

TOWN OF ACTON  
PLANNING BOARD

PUBLIC HEARING  
5 CRAIG ROAD - CELL TOWER APPLICATION

JANUARY 7, 2014  
ACTON TOWN HALL  
ROOM 204  
472 MAIN STREET  
ACTON, MASSACHUSETTS  
7:48 p.m.

---- Reporter: Julie Thomson Riley, RDR, CRR ----

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1 P R O C E E D I N G S

2 7:48 p.m.

3

4 CHAIRMAN CLYMER: All right. Again, sorry  
5 for the delay. We now have a quorum, so we can get  
6 started. And just if anyone's going to the mike to  
7 speak, just make sure you give us your name,  
8 address, and spell your name too, so we can get that  
9 correct.

10 Thank you.

11 And we'll let you get started.

12 MR. SOUSA: Very good.

13 Good evening, Mr. Chairman, members of the  
14 board. For the record, I'm Ricardo Sousa from  
15 Prince Lobel Tye. I'm here on behalf of my partner,  
16 Brian Grossman, who's no longer working on this  
17 application; so I'm taking over for him. So you'll  
18 see that I'm replacement counsel for the applicants  
19 SBA and AT&T Wireless as part of the record.

20 And it's my understanding that when we  
21 left off, there was some additional homework for us  
22 to do both on the RF side and on the site acquisition  
23 side. And as such, radio frequency engineer for  
24 AT&T Wireless who is Amjad Md who's -- he was here

1 in the room. He may have stepped out. He has  
2 uploaded his plots, and he has provided some  
3 additional plots and drive test data and information  
4 to Mr. Maxson who is the Town's consultant relative  
5 to radio frequency issues and just prior to our last  
6 hearing in December, which was continued, we  
7 received a report from Mr. Maxson that we tried to  
8 address. There were six various points relative to  
9 the information that the applicants have submitted  
10 to the Town and to the Board, and Mr. Maxson had six  
11 points that he wanted us to address.

12 I believe we have addressed those not  
13 necessarily -- I don't want to speak for  
14 Mr. Maxson -- to his satisfaction, but we've been in  
15 dialogue a few times in the last few days, and  
16 Mr. Md is going to submit some plots to the Board  
17 and sort of walk you through that, or if it's the  
18 pleasure of the Board to hear from Mr. Maxson  
19 instead, since he has submitted a report to you as  
20 of the December hearing, I'm amenable to that as  
21 well, however this Board prefers to proceed.

22 CHAIRMAN CLYMER: I guess the question is,  
23 Mr. Maxson, do you have all the information that you  
24 need to comment, or are you going to get anything

1 from the presentation that he was planning on doing?  
2 Have you already seen all these plots?

3 MR. MAXSON: I have.

4 CHAIRMAN CLYMER: Okay. So, you know,  
5 we're certainly happy to --

6 MR. SOUSA: I think it makes more sense  
7 perhaps for Mr. Maxson to report, and then we can  
8 address any outstanding issues that still remain.

9 Thank you, Mr. Chairman.

10 CHAIRMAN CLYMER: That's great. Thank  
11 you.

12 MR. MAXSON: Good evening. My name is  
13 David Maxson with Isotrope. I'm a consultant to the  
14 Town on this application, and I have succeeded in  
15 handing out all of the copies of the letter that I  
16 just circulated. If I could have a copy for  
17 reference, I will return it.

18 Thank you.

19 I just wanted to get this on the record  
20 because I neglected to get this out just before the  
21 holidays. I was in touch with the Massachusetts  
22 Department of Transportation and asked them about  
23 their process for making property available for  
24 wireless facility siting and specifically in Acton.

1           The gentleman I spoke with was a Martin  
2 Polera who works with Frank Vallarelli who  
3 apparently is the point person for these kinds of  
4 matters in the Town of Acton. And Mr. Polera has  
5 described the process, and I can quickly summarize  
6 that just verbally for the record.

