

1 approximately eight hours. The completion of this  
2 loop will allow us to have a diverse run so those  
3 types of impacts won't -- won't happen.

4 And even in the case of Lander and Riverton,  
5 the communities that Senator Case spoke of, we'll  
6 able -- we'll be able, when we complete this  
7 project, to turn high speed capacity in the excess  
8 of OC20 levels to those two communities from a radio  
9 perspective. And so the fact of the matter for us  
10 is that what we know is it is capacity that's  
11 critical in this area. And we're going to have  
12 substantial new capacity to the 22 exchanges that US  
13 West serves.

14 The last point I want to make on that is  
15 that we also have worked in conjunction with two  
16 independent telephone companies; one that was  
17 mentioned, Tri-County, TCT, that is competing with  
18 us substantially in the northwestern part of our  
19 state. But we're also leasing facilities from them  
20 and another long-haul provider to bring fiber to the  
21 communities of Cody and Powell and the surrounding  
22 areas that we serve. And, again, in the past, that  
23 might have been unheard of. But we do think that  
24 that was something to move forward with.

25 In the case of Range Telephone Company,

1 we're going to be building fiber to the Gillette  
2 area, and they're going to be building fiber into  
3 our exchanges in Sheridan. Again, I think that's  
4 unheard of in the past, but it certainly is positive  
5 from that perspective.

6           What I would like to close, however, with is  
7 the Universal Service Fund. What US West has done  
8 is to take in their portion of the federal fund and  
9 allocated it to the high cost customers in the  
10 state. We serve 250,000 customers. 50,000 of them  
11 are outside of the city -- outside of our base rate  
12 boundaries. And as a result, they are getting the  
13 direct benefit from that. We receive approximately  
14 \$19 per customer per year. The independent  
15 telephone companies rightly are receiving \$450 per  
16 customer per year. And they serve approximately  
17 50,000. We would argue that our 50,000 rural  
18 customers deserve just as much support as those high  
19 cost customers that the independents are serving.  
20 And the difference in funding, just to put it in one  
21 year's context, would take it from the 5 million  
22 that we receive today to 21 million. And I would  
23 suggest there will be a lot that we can do with that  
24 extra type of money from USF support to provide  
25 advanced services in the state.

1                   COMMISSIONER FURTNEY: Thank you, Mike.

2                   Let me see if I can get it right this time.

3                   Jerry?

4                   MR. BRONNENBERG: This is Jerry Thelma

5 Bronnenberg. Just kidding.

6                   Thanks, Commissioner.

7                   My task this morning is to give you a  
8 thumbnail sketch of telemedicine in Wyoming. And to  
9 do that, I'm going to use a few overheads.

10                  So if we could bring the first overhead up.

11                  Okay. Next.

12                  These are the key points that I will be  
13 talking about. And they will be very, very brief.  
14 I will talk about the telemedicine network, the  
15 connectivity that exists in Wyoming today or is in  
16 the installation phase. I'll briefly talk about the  
17 infrastructure, limited, about the Wyoming State  
18 Network and the Equality Network, then focus a  
19 little bit more on our telemedicine committee, our  
20 mission, our accomplishments, and our challenges.

21                  Next.

22                  Taking a look at the state of Wyoming and  
23 the telemedicine connectivity that's in the state at  
24 the current time, if we take a look up in the  
25 northwest part of the state, we have a teleradiology

1 from Afton to Jackson to Driggs, Idaho. Then moving  
2 down into the Evanston area, from the Wyoming State  
3 Hospital, we have connectivity going from Evanston  
4 to the Wyoming Medical Center in Casper; from  
5 Evanston to the Wyoming State Training School in  
6 Lander; and from the Wyoming State Hospital in  
7 Evanston to the Wyoming Retirement Center in Basin.  
8 And the purpose for this connectivity is to do  
9 mental health consultations and -- and education.

