call the roll?

17 MR. NOYES: Mr. Arthur?

18 MR. ARTHUR: Here.

19 MR. NOYES: Delegate Byron?

20 DELEGATE BYRON: Here.

21 MR. NOYES: Mr. Hite?

22 MR. HITE: Here.

23 MR. NOYES: Delegate Hogan?

24 DELEGATE HOGAN: Here.

25 MR. NOYES: Mr. Montgomery?

1 MR. MONTGOMERY: (No response.)  
2 MR. NOYES: Mr. Owens?  
3 MR. OWENS: Here  
4 MR. NOYES: Mr. Thompson?  
5 MR. THOMPSON: (No response.)  
6 MR. NOYES: Senator Wampler?  
7 SENATOR WAMPLER: (No response.)  
8 MR. NOYES: Delegate Wright?  
9 DELEGATE WRIGHT: Here.  
10 MR. NOYES: Mr. Bryant?  
11 MR. BRYANT: (No response.)  
12 MR. NOYES: Mr. Day?  
13 MR. DAY: Here.  
14 MR. NOYES: Delegate Dudley?  
15 DELEGATE DUDLEY: Here.  
16 MR. NOYES: Mr. Harwood?  
17 MR. HARWOOD: Here.  
18 MR. NOYES: Senator Hawkins?  
19 SENATOR HAWKINS: (No response.)  
20 MR. NOYES: Mr. Jenkins?  
21 MR. JENKINS: (No response.)  
22 MR. NOYES: Ms. Lane?  
23 MS. LANE: Here.  
24 MR. NOYES: Mr. Mayhew?  
25 MR. MAYHEW: (No response.)

1 MR. NOYES: Mr. Moody?

2 MR. MOODY: (No response.)

3 MR. NOYES: Ms. Nyholm?

4 MS. NYHOLM: Here.

5 MR. NOYES: Senator Ruff?

6 SENATOR RUFF: Here.

7 MR. NOYES: Mr. Stith?

8 MR. STITH: (No response.)

9 MR. NOYES: Mr. West?

10 MR. WEST: (No response.)

11 MR. NOYES: We have a lot more than a quorum.

12 DELEGATE HOGAN: All right. Do I have a  
13 motion to approve the Minutes of the last meeting? I'll ask you to approve  
14 the April 26 Minutes.

15 It's been moved and seconded, all in favor aye? (Ayes.)

16 Opposed, like sign? (No response.)

17 All right. Mr. Stephenson.

18 MR. STEPHENSON: Mr. Chairman, I told the  
19 Director I'd do this in one minute, so it will be very brief. Most of you at the  
20 table know the history of this project better than I do myself, but for the  
21 benefit of two or three of you that have come along recently, Minnie and  
22 maybe Connie and perhaps Barnie, I thought we'd give a quick recap of  
23 where we are so you'll kind of have a perspective on your decision today.

24 The Commission was formed in 1999, and conversations about  
25 this began very soon thereafter. The Commission made its first grant in

1 about 2002. Twenty-five grants later we are here today, having spent a little  
2 over \$60,000,000 for a variety of backbone projects scattered throughout our  
3 region. That is probably without question our largest most signature project,  
4 the backbone project.

5 I've placed in your package a very quick summary that shows  
6 you which grants you have funded, where, and more importantly, the  
7 progress that has been made on each of those grants in terms of  
8 disbursements. You know, of course, we don't disburse until the work is  
9 done. You can see an aggregate of 60 odd million dollars, and we have  
10 disbursed about 65 percent of it. Some work is left to be done.

11 I apologize, there are one or two errors on the sheet, that is the  
12 VBU grant that really belongs to Cumberland Plateau, but basically you can  
13 see the posture of the Commission. Up at the top you can see the budget  
14 history where we began with a \$5,000,000 budget and funded the  
15 Technology Committee a couple of times, the largest of which was  
16 \$40,000,000, which was from our securitization effort. That brings us to a  
17 total funding of \$63,000,000. If you look at the next to the last line on the  
18 page, you will see that there are plus other funds that are not yet awarded;  
19 you have about a million nine remaining in your budget not yet used.

20 I'll be happy to comment on any of those we need, but I really  
21 think that what you want to do today is talk about the next frontier, which is  
22 your last mile, as you have on the screen before you.

23 With that, Mr. Chairman, I will leave the floor.

24 DELEGATE HOGAN: All right, Mr. Deriso.

25 MR. DERISO: Thank you, Mr. Chairman, and

1 thanks for giving us the opportunity to come in and talk about the things  
2 we've seen on this last mile project in our Southside region and all the many  
3 ins and outs that we've learned over the years in developing this backbone  
4 and working with the private sector. I'll be happy to address the last mile.

5 One note I'd like to make is that this building that you're sitting  
6 in here today, Riverstone, in the basement of this building is one of our  
7 major node facilities. This is on our network, and actually the node for this  
8 region. We have some Nortel Electronics in this building, as well as three  
9 major fiber optic rounds that come into this building, Riverstone.

10 After the meeting I'd like to offer to you, if anybody has any  
11 interest in seeing that, I'd be happy to show that to you. I think last time we  
12 had a couple of people join us, but I'll be more than happy to take you down  
13 to the basement and give you a tour of the facility and show you how all this  
14 stuff works, and you can actually see it. That will make it a little more  
15 interesting to look at.

16 Real quickly, some of the things I'm going to cover, Ned did a  
17 good job of describing what the Tobacco Commission has done in the recent  
18 past with these projects. I want to talk a little bit about a problem we've had  
19 in Southside and what we're trying to solve and what we feel the problem is  
20 and what the members feel the problem is. Thirdly, I'll talk a little bit about  
21 fiber to the home and wireless, and the discussion seems to keep revolving  
22 around those two points, what's the best last-mile strategy for Southside, and  
23 what role the Tobacco Commission will play in all these different types of  
24 activities. If time permits, I've got a really interesting video case study that  
25 will show a little town called Keokuk, Iowa, and it has 12,000 population,

1 and it's a very little town in Iowa. It talks about how a private sector  
2 wireless ISP came to that town and deployed a wireless system and did a  
3 very interesting job for the businesses there in that community. So there are  
4 a lot of good things we'll talk about for that, as well as some of our members'  
5 plans to solve the last-mile broadband problem. We'll talk about the 17  
6 members we have to date that joined MBC and that are aggressively going  
7 after new markets and looking for new opportunities to build market share,  
8 as well as the incumbent carriers, Verizon and Sprint, and they are going to  
9 be addressing us as a cooperative and becoming a member of MBC as soon  
10 as we get all that stuff wrapped up.

11 I've got a proposed strategy for pilot sites. In the last meeting,  
12 the Commission Staff asked us to prepare a kind of an outline of what would  
13 make sense as far as the pilot sites and the five communities that are listed in  
14 the Commonwealth's plan to take care of that.

15 Very quickly, this whole thing, MBC, was formed to leverage  
16 federal investments in the EDA and Tobacco Commission funds to construct  
17 this fiber optic network. Since day one the vision has always been to build a  
18 system that is available to everyone to use in building new highways to get  
19 to these communities and provide services. The key idea of this whole  
20 project was to use MBC as the not-for-profit cooperative vehicle to apply for  
21 grant funds and the construction and operation of the project, and then  
22 depend on the private sector to build out, serve, maintain and operate the  
23 services to the business community and within the industrial parks, the last  
24 mile in our business community. Goal one was to build a highway system  
25 that would connect all business/industrial parks. We have a hundred percent

1 of those connected today, and really part of that is to provide redundancy  
2 and the reason to attract and maintain businesses in Southside. One of the  
3 things that a lot of our parks had when the Commission looked at various  
4 ways as to how we can attract economic development and how do we solve  
5 broadband problems for our business community within our business and  
6 technology industrial parks. This is all part of what we did. I use an  
7 example of trucking companies and a highway, and that's basically the way  
8 you think about it. Before MBC and the Tobacco Commission, this region  
9 had basically two highway systems that had very heavy tolls with not much  
10 lane capacity to bring telecom service providers into the region to provide  
11 competitive broadband service.