7           That DOT canvasses the site to be clear on  
8 ownership and value; then does -- they use the word  
9 surplus as a verb here -- surplus the site from the  
10 DOT asset inventory, and they issue an RFP and award  
11 an RFP for developing the site for purposes including  
12 wireless facilities. This is done with community  
13 participation. So there is a sort of a consultation  
14 period before they issue the RFP, and then they  
15 finalize the terms of the agreement with the winning  
16 bidder. And then the bidder can then construct  
17 their facility.

18           Now, Mr. Polera says that as of December,  
19 they expect to begin a more formal outreach to the  
20 Town in March or April. So this process of  
21 consulting with the Town is something that would  
22 pick up in the spring and could probably take a  
23 couple or a few months before an RFP would be  
24 issued, if one were issued at all.

1 I have a little bit of experience with  
2 this in my own Town of Medfield, where there's a water  
3 tank that was on State-owned property that had a  
4 similar process with DCAMM. There was a consultation  
5 with the Town, and then they put out an RFP for  
6 wireless antennas on the water tank.

7 So there are some DOT properties along  
8 Route 2 that we've discussed, mostly near Hosmer  
9 Street on each side of Route 2. There are actually  
10 several properties not just the one with the group  
11 residence on them. And so there are some  
12 opportunities there. The challenge is that those  
13 are months away and uncertain, and the applicant is  
14 before you right now with an application.

15 So something you might have to consider  
16 in evaluating the alternatives under the  
17 Telecommunications Act is whether this is an  
18 appropriate alternative to consider one of these  
19 DOT properties for a cell tower.

20 Now, in the questions we had for the  
21 applicant from the last meeting, we did include  
22 questions about locating antennas at locations like  
23 a DOT property, and the applicant did submit some  
24 new coverage plots to illustrate that, and I just

1 received those yesterday; and we have been furiously  
2 burning up the telephone lines to clarify some  
3 questions and get some things straightened out  
4 between myself and the applicant's attorney.

5 And, first of all, I think I'll just point  
6 out that the applicant submitted two sets of  
7 coverage plots. One is -- while the titling, I  
8 think, is not on the plots themselves, it is on the  
9 files, the file names. One is for the current third  
10 generation, 3G technology. The second is for  
11 coverage of the LTE technology service, which is the  
12 new service that AT&T and many other companies are  
13 rapidly working to deploy across the United States.

14 The thing is at this point, while we have  
15 some coverage plots about LTE, my company, Isotrope,  
16 has not received any signal power information or  
17 antenna information. We have not done any modeling  
18 of the LTE, and similarly the drive test data that  
19 also was submitted by the applicant, which I'll talk  
20 about shortly, is about the 3G technology rather  
21 than about the LTE.

22 So I think the focus can be on the 3G  
23 coverage, and to the extent that the applicant wants  
24 the Board to consider the LTE coverage as part of

1 the analysis, we might want to go into more depth on  
2 the LTE coverage modeling because it's -- it's not  
3 as complete as the modeling that we've done, and the  
4 applicant has done for the third generation  
5 technology.

6 If you'll permit me to jump around, I will  
7 go to the drive test data. The applicant did have a  
8 contractor, that is well-known in the area, that  
9 does this kind of work, conduct a drive test of the  
10 3G technology and produced the data for the applicant  
11 for AT&T; and then AT&T produced a drive test map.

12 I've been asking some questions about some  
13 of the assumptions and what we call normalizations  
14 between the field measurements and the computer  
15 estimations. And because sometimes what you measure  
16 in the field is a different characteristic than what  
17 your computer is modeling, then you need to make the  
18 two agree before you compare the drive test with the  
19 computer modeling. And I had some questions this  
20 evening before the meeting started, and the  
21 applicant was very helpful in answering. There may  
22 be a little bit of a difference between the apples  
23 we're looking at in the drive test and the oranges  
24 we're looking at on the computer models. So a

1 one-for-one comparison of the drive test and the  
2 computer model, I would not recommend yet.

3 That being said, if we can look at the  
4 drive test data, it will still give us a general  
5 sense of the behavior of the existing coverage from  
6 the existing facilities.

7 Is that something that you can put up on  
8 the screen?

9 (Mr. Md complies.)