10 Moving more toward the center of the state,  
11 Thermopolis, we have medical specialty consultation,  
12 the connectivity being between the hospital in  
13 Thermopolis and the University of Washington School  
14 of Medicine. This is a three-year demonstration  
15 project between the states -- or among the states of  
16 Washington, Wyoming, Alaska, Montana, and Idaho.  
17 And, basically, what this is is a PC based desktop  
18 multimedia that has both real time and forward video  
19 conferencing capability and digital image  
20 transmission. Now, the importance of this whole  
21 thing is all of the specialties that the physicians  
22 in the Thermopolis area have through the University  
23 of Washington. And, again, this project is ongoing  
24 and has been very successful -- successful up to  
25 this point in time. And we expect it to continue on

1 very successfully.

2           There's also medical specialty consultation  
3 via telemedicine that's being installed. The  
4 network is between Greeley, Colorado, and the  
5 Torrington and the Wheatland area.

6           We have another project up in the northeast  
7 part of the state that is almost operational. It's  
8 being installed. It's between the Crook Memorial  
9 Hospital in Sundance and also the Weston County  
10 Health Services in -- in Newcastle, connecting with  
11 the hospital in Rapid City, South Dakota.

12           We also have a telepathology network that  
13 runs between the Wyoming Medical Center in Casper  
14 and the Memorial Hospital of Converse County in  
15 Douglas. This was -- project was funded by the  
16 American Cancer Society. And the purpose of it was  
17 to connect a rural, remote hospital with a primary  
18 care hospital and its staff. And, again, this has  
19 been very, very successful.

20           So this is a thumbnail sketch as to where  
21 we're at in Wyoming with telemedicine today and,  
22 within the next four to five months, as to what will  
23 be installed.

24           Let's take a quick look at infrastructure.  
25 I just want to point out that we have the Wyoming

1 State Network. It has a teleconferencing  
2 capability, audio and video. It's located -- we've  
3 got 32 sites located in 21 of our Wyoming  
4 communities. And we have the conferencing  
5 capability to conference up to three conferences  
6 simultaneously. Over this network, we also have  
7 done some telemedicine consultation. This network  
8 also serves as the Wyoming Data Network.

9           Would you move to the next.

10           The Equality Network, I'm not going to talk  
11 about any of the connectivity on that, but this is  
12 important to telemedicine in Wyoming from the  
13 standpoint that we have had a -- received an  
14 attorney general's opinion that this network can be  
15 used for health services by the private sector and  
16 the public sector provided that they pay the cost.  
17 So that gives us another infrastructure capability.

18           Moving on to the governor's telemedicine  
19 committee. It was established in 1997. It's  
20 working very, very well. We had a statewide  
21 conference in the April time frame. We had national  
22 representatives come in, as well as state  
23 representatives. We're in the process of developing  
24 a strategic plan for telemedicine in Wyoming. We  
25 expect the first draft to be completed in August of

1 this year.

2           Some of our challenges are reimbursement,  
3 licensing, and credentialing of physicians,  
4 liability and malpractice issues, and the cost of  
5 technology and its infrastructure both.

6           My time is up, but I want to leave you with  
7 this thought. Wyoming is the ninth largest state in  
8 the union. It's the least populated, about 5 people  
9 per square mile. The national average is 75. We  
10 have a shortage of physicians, and we are facing a  
11 nursing shortage. And we are hoping and planning  
12 that telemedicine will bridge the gap to provide --  
13 to increase the accessibility and availability in  
14 our rural state.

15           Thank you.

16                   COMMISSIONER FURTNEY: Thank you,  
17 Jerry.

18           Now Thelma.

19                   MS. McCLOSKEY-ARMSTRONG: Oh, I have  
20 two microphones.

21           Thank you very much.

22           Health care consumers in Montana and  
23 Wyoming, as you've heard, like many other rural  
24 areas across the country, face significant barriers  
25 in accessing basic health care services. If you're

1 a parent of a child living in Miles City, Montana,  
2 which is the telemedicine site that is the closest  
3 one to Billings on my network, for that parent to  
4 access a pediatrician for that child, they have to  
5 drive to Billings. For our guests from Washington,  
6 D.C., that would be like you driving your child to  
7 Wilmington, North Carolina, to see a pediatrician.