12           What I'd like to do is develop a baseline in what we're trying to  
13 talk about when you say T-1 level services. Most everyone, when we first  
14 started talking about this project, it always came back with T-1. We need  
15 T-1 services to be the same or better than they are in Richmond or  
16 Washington or Norfolk or Raleigh. When we first started this, some  
17 companies were paying \$8,000 a month for the T-1 line, a T-1 data line,  
18 where in a major metro area you can get that for about five, six or seven  
19 hundred. We wanted to put the model on its head and make Southside as  
20 competitive as those major metro areas. If you look at this from an economy  
21 problem, I think of broadband and last mile in two places of this, and I'm  
22 referring to the graphic here. Think of the T-1 and lower. The applications  
23 for these are primarily residential and small business communities, anything  
24 from a florist to a restaurant owner to whatever the case may be. Starting off  
25 with dial-up services, 54k, DSL services, and looking at services that some

1 of our private sector competitive carriers provide, cable modem, and then  
2 finally wireless, all those services demonstrated here. All those kind of  
3 activities, I kind of group them in T-1 and below. That's what we're really  
4 trying to solve here as part of this discussion today, and that applies to our  
5 20-county region.

6           The other side of this puzzle is the T-1 and above. What these  
7 are designed for are major corporations and commercial enterprise users.  
8 I've got stories from all over the place where people have come back to us  
9 that we've hooked up already and are providing a network. Just to give you  
10 an idea of these type services, we started off with T-1, which is about one  
11 and a half megabytes per second, and that's what we consider our fairly  
12 robust broadband solution. T-3 and OC-3, all of those types of services can  
13 be provided on the network that has been built to become operational with  
14 these different types of pipes. And that is something, certainly in the areas  
15 of Southside, an incumbent carrier simply cannot offer. They could not  
16 offer Ethernet services to the business communities. Now that we're able to  
17 provide Ethernet services on a transport to get our private sector telephone  
18 members in business into these businesses and industrial parks, we're now  
19 able to provide that. It's becoming a very interesting exercise in how this  
20 connectivity is going to happen.

21           I thought I'd mention very briefly the telecommunication  
22 infrastructure portion of your Long Range Plan. There are a couple of things  
23 that we've done so far. Your first objective was to build the fiber-optic  
24 geodesic mesh network throughout the region. That's been almost  
25 completed in the 20-county region of Southside Virginia. You've probably

1 seen this map more times than not. This connects 100 percent of our  
2 industrial parks, all of our communities and the different places that we go,  
3 and that's been done.

4           One of the most innovative and creative projects that the  
5 Commission has done is wanting to connect the regions fiber-optic network  
6 to the national and global infrastructure. I remember a couple of months ago  
7 during the Phase 2 grant application we, MBC, was awarded funds, and we  
8 talked about it at the last full Commission meeting. We have two strands of  
9 fiber from Atlanta to Washington D.C., and we're lighting that fiber  
10 currently, and within the next 30 days we hope to have that lit and providing  
11 10-gigabyte services to some of our members. There are very, very large  
12 pipes up to Ashburn and McLean, Virginia. Think of that as the home of the  
13 Internet. Every single carrier and every single provider, that's ground zero  
14 for broadband services. The reason this is important is that back when this  
15 project was started you've got Internet, and you get services from a  
16 competitive carrier or a telephone provider, and that has to go back  
17 somewhere; it comes from your house or your business and goes back to a  
18 wire center and goes back on a network, and it goes somewhere and gets  
19 back to an Internet place where everybody is interconnected. Those costs  
20 have been anywhere from three to four hundred dollars per megabyte, all the  
21 way down to 80 or \$90 per megabyte, just in this region. Once we have  
22 connectivity up here, you've got carriers providing Internet services for \$10  
23 a megabyte, \$15 and \$20 a megabyte. What we've done is, we're bringing  
24 the home of the Internet and all this rich interconnection of traffic and  
25 networking into that area. So what our carriers and our incumbent carriers

1 appreciate is the opportunity to use the network, which is very affordable, to  
2 get up to the major Internet centers, and it reduces the cost of transport,  
3 which reduces the operational costs for our private sector members, which in  
4 turn will reduce the cost that they would charge for residential and business  
5 Internet services. That way, you have more capital to expend on new  
6 projects, and it just kind of flows from there.

7           Our third objective was creating the multimedia service access  
8 points at strategic points across the region. This is a node facility, I believe  
9 this is in Clarksville, and these are these electronic buildings that have all  
10 our fiber. This is a shelter building that has our electronics and all our fiber.  
11 What happens is that we interconnect with our carriers and come into these  
12 buildings or at some other point, and we're able to interconnect traffic back  
13 and forth. If you go down stairs in this basement, I'll be able to show you  
14 how that works. We can bring companies in here and have racks and racks  
15 of equipment and servers and optical transport gear all interconnected  
16 through this type of activity.

17           The fourth activity, which is really what we're talking about, is  
18 how we deploy optical and wireless technologies for our communities that  
19 reflect the best technical and economical choices available. There are lots  
20 and lots of things that we can do, and the almighty dollar is usually a big part  
21 of that. The good news is that the last mile is solved a hundred percent in  
22 our industrial and business parks in Southside. It's all been completed. In  
23 some parks we have a shelter building, as I showed you on that last slide,  
24 that has the physical electronics that we can provide services that way. In  
25 some of the other industrial parks we have a fiber-optic cable in the ground,

1 and that's ready to be hooked up, once there's a business need. So if a  
2 business comes to town, it's right there waiting on a hookup.

3           The private sector, and this is one of the most amazing points to  
4 me, especially when I looked at this over the last several years. Our  
5 members are willing and able to invest and build out the last mile.  
6 Surprisingly enough, there are actually private sector companies that have no  
7 need or no interest in your money, and that's been the neatest part to us, to  
8 see that in the private sector, where there's a need and there's an opportunity  
9 they're willing to do that, and they're using the MBC network to get further  
10 into our region to reach their business and customers of that, and don't need  
11 it.

12           There are some people from Franklin County that just walked  
13 in, and I'd like to tell them about your project. Franklin County really  
14 doesn't have a broadband problem in the rural areas of that county. Most  
15 amazingly, they also didn't require a penny from the Tobacco Commission.  
16 They have fire and rescue and emergency services throughout the county,  
17 and each one of those has a small tower, and they use that for emergency  
18 communication services. There is a private provider or an ISP in the  
19 Roanoke area and came to Franklin County and said we'd like to provide  
20 broadband to your whole community, but the thing is, we can't afford to put  
21 up a tower, and we can't afford to pay a lot of money in co-location or  
22 monthly rent for tower space, but here's what we'll do. We'll put the money  
23 up to put the radios on the tower, and we'll come in and market our services  
24 to your community, and you, Franklin County, don't charge us a penny for  
25 putting that equipment up there. In exchange we'll give you free Internet for

1 your county facilities. It reduced the cost to the county for Internet, it helped  
2 a private sector member get into the community in which there is no service  
3 and probably never would be any service, and get wireless broadband into  
4 the various communities of Franklin County. That's just a program that they  
5 rolled out.

6 UNIDENTIFIED: They donated a tower that we're  
7 using at one of the locations for our public safety radio system. It's worked  
8 out real well for everybody.