10 MR. MAXSON: Thank you.

11 It's good you have a screen. I seem not  
12 to have my hard copy at my fingertips.

13 Here we go.

14 MS. GORMAN: Do you want a pointer?

15 MR. MAXSON: Do you have a pointer?

16 MS. GORMAN: I think so.

17 MR. MAXSON: Awesome.

18 High tech. I'm now equipped with a laser  
19 pointer. Thank you.

20 If you look at the legend on the chart, if  
21 I got the number right, you see the signal strength  
22 thresholds that the applicant is portraying to  
23 illustrate best coverage, which is the light green,  
24 which they feel would be quite good inside

1 buildings. The dark blue dot is the next level of  
2 coverage down, which in my estimation, still works  
3 to some degree in buildings, but it's not as  
4 reliable and is reliable in automobiles, and the  
5 applicant can certainly wave at me if I'm  
6 misrepresenting anything, and we can make  
7 corrections. And then you get to weaker signal  
8 levels with the yellow, and then down in the red,  
9 that's a signal level that if you're standing real  
10 still, the phone might work, but it's not terribly  
11 reliable at all.

12 And so what the applicant has determined  
13 with this drive test of their 3G technology is that  
14 in the vicinity of School Street and Route 2, which  
15 I'm circling here in the center, very close to the  
16 Craig Road cell site, the signal levels are up into  
17 the blue region with some pockets of green. So  
18 they're fairly strong, but they're not solid at the  
19 in-building signal level that the applicant would  
20 like to see, but if you go either way on Route 2  
21 from that pocket of coverage, you can see that it  
22 drops down quite quickly to levels that are the red  
23 there. It's really unreliable.

24 And then if we could pop up the 3G current

1 coverage map. I want to try and toggle between  
2 these two a little bit to make some comparisons.

3 And is there a magic way to make that full  
4 screen? Because the other one was full screen, but  
5 I don't know how.

6 MS. GUICHARD: You can try view.

7 MR. YACOUBY: Try zoom.

8 MR. MAXSON: Yeah, I think there is a  
9 view. You can do the document without the other  
10 hooperaffa around the edge.

11 So here I am circling the area that is  
12 indicated in the computer model that we just looked  
13 at on the drive test around School Street, and  
14 Route 2, and we see that the computer model is  
15 suggesting that the signal level never gets up into  
16 the blue or green, and as we move east and west of  
17 this circle on Route 2, we can see it very quickly  
18 goes to red, which is moderately consistent with the  
19 drive test, but this area in the middle has a large  
20 pocket of a much stronger signal than the computer  
21 model is estimating.

22 This is not to say that the computer model  
23 is bad. It's just that computer models have  
24 variations between reality and projections. The

1 variations on my computer model might be a little  
2 different than the variations on the applicant's  
3 computer model, but this is where I raised that  
4 question about, gee, isn't this signal stronger in  
5 this area than your computer model is showing. The  
6 drive test indicates the answer is yes, in part, but  
7 not completely. So the drive test falls somewhere  
8 between the applicant's estimation of coverage and  
9 Isotrope's estimation of coverage, which  
10 I guess means we're both close but on different  
11 sides of the divide.

12 Now, if we look to the west on Route 2,  
13 towards where Hosmer Street crosses, we can see that  
14 there is some relatively solid dark blue coverage  
15 along Route 2 that I think is coming perhaps from  
16 Great Hill, and that's the computer model.

17 Now, if we could go back to the drive  
18 test.

19 Thank you.

20 We'll look at that same area, and we'll  
21 see that the drive test in this case is not quite so  
22 optimistic. Oh, look at that. And the drive test  
23 around Hosmer Street is within that area, mostly  
24 yellow rather than blue. So here the drive test

1 says the signal is not as good as the computer model  
2 says it would be. So this is one of these things  
3 that we have to sort of take with a grain of salt  
4 when we're comparing the two. And then recall that  
5 at the outset when I started discussing this, that  
6 this drive test data that we're looking at right now  
7 is not exactly matched to what the computer was  
8 simulating. So there may be an overstatement or an  
9 understatement because the drive test has not been  
10 what we call normalized to the same units that the  
11 computer model stated it is; but in a general sense,  
12 we can still see where things are strong; things are  
13 not strong, looking at the drive test.