8 The Eastern Montana Telemedicine Network  
9 became operational in 1993. It was a cooperative  
10 effort among health care providers in eastern  
11 Montana to research the potentials of utilizing  
12 two-way interactive video conferencing to provide  
13 medical and mental health consultations throughout  
14 our region. Initially funded by two federal grants,  
15 one from the Rural Utilities Service and one from  
16 the Office for the Advancement of Telehealth, EMTN  
17 is one of the most active telemedicine networks in  
18 the country. During the past year, the Eastern  
19 Montana Telemedicine Network conducted over 2,000  
20 video conferences supporting the 13 members'  
21 clinical, educational, and administrative needs.

22 In the summer of 1993, EMTN partnered in a  
23 six-month trial with US West Telecommunications and  
24 Nemont Telephone Cooperative to develop and deploy  
25 the first telemedicine network in Montana. A daisy

1 chain dedicated T1 network was designed to provide  
2 the most cost-effective telecommunications system  
3 available. And I want to note that in 1993, those  
4 four T1s cost us \$9,000 a month.

5 With the second grant awarded to EMTN, we  
6 expanded to five new sites requiring  
7 telecommunications services from US West, Nemont  
8 Telephone Cooperative, Midrivers Telephone  
9 Cooperative, Valley Telecommunications, and AT&T.

10 Since 1993, telehealth activity in Montana  
11 has grown significantly. Telehealth services are  
12 provided in over 40 communities throughout Montana.

13 The question is, why has Montana been so  
14 successful and why has widespread deployment  
15 occurred? I think, number one, early in -- there  
16 was an early commitment by telecommunications  
17 carriers to support deployment of broadband with  
18 technology required for telehealth application. The  
19 passage of the Telecommunications Act of 1996,  
20 providing universal service support for rural health  
21 care providers. I am proud to say that the Eastern  
22 Montana Telemedicine Network has two years of  
23 funding in the bank as of today. The governor's --  
24 Governor Racicot's blue ribbon telecommunication  
25 task force, which developed the Montana interim

1 Universal Service Fund, an active and supportive  
2 Public Service Commission.

3 Commissioner Rowe, yesterday -- day before  
4 yesterday, called Bonnie Lorang Ms. Access. And I  
5 want you to know that that is very much a true title  
6 for Bonnie. She's worked very hard in the state of  
7 Montana to educate health care providers in  
8 understanding what the universal service support  
9 program can do for them.

10 In addition, the establishment of the  
11 Montana Healthcare Telecommunications Alliance,  
12 which has brought all those involved in telemedicine  
13 in the state of Montana together to support the  
14 telemedicine activity in the state. In addition,  
15 the long-standing support that we've received from  
16 both our state and federal government. And, also,  
17 partnerships with other people that have similar  
18 interests.

19 I was glad to see my friends from Wyoming  
20 here with their technology. Two years ago, the  
21 state of Wyoming's backbone, the Eastern Montana  
22 Telemedicine Network, and the Mednet Network  
23 conducted a 27-site video conference supporting the  
24 Army National Guard education.

25 Although Montana is a leader in the area of

1 telemedicine, we are still faced with the same  
2 challenges that our other rural states face in  
3 deploying telehealth services. The availability of  
4 cost-effective broadband width telecommunications.  
5 The most isolated and small health care facilities  
6 in this country are those that have the most to gain  
7 from telehealth applications. And they are the ones  
8 that can most likely least afford and have the most  
9 difficulty gaining access to the backbones that they  
10 need.

11 A side note. One of our facilities on our  
12 network, to gain approval for an expenditure to cost  
13 their -- cover their telecommunication costs, which  
14 was 120-something dollars a month, had to go to  
15 their ward for approval for that type of  
16 expenditure. Our health care facilities in rural  
17 areas are under tremendous pressure financially to  
18 stay afloat.