9 MR. DERISO: It's a fantastic model. I've got  
10 other members within our industrial park, they serve businesses within the  
11 industrial parks, and they don't want MBC to build fiber to the businesses in  
12 the park because they would like to spend their own money on their own  
13 fiber cable to build access into these businesses and services. It's not a  
14 penny of tobacco dollars, but they're solving that last-mile problem in the  
15 park. It's amazing to me that the model in the early days said this is how it's  
16 supposed to work, and it's actually working with the private sector.

17 The third point is that over the last several months I've had  
18 conversations with Verizon and Sprint. They realize that this network will  
19 make them a lot of money and can make them more access to services, and  
20 it's really encouraging to me that the private sector, our incumbent local  
21 exchange carrier, want to be part of the solution, and they want to be  
22 responsive. So if you combine the ILEC with the MBC network, you've got  
23 Verizon and Sprint fiber in their territories in their industrial parks and MBC  
24 with our fiber in the industrial parks, and Verizon and Sprint serves that for  
25 the last mile with their phones and data services. MBC can provide

1 hundreds and hundreds of different carriers on our open access highway  
2 system to that industrial park or into those businesses, and it makes the  
3 region much more attractive as far as recruiting and getting that type of  
4 activity working out.

5           These are our current members, and as of today our Class B  
6 members. These folks submitted applications to the MBC Board of  
7 Directors, and they pay a \$500 one-time fee to become a member of the  
8 cooperative. As a co-op we're set up so that they kind of share in the  
9 operations and things that MBC does. You may recognize a couple of them,  
10 some are brand new, and some have been around for a long time. The neat  
11 part is companies like nTelos of Lynchburg, Virginia, and we'll be helping in  
12 the next couple of weeks to do a press release on a project they're doing in  
13 Farmville as a result of using our network. You've got Level 3, which is a  
14 multi-billion dollar corporation, just bought the assets of Telco, which is  
15 also a billion dollar corporation. They're a member of this MBC co-op and  
16 providing services in our region for some of our members. Actually they're  
17 providing services to members as well as some of the communities they're in  
18 already. So the neat part is that there are a lot of wireless providers, and  
19 there are companies like Citizens Telephone Cooperative, Buggs Island  
20 Telephone Cooperative in Mecklenburg County, who are doing last mile  
21 today in their service area. You've got some citizens who are using their  
22 copper plant, and that's the old fashioned copper that nobody likes. They're  
23 delivering 22 megabytes per second to the customers today on their services,  
24 and they're able to deliver what they call a triple play, voice, video and data  
25 on those services. I can't stress enough how the innovation of the private

1 sector is really addressing all the problems of how do you get those services  
2 out there.

3 I now want to talk about options for the community  
4 infrastructure. We talked about wireless and fiber to the home. These are  
5 broad-based assumptions. We've looked at some of these numbers for many  
6 years, and we looked at some of our estimates, based on current construction  
7 costs, and we're seeing an increase from when we first started the project.  
8 This made the assumption that we're going to cover 20 counties and cover all  
9 4 cities, and we want to cover residential and business communities to see  
10 what happens. The base line data we used was the demographic data, and  
11 some of this is Census 2000, and some of it is updated to 2002. We let each  
12 of our counties and cities, or we used their population, housing units is what  
13 we used for the cost per housing unit to be connected. That's an actual house  
14 or building, non-farm businesses, and we want to look at that as far as the  
15 business community, based on the current demographics. We need to know  
16 what the cost is to connect those folks. Then the land area, and that's in  
17 square miles, it's got people per square mile, and then you can see the  
18 density of some of our rural areas. All that information is in your handout as  
19 well.

20 Now, let's talk about some cost assumptions, fiber to the home  
21 and business. We estimated around \$1800 per home or \$1500 per business,  
22 realizing there is a little closer density in businesses, say in Main Street, and  
23 it ended up \$600 per connection for electronics. You may have heard of a  
24 device that goes on your house or business that the fiber hooks up to that  
25 would allow you to do a lot of things. There is a lot of stuff not included in

1 these assumptions, mainly permitting, engineering, design, access to get  
2 from an electronic box on your house to the inside wiring of someone's  
3 home or business, and how do we connect them to your network inside the  
4 home, and that type of stuff.

5 In wireless we looked at on average one tower to serve a five-  
6 mile radius non line-of-sight. With the equipment out there today and an  
7 unlicensed, or what we like to call a non line-of-sight, that's a very doable  
8 option. If I used my geometry math correct, I think it's about 78 square  
9 miles per tower that you cover. Some of these areas you don't need it,  
10 because it's already being served with broadband. In other places you'll need  
11 more towers or more access to water tanks or X, Y, Z. We budgeted about  
12 \$180,000 per tower, and nothing fancy here, and about 100,000 for  
13 equipment on the tower. In talking to many of the wireless vendors in the  
14 marketplace, that's probably a fairly conservative number. When you apply  
15 these assumptions to our demographics, then you have to figure out what  
16 happens to the fiber to the home. We did do a calculation for fiber to the  
17 home on this chart, FTTH, and took a cost per household and a cost for  
18 electronics and added them up. The grand total was \$706,000,000. A  
19 couple of months ago when we first talked about fiber to the home I said it  
20 would be a billion dollars to hook up all the 20 counties. It was about  
21 \$700,000,000, and that's what we figured to cover Southside.

22 Does anyone have any questions on that?

23 For wireless deployment we did the same thing. We looked at  
24 the towers and the equipment, the square miles covered, the cost of the  
25 towers and the equipment, and we came up with around \$37,000,000 for a

1 last-mile wireless solution. We're talking about fiber to the home or  
2 wireless, and that's wholesale deployment. MBC will not ever, never, make  
3 sure you've got that, not ever, ever serve the residential community, the end  
4 user community. That's the job of our 17 private sector members, which is  
5 the CLEC's, the ISP's and the wireless providers.

6 If we've got enough time I'd love to show this little video.

7 DELEGATE HOGAN: Is it about 10 minutes?

8 MR. DERISO: It's not very long.

9

10 NOTE: At this point the video is played.

11

12 MR. DERISO: It ran a little longer than I thought.

13

14 MR. DAY: Let me ask you a question. If we  
15 spend essentially \$40,000,000 doing this, what's the shelf life of that  
16 investment, or how long is that going to last?

17 MR. DERISO: That will get you up and running,  
18 and it's managed by the private sector, so the hope is, once you make the  
19 initial investment, you have helped create those businesses and created those  
20 opportunities for the service providers to come out. As far as upgrading it,  
21 that's something that the private sector needs to handle. What we hope is  
22 that there is enough business in the communities that are selected to have  
23 this type of wireless service pulled out that the business more than pays for  
24 itself. What we've found from our members is that I've polled a lot of our  
25 folks and asked, what prevents you from going to the next town or what

1 prevents you from going to a new community. A lot of times the answer  
2 comes back, capital. We simply can't afford the equipment, we can't afford  
3 the towers, we can't afford the radios on the towers, and if we were able to  
4 buy a service and get to the customers, we'd love to be able to do that or  
5 offer that. So the shelf life may be three or four years, but there are a lot of  
6 variables to that.

7 Let me just give you a short summary of what we've talked to  
8 our members about and the need to increase access to towers, the need for  
9 Ethernet transport to the towers based on new equipment they get and higher  
10 radios, they need more backhaul capacity to get to that, they need capital to  
11 upgrade their current equipment, and they need to help educate communities  
12 on the need for broadband and what it can offer.

13 Karen Jackson from CIT has worked with different folks, and  
14 she's been involved in this for a couple of years with the EDA and some  
15 others, trying to solve that and trying to educate a lot of communities on  
16 what broadband is and what it can do for you and why it's important.

17 DELEGATE BYRON: Just to understand this  
18 chart a little bit, I'm not sure I understand what this means. Does that mean  
19 they have towers already in their area, or what does that mean?

20 MR. DERISO: Just because their land base is  
21 much smaller, when you look at a 78 square mile radius and you look at one  
22 tower and what that function is, you can sort of pretty much serve the City of  
23 Danville with, I mean Bedford County then.