14 And if we look at it from the perspective  
15 of the drive test, we can see that there's perhaps  
16 more of a demand for improved coverage closer to  
17 Hosmer Street than there is closer to School Street  
18 because of the existing coverages coming down, from  
19 what I could tell from our computer modeling, from  
20 Concord.

21 And if we could then go to the first  
22 proposed coverage model.

23 Thank you.

24 We can see that the large area of really

1 solid green coverage from the proposed facility  
2 encompasses that same wedge of School Street and  
3 Route 2 that we saw the drive test showing was  
4 fairly good coverage with mostly blue and some  
5 green. So an awful lot of the work that this  
6 facility will provide is improving but close to  
7 duplicating existing coverage, and it's in an area  
8 where you have open land and not a lot of residential  
9 or commercial development other than, of course,  
10 right at Craig Road and the other residential areas  
11 nearby.

12 And then if we look heading west on  
13 Route 2 from that main footprint of the proposed  
14 facility, if you're familiar with the road, of course,  
15 the terrain changes, and you've got hills, and those  
16 sorts of things that tend to obstruct coverage, and  
17 we can see here that as we go west on Route 2,  
18 recall that the computer model was already predicting  
19 blue on this stretch of Route 2 west of Hosmer  
20 Street.

21 So the proposed facility is not really  
22 adding anything substantial west of Hosmer Street on  
23 Route 2. That's already covered, the computer was  
24 predicting, from other sites like Great Hill.

1           And then if we look at the footprint this  
2           is the, I believe -- I can't see the title on the  
3           top. This is the 100-foot height?

4           MR. MD: Yes.

5           MR. MAXSON: Okay. Thank you.

6           And we can see the footprint of the blue  
7           and green, the most desirable coverage, the blue and  
8           green and how that kind of wraps around the locus  
9           and is somewhat defined by the terrain.

10           If you would, could you jump straight to  
11           the is it 65 foot, the lowest of the three heights,  
12           rather than take you through the 80-foot height and  
13           then to the 65-foot height, I thought perhaps we  
14           could just make the biggest jump possible and  
15           illustrate the difference.

16           We can see there is a substantial reduction  
17           in height, assuming the trees are not in the way of  
18           the antennas at 65 feet; that there is an opening up  
19           of a little bit of yellow along Route 2 here, and  
20           the general boundary of the blue area is diminished  
21           a little bit, but if you have an opportunity to  
22           compare these side by side, you'll see that there's  
23           not a significant change in the footprint of the  
24           facility with AT&T's coverage with the 3G technology

1 in the PCS band by having a substantially lower  
2 height. It doesn't mean 65 foot is recommended, but  
3 rather it tells us that we have some latitude not  
4 only with AT&T's antennas, but if there's a desire  
5 to encourage maximum co-location, it's encouraging  
6 to see that this tower, if it had two or three  
7 carriers on it, the lowest carrier would still have  
8 a pretty substantial footprint, very comparable to  
9 the highest carrier on the tower.

10 So that's information to keep in mind when  
11 considering the tower height, that potential between  
12 having multiple carriers co-locate and the maximum  
13 height of the tower for a particular location.

14 CHAIRMAN CLYMER: David.

15 MR. MAXSON: Yes.

16 CHAIRMAN CLYMER: Go ahead.

17 MR. CHIN: Is this for a concealed -- a  
18 CAM or a monopine exposed antenna?

19 MR. MAXSON: The coverage data is just for  
20 antenna heights, and it's agnostic to what kind of  
21 tower. What we assume is if the antenna is 100 feet  
22 off the ground, it will have the same coverage  
23 whether it's on a helium balloon or a monopine or a  
24 CAM. We have the one distinction that we've

1 discussed before is that when we're dealing with a  
2 CAM, companies like AT&T want to use more than the  
3 normal 10 feet of the vertical space, so their  
4 second set of antennas will be a little bit lower  
5 than the top set of antennas, and it will take up  
6 more vertical space on the tower than it would if  
7 the tower were a full array kind of a tower.