19 The other -- the other issue is the  
20 availability of new and emerging technologies to  
21 support new and emerging application technologies.  
22 The equipment that you see over there by Bonnie, in  
23 1993, when we started, cost \$75,000. You can buy  
24 similar equipment today for under 10-. And the end  
25 equipment cost is decreasing, where the

1 telecommunication costs are not dropping as quickly.

2           The other difficulty that we have is the  
3 limited benefit from -- in the competitive  
4 marketplace. We don't have a whole lot of  
5 competition out there in our most rural and frontier  
6 areas of the country. Universal support is  
7 providing important discounts to health care  
8 providers for telecommunications services. Today,  
9 if it were not for the Rural Healthcare Program,  
10 rural health providers would have difficulty  
11 absorbing the cost of telecommunication services  
12 needed for telehealth applications. But universal  
13 service support addresses only the challenge of  
14 today. I suggest that we face a greater challenge.  
15 And that one is preparing for tomorrow. The  
16 challenge will be to ensure the equitable deployment  
17 of cost-effective broadband telecommunications  
18 services to rural and frontier areas of this  
19 country.

20           Thank you.

21           COMMISSIONER FURTNEY: Thank you,  
22 Thelma.

23           Ron?

24           MR. SCHAIBLE: Thank you, Steve.

25           Black Hills Corporation is one of a handful

1 of South Dakota companies that are listed on the New  
2 York Stock Exchange that are public companies.  
3 Black Hills Corp is really made up of three  
4 companies. There is the one that is probably the  
5 best known, the regulated power and light company.  
6 And the unregulated company is -- or unregulated  
7 energy has a commitment here in Wyoming in the way  
8 of Wyodak, as it's known here in Wyoming. And we  
9 have the responsibility for the third company, which  
10 is the communications company known as Fibercom.  
11 And Fibercom is an advanced broadband facilities  
12 based provider of services, of all the services.

13 And, Commissioner Rowe, this is one of the  
14 success stories, if you will, in competition.

15 Let me give you a little background on how  
16 it started. Black Hills Corp was looking for some  
17 advanced services, as well. And it was one of the  
18 members of the economic development committee. And  
19 in a meeting in northern Black Hills, which is  
20 Sturgis, Spearfish, Lead, Deadwood, and Belle  
21 Fourche, the incumbent provider said, You should be  
22 happy; you're lucky you have what you have. And  
23 from the moment that meeting was over, Black Hills  
24 Corp started spending money. And believe you me, we  
25 spent a ton of money in the meantime.

1           But what we've done is that we made the  
2 decision to get into the communications business in  
3 a big way, aggregated the resources, built a  
4 building, started building the systems, put the  
5 systems into place, all the systems, from antenna  
6 farms, head-end equipment, the latest in switch  
7 equipment, the latest in network equipment, the  
8 latest in transport equipment. And we started  
9 building an outside plant, as well. So we've built  
10 intercity and intracity fiber rings between the  
11 communities in northern Black Hills and in Rapid  
12 City. We're still building, but our backbone is  
13 complete. We've built about 200 miles of fiber  
14 optic backbone, maybe another 350 miles of fiber in  
15 the distribution network, another 350 miles of  
16 hybrid fiber coax.

17           I noticed, for those of you that were on the  
18 bus yesterday, AT&T's description of the HFC, and  
19 other providers are doing it, that's true. I think  
20 ours is a little bit more robust. We've gone to the  
21 latest in equipment and 860, not this 550 or 750.  
22 We don't serve 600 to 1,200 homes for each of our  
23 nodes. We've got nodes out there that are 26 and 35  
24 residents. So it's a pretty robust network from  
25 being able to aggregate traffic.

1           The topic here is the importance of demand  
2 aggregation. And, of course, the importance there  
3 is, what work will be done? What can you do with  
4 it? What is the band width available to be able to  
5 do work? And we are serving customers, and our  
6 customers love it. The customers that are fiber  
7 direct enjoy the high band width capability. And  
8 there's a lot of hundred megabit transland  
9 applications, both intracity and intercity, working  
10 today. We provide a service that we think is more  
11 robust in a lot of ways. And it's certainly -- we  
12 try to provide them with better customer service at  
13 a lower price.