24 One of the things that you have to look at, Danville has quite a  
25 rich broadband history, and the City of Danville does quite a bit of

1 broadband, and you've got DSL and cable modems and wireless, and that's a  
2 pretty rich environment. If the Commission decided that we want to invest  
3 some more for broadband, or do we want to put it in areas that don't have it.  
4 That's a policy question and I just wanted to give you the numbers on it.  
5 Does that answer that question? All right.

6 DELEGATE WRIGHT: I notice that we've had a  
7 list of availability going from dial-up through DSL and so forth, and some  
8 communities now have DSL. How would the cost of wireless compare to  
9 the current DSL costs, and what's the speed, or what is the difference in  
10 speed, the opportunity for DSL versus wireless?

11 MR. DERISO: Sure. Our private sector members,  
12 wireless ISP's are at the same price as DSL or lower. I've got some members  
13 that do what's called license spectors, and it's a lot more expensive to deploy,  
14 and it's a higher quality of service. It's more reliable for business-type  
15 applications. You've got others that do unlicensed wireless, and maybe five  
16 or six vendors that we looked at that our members use, that involves  
17 different types of equipment and different types of capacity and distances.  
18 I've seen prices as low as \$22 a month for the wireless broadband. From the  
19 speed perspective, you're looking at right around one megabyte or less per  
20 second. And when they use the dial-up to the wireless broadband, IBM  
21 wouldn't put a data center on the wireless network, for residential and small  
22 business it's a fantastic solution.

23 MR. KUNDRA: Two quick questions. Do we  
24 know for the potential customer base what is the ideal price point to serve  
25 the market? Secondly, on the technology side with the towers, are they

1 susceptible to rain and fog, and what are some of those issues that they  
2 might face?

3 MR. DERISO: As far as pricing and elasticity, this  
4 is not a firm number, but anything that, I've seen prices \$25 to \$45 a month,  
5 primarily talking about residential connections, and that seems to be the  
6 going rate for wireless ISP's as far as pricing. For business customers, \$50  
7 to \$100 a month for that type of service.

8 The rain and fog can have an impact, but again, it depends a  
9 whole lot on the geography, the type of equipment you use, the frequency  
10 that it is used, where the equipment is located in the user's residential or  
11 business. Whether it's on the tower or on a window, or things like that. A  
12 lot of things can impact that. The good news is that in this day and age, in  
13 the middle of 2006, technology has increased quite a bit in the wireless  
14 world to help take care of a lot of those issues.

15 MR. DAY: What do we say to these companies  
16 that have already invested and spent borrowed money laying the fiber optic?

17 MR. DERISO: In the Southside region --

18 MR. DAY: -- I'm thinking about Citizens  
19 Telephone, is anybody here from Citizens? I know they're a member of that  
20 consortium. They spent a lot of money in my neighborhood specifically, or  
21 just recently. How do they recover that investment if we come in and  
22 overlay something like this on top of that?

23 MR. DERISO: The way they recover that  
24 investment is that they're part of, or they get funds from the Rural Utility  
25 Service and other places to help recover some of that cost. The thing about

1 Citizens is that they are a rural telephone cooperative. They're going big  
2 time stuff into Patrick and Floyd Counties and all the surrounding areas  
3 because there's a need for it. They have customers that are willing to pay for  
4 it, and that's how they get that service. If the Commission were to come in  
5 and say, okay, we're going to build towers in the community and let a  
6 wireless provider provide services, or build the tower and allow a wireless  
7 wholesale company to come in and basically manage the wireless network,  
8 Citizens would raise their hand and say, great, we'd love for them to do it,  
9 because at the end of the day when you get into what's better from a  
10 competitive standpoint, fiber or copper to the home versus wireless solution,  
11 that's one thing. If money is not an object, fiber to the home and fiber to the  
12 business is the best solution, because it's always there, and bandwidth  
13 unlimited you can do a lot of things with. When you get into the finances,  
14 it's very, very expensive, not only to build it but also to maintain it and  
15 operate it. When Citizens deploys services, that's their service area, there are  
16 other phone companies, they have capital customers and are willing to  
17 employ that in some areas where you've got an incumbent carrier if that cost  
18 doesn't justify us putting DSL or putting a cable modem into a community  
19 like that. That's where wireless comes in and helps fill the gap. Most of our  
20 members want us to put it where there's no broadband. If you took South  
21 Boston, for instance, and if you were to put up a wireless tower and MBC  
22 were to offer someone to deliver wholesale wireless services, in essence  
23 Pure Internet and Gamewood and some of the other wireless ISP's who are  
24 members already provide that service. I guess it then becomes more of a  
25 policy question on the Tobacco Commission of where we put the money and

1 where does it make sense to build out infrastructure and what are our  
2 guidelines that will allow us to do that.

3 I did skip around to a lot of things in that response.

4 MR. DAY: Yes, you did, but it raises another  
5 what-if question. Part of this is philosophical, I guess. What would be the  
6 wisdom of saying to these companies, like Citizens, that we're going to give  
7 you an option, and we're going to pay you the equivalent amount to lay the  
8 cable, but we're going to set up a wireless provider --

9 DELEGATE HOGAN: -- Just to interrupt you, but  
10 the wireless mesh costs 250,000, give you 250,000 and you can spend it. In  
11 fiber you can do that, or is that your question? Does anyone want to  
12 comment on that question? I think what MBC is trying to do is not to pick  
13 on Citizens or other companies but to say we're going to provide the  
14 infrastructure that any of you could use. I think so far that's what MBC has  
15 done, what the Commission has done, at least in Southside. I think what  
16 we're really trying to talk about, maybe what we ought to be talking about, is  
17 in places where there is not broadband, what do we do to enable any number  
18 of people to get, if you take South Boston it doesn't make sense, there's DSL  
19 that you've got, you've got the copper and your wireless network, at least  
20 maybe one or maybe a couple. Right now there are choices in South Boston.  
21 I'm not sure what role the Commission would play in dealing with that, the  
22 last mile. There is a last-mile solution, and if you go to --

23 MR. DAY: -- Mr. Chairman, I guess what I'm  
24 saying, aren't we in fact in de facto fashion going to pick winners and losers?

25 DELEGATE HOGAN: If we do our job right, no.

1 I would hope not, and I don't think there is any reason that we would have  
2 to. I think what Tad has touched on is that where it is economical in even  
3 these small, undercapitalized businesses, then these businesses will deploy  
4 last-mile solutions. There is not some access point to a backhaul or to a  
5 piece of fiber, they can't do it. We've got that problem with Brookneal right  
6 now, and several other communities I think that's probably true of. What do  
7 we have to do to make that possible, versus spending money in South  
8 Boston or in Franklin County, where the network is there in place.

9           What happens in Franklin County when ABC Company wants  
10 to go in there and have the same access to water towers and these public  
11 towers as a company that has it now? Let's say these companies now deal  
12 with the counties and they have a monopoly, and they want to charge \$50 or  
13 \$60 a month for broadband services, and they've had everybody using it for  
14 the last three or four years and they're used to it, and you've got people  
15 working at home, and now what do you do? I think that will come up,  
16 maybe not quite yet, but I think that's certainly a question we have to deal  
17 with over the next couple of years.

18           DELEGATE BYRON: Do we already know those  
19 areas that the private ISP is not going to be able to reach, or do we have to  
20 have a given amount of time to measure or to find out what those areas are?

21           MR. DERISO: Appomattox has been one of the  
22 areas, a hotbed for looking at broadband. There are two or three companies  
23 today, and two of them are members looking at wireless for Appomattox.  
24 The problem is you've got capital, if you've ever seen the water tower in  
25 Appomattox, it's covered. I think there are three or four companies that have

1 wireless, and one or two of those companies are bankrupt. Appomattox is  
2 one of the goals of this pilot project. In the Town of Appomattox if you  
3 employ the wireless mesh product, there's open access based on wholesale  
4 service. I'd love to serve the businesses or residents in Appomattox, and I  
5 don't know if I can afford 150 or 200 thousand to put my equipment on the  
6 water tower, or on a building or this, that and the other, but if I could buy a  
7 wireless service from the wholesale group, if I can buy it for \$10 a month  
8 and then I sell that to my customer for \$30 a month, then I don't have to  
9 spend the capital. I, as an ISP, am providing services to the businesses in the  
10 Town of Appomattox, and I've got that \$20 margin, and that's what I'm  
11 paying, because I, as the ISP, am connected to MBC and connected to the  
12 greater Internet, and they have all of their IT authentication service. When  
13 you get Internet service, you have to have those IT addresses. MBC is never  
14 going to be in that business. You've got the private ISP's, like Gamewood  
15 and Pure Internets of the world, that have all that set up. They have to get  
16 the network further into the community so they can get to a business or a  
17 residence. As far as communities that don't have it, I know Appomattox is  
18 one. I think there are places in Buckingham. We did look at it from where  
19 our industrial parks are and where our major nodes are in our network.  
20 There are a whole lot of wireless and Internet providers, and they're doing a  
21 lot of stuff.

22 DELEGATE HOGAN: I think everybody knows  
23 that there is a huge variation in quality and reliability with wireless service  
24 and the cost. If you look at a 45-megabyte wireless network, far beyond  
25 what you'd need at somebody's house, and the question is will it work. And

1 the answer is, maybe, depending on how far you want to go. That may be  
2 legalistic in a three or four mile area, because even that amount of bandwidth  
3 is basically enough to run your service. In a wireless network, over six or  
4 seven miles it probably would not work. I think one of the things we need to  
5 talk about is how dated is this technology, because we don't want to do this  
6 all over again. The answer is if we do our job right we hope not, but the  
7 truth of how well these different kinds of technologies are going to work in  
8 different environments is another question. Every time I talk to people that  
9 know this, I get a different answer. The answer is, no, they don't know.  
10 We've got to find out what's the best way before we just throw money at it.  
11 That's why I think maybe these pilot projects make sense, because some will  
12 work better than others.

13 MS. NYHOLM: Isn't that the point, that we're  
14 here to identify four or five pilot projects and use that pilot technology to try  
15 to find the best match and take that and apply it to the last mile throughout  
16 Southside?

17 DELEGATE HOGAN: Yes, but if we can keep  
18 our part of this business at the backhaul level, versus us trying to figure out  
19 which radio is the right one for X application, which I don't think we're  
20 qualified to do, if we can keep our interest and involvement where they hook  
21 that radio up to fiber backhaul, and even if they make a mistake on the  
22 radios, you haven't thrown your money away. My experience with some of  
23 this technology, almost every application, some of it will work at various  
24 levels.

25 MS. NYHOLM: Who is making those decisions?

1 We have two wireless networks at VIR, and I couldn't begin to explain it.  
2 They're working incredibly well, and they have to be very affordable.  
3 They're never down.

4 DELEGATE HOGAN: You have a local network  
5 area on the wireless, and that technology is well proven, and it's working,  
6 and it's fine for you. When you go to a wire network or an infrastructure  
7 question, the wireless becomes a good bit more difficult.

8 MS. NYHOLM: Five miles, the facility you're  
9 directing it at --

10 MR. OWENS: When you talk about wireless  
11 compared to wire, do they come close together?

12 MR. DERISO: They come close together, but I  
13 couldn't tell you percentages of how it's working. As far as the wire  
14 connection, especially the fiber optic cable, there is no way to tap that  
15 information unless you're on a server or network that can, it's way over my  
16 head. For wireless there is encryption and security built in, there are  
17 different applications, like Connie's stuff at VIR, where you're using a  
18 proprietary wireless system, I would think. It's definitely not wireless  
19 routing by Wal-Mart.

20 MS. NYHOLM: We don't, I know we don't -- for  
21 people to use it.

22 MR. DAY: Mr. Chairman, to give you a personal  
23 example, I spent the last two weeks shopping high-speed Internet service to  
24 my home and I live on a dirt road, and I don't have neighbors within a mile.  
25 The choices I have today are two. I can spend \$600 for a hardware charge,

1 which is a huge satellite company, and \$200 a month for high speed Internet  
2 alone, or for \$217 a month I can go to Citizens now, who last summer ran a  
3 cable right by my house, and I get local phone service, TV including all the  
4 movie channels and high-speed Internet.

5 MS. NYHOLM: Our satellites never work.

6 MR. DAY: What do you all do? My plan is to go  
7 to Citizens.

8 MR. OWENS: Even though there is another way  
9 to do it, cable actually gives you access to more flexibility to do other things.  
10 What we're talking about is applying something that is going to be wireless  
11 and you'll only be able to do Internet service, correct?

12 MR. DERISO: Correct. What we found in my  
13 conversation with folks in the communities, people are, the biggest thing  
14 they want is the broadband, high-speed Internet connection. Nobody is  
15 thinking, I don't think, about cable or TV service or phone service or  
16 anything like that.

17 MR. OWENS: You don't live in my  
18 neighborhood.

19 MR. DAY: Some of these companies are getting  
20 other services, the high-speed Internet and by the phone and the TV.

21 DELEGATE HOGAN: I think going back to what  
22 Tad said, are we trying to build a phone, television and Internet business, or  
23 are we trying to make sure that people have high speed broadband? I would  
24 argue we're trying to do one and not the others, although the others are nice,  
25 but as these technologies do develop, if we play our cards right, there is

1 nothing to be said that telephone and/or other services won't be available as  
2 the technology develops. Unless somebody else figures out something  
3 different, then that fiber and access point is going to be reasonably universal.  
4 I've never heard of anyone even suggesting anything in that realm was  
5 going to change any time soon. That doesn't mean it won't, but that doesn't  
6 seem to be on the horizon right now.

7 DELEGATE DUDLEY: Mr. Chairman, you say  
8 you've got all the industrial parks serviced, the sites at this point, for some  
9 one to come in and make a connection?

10 MR. DERISO: Yes.

11 DELEGATE DUDLEY: What part of the  
12 localities, and assuming that each one has at least one industrial park and  
13 maybe some have more, I think it's 20, what part of that have we covered  
14 already?

15 MR. DERISO: As far as the industrial parks?

16 DELEGATE DUDLEY: Pittsylvania County.  
17 Based on population and square miles, how many of those are in place at the  
18 industrial parks at this point?

19 MR. DERISO: MBC has, there are towers close  
20 by some of the parks that are managed by companies like American Tower,  
21 and some of those big tower companies that lease space to private providers.  
22 There are lots of towers, but the question is, how do you get to those towers.  
23 MBC built the Tobacco towers, and we built it under the theory that if you  
24 use one dollar of Tobacco Commission money it's open access, so we're not  
25 competing against or monopolizing some kind of access. What we don't

1 have in some of the communities is we don't have a tower that is quote, open  
2 access, where members can get on. I think one of the towers we looked at  
3 was, I think, it was in Lunenburg County, and the tower company wanted  
4 2,000 a month just for space on the tower. If you're looking to sell  
5 broadband for 30 or 50 a month, plus your connection charges and plus all  
6 your capital charges, et cetera, et cetera, that makes that go away very  
7 quickly. That's why the Franklin County deal was such a good way to do it,  
8 because they had zero costs on a monthly recurring basis on that tower, same  
9 as the video where we showed what happened in Keokuk, Iowa. The city  
10 allowed the company to put their wireless in exchange for free Internet  
11 space.