14           The residential customer is really our play,  
15 so we bring a full suite of services and the video  
16 television services, some 209 channels, if you will,  
17 digital music channels, 32 pay-per-views, and on and  
18 on. Along with that, we have the cable modem  
19 service that we're putting in, and telephony  
20 service. So we have all of our services ready to go  
21 from the system standpoint. We started putting some  
22 test customers out and started serving customers.  
23 And today, you know, I can report back that customer  
24 acceptance has been absolutely superb. So, you  
25 know, we're pleased that that could be the story.

1           I think I'll leave you. And I know that  
2   from a time standpoint, we could go on. And I could  
3   go on about this for the next two hours, but I'll  
4   leave with one more story that talks about our  
5   governor. And during the course of the year, I got  
6   to know him. And he's a pretty robust fellow and  
7   not unlike Jim, I imagine. But in one of the early  
8   press releases, he said, This is a network unlike  
9   any other on the face of the planet. I had an  
10  opportunity later on to visit him and go over some  
11  of the technical details and explain to him why that  
12  was true. After an hour and 15 minutes, he said,  
13  Why did you do this in western South Dakota? And  
14  the answer was simple. We live there. I said,  
15  Bill, you know, that's where we live. The  
16  electricity, utilities, all of those are independent  
17  businesses. I mean, they charge us. If they walk  
18  across the street for us, I get the bill. So it's  
19  totally separate. Make no mistake about that. But  
20  it's where we live.

21           Now, we have also made an announcement.  
22  Wall Street is aware that we have sent some teams  
23  out to do some exploration. And we'd made the  
24  announcement that we will, in fact, or are, in fact,  
25  exploring how we might duplicate or replicate what's

1 been done in northern Black Hills and Rapid City and  
2 some of the other rural markets. We're not prepared  
3 to go beyond that at this point, other than the fact  
4 to say that we're exploring that. And, of course,  
5 that's really -- there are some really high risks  
6 associated with that. And we're not really ready to  
7 make the announcements at this point.

8 So thank you, Steve.

9 COMMISSIONER FURTNEY: Thank you, Ron.  
10 Victor?

11 MR. DOBRAS: Thank you, Steve. I'll  
12 just launch right in here in the interest of time.

13 To begin with, Sprint serves four local  
14 exchanges in the southeastern part of Wyoming as  
15 their local telephone company. That includes about  
16 74 access lines. And some of those customers live  
17 as far as 52 miles from town. Over the last three  
18 years, we have spent a little over \$13 million in  
19 upgrading our network in those exchanges to do,  
20 among other things, ISDN availability in all four of  
21 the exchanges. Since January of 1999, we've offered  
22 ISDN BRI in those exchanges for \$25 a month to  
23 residential customers, \$35 a month for business  
24 customers. Those are pretty cheap prices as you  
25 look at ISDN rates around the country. Since

1 January 19 of this year, we've offered ISDN PRI in  
2 those same exchanges. So far, customers haven't  
3 showed much interest. We have a total of seven ISDN  
4 BRI customers, and only one of those is residential.  
5 We have one ISDN PRI customer. That's the cable TV  
6 company. Putting it another way, our market  
7 penetration right now is about one-tenth of 1  
8 percent.

9           And we think that raises some interesting  
10 questions about some of the fundamental assumptions  
11 for broadband demand. You know, have we assumed an  
12 unmet demand that doesn't exist, for example? Maybe  
13 we really don't understand which customers want it  
14 and which customers don't. Second, is the price  
15 still too high with today's technology? Certainly,  
16 people aren't beating down the door to buy it at \$25  
17 a month.