12 MR. NOYES: There will be opportunities to do  
13 that in Southside?

14 MR. DERISO: Yes.

15 MR. NOYES: We're not talking about necessarily  
16 building towers all over Southside.

17 DELEGATE DUDLEY: The cost model --

18 MR. DERISO: -- I don't know if the 35,000,  
19 whether, if we need 10 towers in Bedford or 2. If we wanted to use a  
20 hundred percent for the fiber and a hundred percent for wireless --

21 DELEGATE HOGAN: -- What you're saying is  
22 that if we did it alone, that's what it would cost? I hope we're not planning  
23 on doing it alone.

24 MR. NOYES: We'd like everyone to have the  
25 same thing like Franklin County.

1 MR. DAY: Does the pricing of this new  
2 technology fall under the jurisdiction of the Utilities Commission?

3 DELEGATE HOGAN: No.

4 SENATOR RUFF: Has there been any inventory  
5 of how many towers might be available free throughout the region?

6 MR. DERISO: We've done an inventory of  
7 towers, but free, I'm not sure. We probably could get that data, but we're  
8 looking at primarily large towers, like in Kenbridge, where we have a new  
9 site in Lunenburg County, and there's a very large water tower right next to  
10 the node site with nothing on it.

11 MS. NYHOLM: There's nothing on the VIR  
12 tower.

13 MR. DERISO: There are some pockets or places, I  
14 couldn't tell you where they're located, but they're out there.

15 Let's talk about the pilot project. We're going to develop an  
16 RFP for the private sector firms, the folks that do wireless all day long and  
17 know how this stuff works. Design, build, operate and maintain a wholesale  
18 wireless mesh network in selected pilot sites. Wholesale, so that this firm  
19 that we select will not be providing a 30 or \$50 a month wireless broadband  
20 connection to someone that doesn't have it today. We'll be providing  
21 services, and then it will allow the same concept as the fiber network.  
22 They'll have private sector ISP's come in, and they can buy a service from  
23 this wholesale group to get to a particular customer or someone on the  
24 network and then, this is just a thought, so far, not set in stone by any means.  
25 As an example, this wholesale company charges \$10 a month for that

1 connection, and the retail company charges the customer \$30 a month or 50  
2 or whatever it works out to be.

3 MS. NYHOLM: Does the customer have a choice  
4 between retailers?

5 MR. DERISO: Yes, we've got 17 members, and  
6 they can, there can be 17 members to begin, and all this can be hooked up to  
7 your backbone on our network. It's a simple matter of having the IP  
8 addresses. The type of equipment out there, if you're like an insurance  
9 company here, you may have provider A or provider C, and when you get  
10 online, that dot knows immediately who your ISP is. We'll use the MBC  
11 network for backhauls to ISP's and CLEC's. We're doing that today for a lot  
12 of them. Most importantly, we're going to develop benchmarks that  
13 determine what works and what does not work, give it some time to be  
14 deployed, and see what happens. I think it establishes something that would,  
15 you kind of want to test the waters and see how it's received in the  
16 community and from the fiber.

17 DELEGATE HOGAN: Why do you want to  
18 explore this wholesale wireless network, versus providing an access point on  
19 towers? What is the advantage of doing that?

20 MR. DERISO: I think the biggest advantage,  
21 you're not alienating your private sector ISP's. At the end of the day  
22 someone has got to get the money and buy some equipment and light that  
23 equipment in a community and serve those customers. If we were to select a  
24 company that does that, or let's say Pure Internet comes to us and says, we'd  
25 love to serve the community of Appomattox. Great, here's 200 and some

1 thousand dollars, go build it. What we'd like to do is for MBC to maintain  
2 title to the equipment. We don't want to operate it, and we don't want to  
3 maintain it.

4 DELEGATE HOGAN: What equipment are you  
5 talking about buying, not the radios?

6 MR. DERISO: No.

7 DELEGATE HOGAN: Do you contemplate  
8 operating what piece of it?

9 MR. DERISO: It's the wireless mesh piece,  
10 everything except the thing that goes on somebody's house. You wouldn't  
11 want to buy all the stuff that goes on somebody's house when that person in  
12 the house doesn't even have a computer.

13 DELEGATE HOGAN: What exactly are you  
14 buying?

15 MR. DERISO: The concept is we will buy the  
16 radios that do the blanket umbrella coverage in a community, say in  
17 Appomattox. There might be better solutions, but we as MBC, part of our  
18 mission is providing leadership in the technology infrastructure for  
19 Southside. It's something we're willing to invest our time and resources in  
20 and determine vendors and how it operates and then come back to you at the  
21 Commission with an application that says, here's the different vendors we  
22 have and we'd like to get the community together and say, this is what makes  
23 sense from a wholesale and access perspective. If one of our members says,  
24 we've got a contract with someone in town for a high-speed broadband  
25 connection, an Internet connection, then I need to get from where I'm

1 connected at MBC to that customer. We take it up, and it goes to the radio  
2 that goes out, and then they work out the deal with the customer for 12  
3 months or 24 months or a one-month contract or no contract. They work  
4 that out.

5 DELEGATE HOGAN: Are you ready to talk  
6 about these pilot sites?

7 MR. DERISO: Yes, there are five communities  
8 that we have, I don't know if I've got them listed here, Appomattox,  
9 Altavista, Stuart, Brookneal and Lawrenceville.

10 SENATOR RUFF: When you say Appomattox,  
11 you mean the town and not the county?

12 MR. DERISO: The town, yes.

13 DELEGATE HOGAN: So you're putting together  
14 a proposal to handle those five towns and then submit that to the  
15 Commission for approval?

16 MR. DERISO: Yes. We'd like to develop this  
17 RFP in-house for MBC, give it to the private sector for our equipment  
18 provider and find an innovative way to connect this. One of our member  
19 citizens is looking at one of the communities where they don't want to  
20 compete with the localized ISP, but they'd like to do this a wholesale way to  
21 be able to sell that to that ISP and others. We'll review those ideas and  
22 scenario and present it to the Technology Committee in the form of an  
23 application, if that's your desire.

24 DELEGATE WRIGHT: Tad, what is the time  
25 frame on this pilot proposal? What we will do from there, or what's the time

1 frame for all localities having wireless service?

2 MR. DERISO: All localities in the pilot project?

3 DELEGATE WRIGHT: All of them in the  
4 Southside region, because it's important to be true to everyone, and our goal  
5 is to have everyone that wants it in our entire region. In general, what are  
6 we talking about, and that's really the money that's driving it.

7 MR. DERISO: Yes, as far as money, that's really  
8 driving it. Once we do the pilot project, and once we work through all these  
9 issues and see what works and what doesn't work, then we can get a good  
10 model to go forward for our private sector members. Then we can figure out  
11 the areas that it's needed, what areas are lacking and what areas are needed,  
12 and then it's just however the Committee would like to do that. You can do  
13 it all at one time, depending on what the capital costs are, or you can do one  
14 or two towns a year, or fifteen or twenty or thirty a year.

15 DELEGATE HOGAN: We've got to figure out  
16 how this technology is going to work, we've got to be pretty sure before we  
17 come up with a proposal. If we had 40 or 50 million dollars right this  
18 minute, speaking for myself, I would be opposed to deploying any plan on  
19 that basis. I base that on the huge variety of technologies and/or certain  
20 scenarios, and we've got to work through all that. In a lot of cases, as you  
21 look at Franklin and other places, in South Boston, there is no argument you  
22 can make for wireless mesh in South Boston. I hate to do something that  
23 other people are going to do anyway. I think there are two things I'd put to  
24 you for an answer for that. One is, where can we help provide Internet  
25 services where there are not any? Number two, where are there middle-mile

1 solutions that we can solve that will accomplish two things that will bring  
2 much less expensive Internet access to places that have some? Number two,  
3 increase the usage on MBC, substantially that will generate cash flow that  
4 will then pay for these other employments. There is one community that  
5 somewhere between 50 and 100 thousand dollars we can probably lower the  
6 price of Internet substantially and make that whole business model work  
7 better; it's not a wireless solution, but it's a technology question whether it's  
8 wireless or copper or fiber, I don't think it makes any difference in the long  
9 run.

10 DELEGATE WRIGHT: I agree with what you  
11 just said, but at this point we're at a point where we're going to consider  
12 whether we go forward with these projects that we can say, okay, this is  
13 what we found, and this is where we're going from this point? I wonder  
14 what the time frame is?

15 MR. OWENS: Six months or twelve months or a  
16 year, or what?

17 DELEGATE HOGAN: Probably something less  
18 than a year, is that a reasonable answer?

19 MR. DERISO: Yes.

20 MR. DAY: Mr. Chairman, what would it cost to  
21 roll the dice on these five projects? What's your best guess estimate?

22 MR. DERISO: My best guess estimate is probably  
23 about 200 thousand per community.

24 MR. DAY: It's a million dollars?

25 MR. DERISO: Yes.

1 MR. DAY: I'm with you, Mr. Chairman, I  
2 wouldn't spend 50 today, but I would spend a million bucks today.

3 DELEGATE HOGAN: It would take a banker to  
4 come up with something like that. I guess that's kind of where we are. Do  
5 we want to ask MBC to go ahead and create this RFP and bring us back a  
6 proposal? Technically, thinking about this, I think our next meeting is  
7 October 27th.

8 MR. HITE: Mr. Chairman, I don't think we have  
9 any choice but to go forward, we can't go back.

10 DELEGATE HOGAN: I'm not sure we want to  
11 wait till the 26th. I think we want to see this as quickly as we can see it.

12 MR. NOYES: We need 30 days to advertise it.

13 DELEGATE HOGAN: We've got two and a half  
14 months.

15 DELEGATE DUDLEY: Mr. Chairman, if you put  
16 out an RFP and get five responses for one locality, what makes you qualified  
17 to evaluate that?

18 MR. DERISO: It would not be myself. We know  
19 enough about the technology and the providers out there to see if something  
20 is kind of smoke and mirrors or actually a tried and true project. We'll be  
21 asking for references from projects where this equipment is deployed and up  
22 and working so we can actually see what's happened with it. As far as  
23 technology, there are many resources we can call on from groups we've been  
24 working with that would love to be involved in helping to make those  
25 evaluations.

1 DELEGATE HOGAN: Would you anticipate  
2 using different technologies in each of these different parts, or each of the  
3 projects?

4 MR. DERISO: It could be, it's easier to do the  
5 same one for five localities.

6 DELEGATE HOGAN: What would we learn,  
7 then? If that was the case, if we found out it worked on one, it might make  
8 your life more complicated.

9 MR. DERISO: We can handle that, but we'd need  
10 some resources to help us with it.

11 MR. DAY: To follow up on Mr. Dudley's  
12 question, are you going to put out one RFP or five?

13 MR. DERISO: It would be one RFP, but five  
14 different scopes of work. I can't show what we've got on this computer, but  
15 we've got an aerial photo of maps. What we'd like to do is get the wireless  
16 company to say, we need aerial photo maps of these areas so that they can do  
17 the planning and processing and figure out the best place for the radios and  
18 the geometry. Dewberry has got that information already, but we can put it  
19 in a format and send it out.

20 MS. NYHOLM: Is there any disadvantage to a  
21 company that can only fulfill three of the scopes of work?

22 MR. DERISO: I don't think so.

23 DELEGATE HOGAN: Can you make sure in the  
24 RFP that you could pick any RFP, or would it be any, or all, or none, or  
25 some combination?

1 MS. NYHOLM: The benchmark, not only the  
2 company and their technologies, the geographics as well.

3 MR. DAY: Mr. Chairman, the comment you just  
4 made I'm not sure we want people cherry-picking for these five sites. I  
5 would think it's all or none. Let's say I don't want to do Stuart and Altavista  
6 but I want to do the other three. Who covers Stuart and Altavista?

7 DELEGATE HOGAN: If he puts out an RFP that  
8 has all five of these and gets five responses, some of them are for one, some  
9 of them are for all of them, he can make some mathematical computations  
10 and come up with the five, or that's how I would do it. I see your point, but I  
11 don't think you want to allow what he just touched on. That would be my  
12 opinion.

13 MR. DAY: I don't think we should allow cherry-  
14 picking for these communities.

15 DELEGATE HOGAN: You're saying we want to  
16 do all five.

17 DELEGATE DUDLEY: I would say that if Stuart  
18 is an example and five are put in the proposal, I think it's going to cost more  
19 money to go to Stuart than somewhere else. It would be in my proposal that  
20 after receiving this and receiving that, I'll do this. I believe that's how I'd  
21 base my price.

22 DELEGATE HOGAN: I think Tad said he needed  
23 30 days to advertise and put it together. We couldn't spend the money  
24 before the meeting, anyway. We don't need to vote on this, but if there are  
25 any objections to this, this would be the time to express them. We can,

1 through the power invested in the Director, go ahead and start inventorying  
2 all of the towers in Southside. That shouldn't be particularly expensive.  
3 There are a lot of towers, I couldn't tell you where they are, the State Police  
4 towers, and we can't use those, towers that we couldn't get access to, or it  
5 would cost ten thousand. In terms of putting together the inventory of  
6 towers that are really available, practically available, it seems to me that  
7 that's something we ought to go ahead and do, versus not doing it, or waiting  
8 and starting six months from now, then we've got to wait until we get that  
9 information back and figure out what to do. I do think that's information  
10 we're going to have to have. Unless there's an objection to that, I was going  
11 to ask Neal to go ahead and do that right now. Does that make sense to  
12 everybody? I've seen the layout on the map of certain areas. All right.

13 Are there any other questions or thoughts at this point that we  
14 need to answer?

15 DELEGATE WRIGHT: Mr. Chairman, do we  
16 have any other options at this point? We discussed towers before one time.  
17 I think we thought it might have been perhaps a little bit too expensive.  
18 We've looked at some things, but this is what we come back to again.

19 MR. DAY: The only other option is to do nothing,  
20 go or no go.

21 DELEGATE HOGAN: No, there probably are  
22 some other options, and here's another option. You could go to these 17  
23 members in MBC and/or anybody else and say that on a priority basis we  
24 will provide grants to lay fiber in places where you would sign a long-term  
25 contract to use the fiber. That would drive that fiber into places where

1 people had a need for it by definition, you could do that. Over time you  
2 would see that that would generate a revenue stream that could then be used  
3 for other areas, eventually that could be 700 million, and that's a possibility.  
4 I would suggest, and I think that's a great question, we don't have to do what  
5 we're getting ready to do. My guess is that the real solution is going to be a  
6 combination of those two things, wireless, and that is contract-driven or  
7 model-driven fiber. I would suggest to you that we came here today to talk  
8 about the pilot projects. We have the resources to do both, or we will very  
9 shortly. I'd suggest maybe we want to get back together between now and  
10 the 26th of October and maybe look at a template for that fiber. Here are  
11 some problems that we should be thinking about. Say somebody wants to  
12 run fiber to a subdivision, and an Internet provider like Gamewood comes in  
13 and says, we'll do it. If we run the fiber there, or if they run the fiber there  
14 now, do we run the fiber or do they run the fiber and we build a closed  
15 access network from our node to those customers. If we want to do that,  
16 we'd better realize what we're doing. If you build an open access network,  
17 that requires somewhat of a different method.

18 DELEGATE DUDLEY: I have one more thing to  
19 bring up. The City of Martinsville is considering buying or taking over  
20 Adelphia cable franchise, and I think you listed them as one of the pilot  
21 areas. Would that be a conflict or a problem?