18           A couple of our previous speakers have  
19 talked about updating the definition of basic  
20 telephone service to include broadband. In  
21 Minnesota, which is one of the other states that I  
22 work with, the Ventura administration introduced a  
23 bill this past year to change the basic definition  
24 of telephone service to include availability of 256  
25 kilobit service to all customers. When they went to

1 put the price tag on that, they determined that they  
2 would have to put a 30 percent surcharge on all  
3 intrastate telecommunication services to pay for  
4 that. That didn't fly very well this past year.

5 Will aggregation of demand help? Maybe;  
6 maybe not. I sure would like to have a little more  
7 demand to aggregate in our territory, anyway.

8 So with that, I'll turn it back to you,  
9 Steve.

10 COMMISSIONER FURTNEY: Thank you,  
11 Victor.

12 Questioners, does anybody have a question  
13 they'd like to start off with?

14 Commissioner Rowe?

15 COMMISSIONER ROWE: Concerning  
16 telemedicine, first, Thelma was too modest and  
17 didn't point out that the EMTN has been nationally  
18 recognized and received awards for its pioneering  
19 work. That's really one of the things in Montana  
20 that we're especially proud of.

21 The telemedicine examples, they tie together  
22 a whole series of issues in terms of facilities,  
23 pricing, coordination among providers. You can go  
24 down from there into training and confidentiality  
25 issues that are particularly important. Liability

1 issues, too, in telemedicine.

2 I'd like to hear from both of our  
3 telemedicine representatives about, first of all,  
4 the customer response and then practitioner  
5 experience and response.

6 MR. BRONNENBERG: Well, regarding  
7 physician response in Wyoming, I think that we're  
8 facing the same problem in Wyoming that's been faced  
9 nationally regarding our physicians. One is  
10 education regarding the use of -- of telemedicine.  
11 We have groups of physicians -- or some physicians  
12 that are -- you know, really, really want to move in  
13 that direction of using the technology and the  
14 capability. And then we have other groups that --  
15 that are just not there. Again, we kind of think  
16 that -- from what we can gather, that education is  
17 an issue. Cost is an issue. You know, one of the  
18 things that we hear in our telemedicine committee  
19 meetings is just the cost of the connectivity, the  
20 cost of not only the connectivity but also of the  
21 equipment. So one of the things we're trying to do  
22 is to get more demonstration projects in Wyoming so  
23 that -- to demonstrate that we can be successful,  
24 and then go after -- after more grants.

25 The issues regarding the customer, there --

1 there's customers that still want the face-to-face  
2 contact with the physician and absolutely are afraid  
3 of -- of using -- using telemedicine, the  
4 telemedicine technology. But by the same token, it  
5 swings to the other side, also. The other direction  
6 is that, in our rural communities, what we're  
7 hearing is that the customers are wanting the --  
8 wanting telemedicine to be extended into the  
9 communities and are looking forward to it and feel  
10 that it will -- if the quality of the service is  
11 high, that the direct physician contact, or with a  
12 nurse and that, is not that important.

13 So I've sort of ridden the fence on  
14 answering your question regarding Wyoming, but  
15 that's just the way it is. It swings from one  
16 extreme to the other extreme in Wyoming. And one of  
17 the things that we -- that we need to do is really  
18 focus on the education side.

19 MS. McCLOSKEY-ARMSTRONG: From the  
20 Montana experience, what we found is that our  
21 patient satisfaction with clinical services over  
22 telemedicine is extremely high. We have seven years  
23 of data that, on a satisfaction scale of 1 to 8, the  
24 average is 7.5 with the service that they provide  
25 over the system.

1           The other issue with the clinical  
2 perspective, I think initially in our state, as we  
3 brought our telemedicine networks up, there was some  
4 real concern from our rural providers that the  
5 patients would be kind of drained off from that  
6 small, rural health care facility, which would have  
7 a potentially significant negative impact to those  
8 facilities. Over the last seven years, 96 percent  
9 of the patients that we've seen over our  
10 telemedicine network are retained in that rural  
11 community, which means the health care dollars stay  
12 there. The shopping dollars stay there. There's  
13 lots of things that the economic impact will have on  
14 that particular community.