22 MR. DERISO: Martinsville is not a pilot project,  
23 Stuart is.

24 MR. PFOHL: Mr. Chairman, one or two  
25 observations, and I'd ask Tad to back up one or two slides. I think we need

1 to keep in mind that the funds that are available to the community right now  
2 are restricted funds, so the funds that would be made available would be  
3 only for the design/build aspect of bullet number one. We'd be asking these  
4 responders to the RFP to come back, what they would bring to the table they  
5 would have to come up with funds to operate and maintain, because our  
6 restricted funds could not be used for operating and maintaining. The  
7 second is a suggestion, because I think one of the things that we want to do  
8 is ask people to make available to us at the end of this period to report back  
9 on take rates of subscribers and maybe some survey data with some of the  
10 business subscribers. To ask those people how much additional business are  
11 you doing today as a result of the increased connectivity and speed that's  
12 available to you through these services, so that we have some economic  
13 development information. I don't know what six or nine months' worth of  
14 data would tell us, and I'm not sure that the responders in the RFP are going  
15 to offer to bring to the table for a six or nine month commitment in terms of  
16 operation or maintenance.

17 DELEGATE HOGAN: Tim, I think you can  
18 answer that same question in the following way. How much bandwidth are  
19 they buying from MBC that's in direct relationship to what their usage is?  
20 While that's a little bit indirect from a telecom standpoint, I think that's  
21 exactly the method we want to look at. What's the bandwidth usage that's  
22 coming or that's being generated through our backbone? We'll have a pretty  
23 good grip on that, regardless of who it is. I think it's some combination of  
24 the two, but if you use the two together you probably could get a good  
25 answer.

1 MR. PFOHL: To get back to your question about  
2 why there are five test sites, some number more than one. When you see the  
3 data on subscriber rates and business usage, it will be more reliable if you're  
4 looking at five market places, rather than one.

5 MR. NOYES: It tells us what our deviation is.  
6 Three might do it, and five almost certainly will tell us what we can  
7 reasonably expect for this type of deployment.

8 MR. NICK PEASEE: Mr. Chairman, one thing I  
9 think is important, I think you're going to have to add something to the effect  
10 of the range and how much they can charge wholesale, because they have no  
11 competition wholesale, they're on their own. You're going to have some  
12 kind of a window there; otherwise, if you charge enough, there is no  
13 competitive advantage at all, the end user.

14 MR. DAY: I'm not sure if that's going to hold.  
15 You always have the option of getting it off, if it's too high, don't buy it.

16 DELEGATE HOGAN: The market will drive that.  
17 Tad, you can work on that, and my suggestion is that we'll ask Tad to work  
18 up those issues. I think at some point we do need to give Tad some direction  
19 if we want to see an RFP between now and October 26. I expect we need  
20 that in the form of a motion.

21 MR. HITE: I so move.

22 DELEGATE HOGAN: It's been moved, and  
23 there's a second, is there any discussion on that at this point? All in favor  
24 say aye? (Ayes.) Opposed, like sign? (No response.) With that motion,  
25 what we'll do is go ahead and try to go ahead and poll and please our good

1 friends from Southside in this process. Try to schedule a technology  
2 meeting before the October 26 meeting.

3 MR. NOYES: The Commission meeting is 26  
4 October.

5 MR. STEPHENSON: There is a slot available the  
6 morning of that meeting for your use, if that will work for you.

7 DELEGATE HOGAN: I'd say at that meeting  
8 we'd like to look at the RFP and also look at a template for other last-mile  
9 projects. I hate to try to jam that into an hour meeting before the meeting.  
10 Why don't we try to set up a date sometime between a week or so before  
11 that, and we can do it. Is this as good a place for this Committee as  
12 anywhere else? Is this an equitable distance for everybody? All right, we'll  
13 try to do that here, sometime a week or ten days before the meeting.

14 MR. DAY: Mr. Chairman, instead of having that  
15 inventory done by then --

16 DELEGATE HOGAN: -- I think it will take  
17 longer than that, if we can get it done, but I don't think it can be done.

18 MR. NOYES: We'll try to get it underway.

19 DELEGATE HOGAN: All right, I think it's time  
20 for any public comment, if there is any.

21 UNIDENTIFIED: I'm from Franklin County, and  
22 I just wanted to talk about providing fiber to areas that cannot get Internet  
23 right now. Even in Franklin County, our partnership, we're serving the  
24 county. Basically what we did is we didn't look at a tower site, but we  
25 looked for the demand and looked at where the demand was and our public

1 safety rating, and we highlighted those areas. We had towers in places  
2 where there is no demand. We have areas that don't have a line-of-sight  
3 primary backhaul, and we have a tremendous need for the Internet. I talked  
4 to Tad about one of the fiber runs that MBC is making through Franklin  
5 County and Citizens and hoping that we could tap into that fiber and have  
6 our private sector partner then broadcast from there, because we can't reach  
7 the backhaul. I think if you can provide fiber to areas like that, it would help  
8 the community tremendously. You asked about what happened since we  
9 allowed this one particular private sector company owned by our county and  
10 if someone else comes along. We put out an RFP. We actually had another  
11 wireless provider on primary power, and they really wanted to get our  
12 business. When we put out the RFP they didn't even respond, and we went  
13 back and said, we've got a private sector partner, would you mind turning  
14 over a few customers you have on that site now? It was fine, no problem.  
15 They're still working with us, because they're putting up some of our towers.  
16 If somebody came to us, I think the way we would approach it is, you're  
17 providing it, and you're letting this guy get on your towers and providing  
18 services, and we want to do the same. These are towers are part of our  
19 public safety radio system, and we have to protect those frequencies and  
20 have to protect this company, because we don't want to do anything to the  
21 current customers that need service. It'll probably be a challenge in the  
22 future, but we have some say on what we put on our towers' infrastructure  
23 and for the frequencies. The speeds that were mentioned, we're getting  
24 tremendous speed out of the wireless. We were relying on a cable provider  
25 for our primary data center, and we were getting three up, one down, or three

1 down, one up, whatever it is. The wireless, we're going to them, it's eight  
2 four, and they have been flawless for over a year, and no problems. We  
3 actually had one of our, we're expanding these facilities, we're expanding  
4 and converting over to them and put everyone on the same network. One of  
5 our outlying locations has been on this for over a year, and we've had no  
6 problems, and we're actually going to do a voice over.

7 MR. DAY: What's the percentage of people that  
8 have access to the high speed Internet in Floyd County, how many of those  
9 actually use it? I mean in Franklin County.

10 UNIDENTIFIED: It's growing, and I'd have to get  
11 with our private sector partner to find out, but I'd say we're probably, or  
12 when we finish the infrastructure, probably would be 60 to 65 percent.

13 DELEGATE HOGAN: All right, thank you. If  
14 there is nothing else, we're adjourned.

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PROCEEDINGS CONCLUDED.

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CERTIFICATE OF THE COURT REPORTER

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I, Medford W. Howard, Registered Professional  
Reporter and Notary Public for the State of Virginia at large, do hereby  
certify that I was the court reporter who took down and transcribed the  
proceedings of the **Virginia Tobacco Indemnification and Community  
Revitalization Commission Technology Committee and Southside**

CRANE-SNEAD & ASSOCIATES, INC.

1 **Commissioners Meeting when held on Tuesday, August 15, 2006 at 1:00**  
2 **p.m. at the Riverstone Technology Building, South Boston, Virginia.**

3 I further certify this is a true and accurate transcript  
4 to the best of my ability to hear and understand the proceedings.

5 Given under my hand this day of September,  
6 2006.

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Medford W. Howard

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Registered Professional Reporter

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Notary Public for the State of Virginia at Large

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17 My Commission Expires: October 31, 2006.

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