15           Our physician groups, like most of us, tend  
16 to not like to change the way we do things. And one  
17 of the challenges in telemedicine is figuring out  
18 how to integrate the technology into the practice of  
19 medicine. And I think one of our challenges has  
20 been one of economics in that -- that what we've  
21 done in telemedicine is we've developed this  
22 telemedicine room that may be across the street from  
23 the clinic, that the physician has to walk across to  
24 to do a consultation. Well, in our day and age,  
25 that means that he probably could have seen two

1 additional patients at the same time. So our  
2 challenge is to get that technology at the desktop  
3 and to get that technology on the local area network  
4 that then goes over the wide area network that  
5 allows us to work more efficiently.

6 The other challenge in that is the  
7 electronic medical record. And when we talk about  
8 telehealth applications, I'm not just talking about  
9 interactive video conferencing. We're talking about  
10 teleradiology, telepathology, electronic medical  
11 record, all of the applications that will allow us  
12 to provide service. And the other new frontier,  
13 which is the largest growing area in telehealth  
14 services today, is the tele home care. It's  
15 treating that patient at that level of -- that  
16 there's a need to see.

17 So we've got some real challenges.  
18 Education, adaptation, and implementation are all  
19 challenges that we face.

20 COMMISSIONER FURTNEY: Governor, do you  
21 have a question?

22 GOVERNOR GERINGER: I have a question  
23 for the -- I guess the providers of connectivity,  
24 telecommunications.

25 The discussion portion of this part of the

1 hearing has to do with aggregating demand. And it  
2 sounds as though we need to be also discussing how  
3 to stimulate that demand. When we talk about a  
4 competitive marketplace and stimulating or the  
5 opportunity to provide service based on service to  
6 customers, the customers also have to perceive a  
7 need for that. And what comes through so far in  
8 some of the discussion is that, with telemedicine  
9 creating a base of demand, although in some places  
10 very reluctantly, it reminds me of the Health  
11 Passport Project, the smart card that we were trying  
12 to implement in our western states, where the  
13 providers are the most reluctant to use it.

14           Thelma, your comment about integrating  
15 technology into the practice of medicine is very on  
16 target. It's happening in education. It's  
17 happening in business. Do we need to teach them how  
18 to use it, or do we need to demonstrate how to use  
19 it? I would go with the latter.

20           So for Commissioner Furchtgott-Roth, lest  
21 anybody believe that this is just focused on the  
22 FCC, I, as governor, take responsibility, as I'm  
23 sure others would take responsibility for what can  
24 we do to help stimulate demand so it can be  
25 aggregated.



1           And so I would put the question to US West  
2           and then others who will follow in the next panel.  
3           If they would address the issue of how -- if they  
4           have seen barriers in the stimulation of demand. We  
5           want to meet -- we want to make competition. We  
6           want to encourage competition. And we want to have  
7           a market based approach. But there has to be  
8           perceived benefit or real benefit on the part of the  
9           consumer or the -- the cost for service.

10           I guess, Vic, you made the comment that  
11           apparently \$30 a month is too high. It's not. \$30  
12           a month is not too high for the type of broadband  
13           capability you're talking about. But there is not a  
14           perceived benefit that relates to that. And that's  
15           part of it.

16           So I guess I'd address it to Sprint and US  
17           West.

18           MR. DOBRAS: Governor, I was involved  
19           in a meeting ~~earlier~~ this week in Minnesota with  
20           some municipal electric utilities who are ~~providing~~  
21           some broadband ~~services~~ within various cities in  
22           that state. And the approach they described to us  
23           in that meeting was one where they worked with the  
24           local community colleges to educate students in the  
25           high schools and in the college programs, as well as

1 local business people, as to what was out there and  
2 how they might be able to use that. And then, in  
3 fact, educate consumers on what they could do if  
4 they had the tool. So I think that certainly is one  
5 step that could be taken.

6 MR. CEBALLOS: Governor, for us this  
7 has been a real opportunity. US West has 22  
8 exchanges. And I take it as my personal  
9 responsibility to go to those 22 exchanges. And I'm  
10 not quite on your campaign schedule, but I'm almost  
11 there. I'm out there as much as we can.

12 In fact, I think I've got somebody back in  
13 the back of the room that has a piece of information  
14 we give. We call it At A Glance. And we're going  
15 out to those communities and holding something  
16 called solution seminars, talking about what the  
17 services do, talking about applications for those  
18 services, how they work, and then actually providing  
19 them with a list of broadband services in their  
20 communities with their price; not the price in  
21 general or what it is, but what they can get it  
22 with. Then we've been doing follow-ups with them.  
23 And we've had some great successes. For example, I  
24 know, in Riverton, we did find one company that just  
25 believed that there was not services available. And

1 it was a company we were potentially going to lose.  
2 And we found that they were actually shipping more  
3 per month by overnight mail of disk information than  
4 it would have cost them to buy a T1 to do it.

5           So those are the types of things that we  
6 think we need to be engaged with to help people  
7 understand the availability that's there. We can  
8 talk about perception and reality, and that might be  
9 a problem. But if we don't help change the  
10 perception, then the belief is that there's not  
11 things that -- that they can work on.

12           And I think the final thing that we have  
13 done -- and it's just recently in Laramie, where  
14 we've announced the rollout of DSL there. That's  
15 the smallest community we've ever rolled out DSL in.  
16 And it was absolutely because of a partnership with  
17 the university. And not only does the university  
18 benefit from it, but then the entire community does.  
19 So I think it's those opportunities to look to  
20 aggregate, to work with other independent telephone  
21 companies, to work with other state agencies, other  
22 businesses. And telemedicine is no exception. I  
23 know I have a person sitting on your telemedicine  
24 council. And the reason we are doing that is  
25 because we believe, through greater education, we

1 can show the value of those services to the -- to  
2 the health community and then also bring the benefit  
3 to the rest of the community, as well.

4 COMMISSIONER FURTNEY: Commissioner  
5 Furchtgott-Roth, I think you had a question.

6 GOVERNOR GERINGER: Steve. I forgot we  
7 still have another provider here to respond.

8 MR. SCHAIBLE: I just have one thing to  
9 add to that. And that has to do with the snowball  
10 effect of what happens when you put the  
11 infrastructure into place. It's like it breeds on  
12 each other, and it expands that way. Now, we've  
13 done some work in terms of our e-commerce business  
14 is to help our business people get into e-commerce,  
15 if that makes any sense. So -- but once it's out  
16 there, it's out there available on a widespread  
17 basis and you have those particular -- that  
18 connectivity available. The applications, in a  
19 small community especially -- and I think about  
20 Spearfish and Belle Fourche. The business community  
21 is revived today and excited about talking about  
22 what are the applications that they're doing and so  
23 on and so forth. And so it's got to kind of catch  
24 fire, Governor.

25 COMMISSIONER FURTNEY: Commissioner,

1 did you have a question?

2 COMMISSIONER FURCHTGOTT-ROTH: This has  
3 been a very interesting panel. And one thing I walk  
4 away from it with is there are a lot of  
5 opportunities with demand aggregation. A lot has  
6 been going on in the states here. And I think, with  
7 the possible exception of the eastern Montana  
8 telecomm- -- telemedicine project, most of these  
9 case studies have not substantially involved federal  
10 universal service, although I'm quite sure many of  
11 you would like to have more of that.

12 I was quite intrigued by Governor Geringer's  
13 comments, which I very much enjoyed. And he had a  
14 very eloquent description of some of the problems  
15 with the FCC's universal service program and the  
16 distribution of it. And Senator Case, as well, had  
17 some very colorful comments about the FCC. I feel  
18 compelled to respond and perhaps to add just some  
19 numbers to this.

20 Five years ago, I sat as a staffer on the  
21 House side, watching the drafting of the  
22 Telecommunications Act of 1996. And there was this  
23 section on universal service, Section 254. And  
24 everyone on both the House and the Senate side said,  
25 Well, this -- this section is for the big square