8 MR. CHIN: And this is for 65 feet?

9 MR. MAXSON: This particular model we're  
10 looking at is for 65 feet with the one assumption  
11 that at 65 feet, we're assuming that the antennas  
12 are above the surrounding tree line.

13 MR. CHIN: And so if there were more than  
14 one carrier, you'd have to increase it by 10 feet  
15 per carrier.

16 MR. MAXSON: Right. Or if AT&T were to  
17 receive their desired nearly 100-foot height for  
18 their antennas, and the next carrier were to go 10  
19 or 20 feet below that, and the next carrier were to  
20 be down at something like 65 feet, that third  
21 carrier would have very comparable coverage to what  
22 AT&T would have, which means the tower would be  
23 desirable to multiple wireless carriers.

24 MR. CHIN: But a tower at this location

1 does not significantly improve what already exists?

2 MR. MAXSON: Well, what we're seeing from  
3 the drive test data is that the tower is very  
4 closely positioned to a pocket, a large pocket of  
5 coverage that is pretty good, and that in an ideal  
6 world, the tower might be located further west, and  
7 companies have to make these trade-offs all the time  
8 as to where the property's available, what the  
9 permitting is involved, and if you move to the west,  
10 how does that affect your coverage to the east,  
11 those sorts of things.

12 And we can see here, just looking to the  
13 east, we have on Route 2 towards the rotary, that  
14 there's still an area that the applicant's computer  
15 model suggests is at least yellow, which is functional  
16 but not terribly reliable, but it hasn't gone into  
17 the solid red. And that's, in part, due to the  
18 addition of the tower here. If you recall, when  
19 we were looking at the original existing coverage  
20 diagram map, that segment just before the rotary was  
21 pretty solid red and not good at all.

22 So in addition to the benefits of the  
23 really good coverage in the green and yellow, the  
24 applicant is seeing that they're getting -- thank

1 you for that -- they're getting benefits with some  
2 yellow coverage, where right now they're predicting  
3 very poor red coverage.

4 So, you know, one of the, as I say, the  
5 trade-offs is that if the tower is moved further  
6 west to achieve better coverage where there are  
7 residences and businesses, other residences and  
8 businesses, that might have an impact on the  
9 coverage to the east.

10 And why don't we take one of the locations  
11 to the west like the one at the DOT site.

12 CHAIRMAN CLYMER: Dave, while he's doing  
13 that, I believe that a 40-foot tower is by right in  
14 Acton. Has this been looked at 40 feet?

15 MR. MAXSON: I wouldn't look at 40 feet,  
16 knowing that the height of trees typically is well  
17 above 40 feet, and you need to be above the  
18 surrounding vegetation to have an appropriate launch  
19 site for your signal.

20 Now, I have been quibbling at times with  
21 wireless companies over how much tree coverage is  
22 too much tree coverage, and you hide your antennas  
23 in such a way that they are perhaps behind the top  
24 of one tree, and then the signal goes out over a

1 valley or something like that. The answer is yeah,  
2 there's some trade-offs to be made there, but once  
3 you're down to 40 feet, and you're trying to shoot  
4 through, you know, two or three acres of trees, the  
5 trees are just, especially in foliage, they're just  
6 soaking up the signals.

7 CHAIRMAN CLYMER: I mean is the signal  
8 really improved -- if you look at the direction of  
9 where the signal is improved, it looks to me like  
10 it's mostly over space that's open.

11 MR. MAXSON: Yes. And the computer takes  
12 that into account that in the direction of where  
13 there is vegetation, even if the antennas are above  
14 the vegetation, that the signal will decay more  
15 rapidly than when you're shooting across open space  
16 in the other direction, which is partly why you see  
17 an asymmetrical coverage plot from the proposed  
18 location.

19 MR. YACOUBY: I'm not sure what question  
20 you're asking.

21 CHAIRMAN CLYMER: Well, I'm just asking  
22 if the issue is are trees -- when we get to lower  
23 heights on the towers, and we're not really seeing  
24 better reception through the trees, then is that

1 really a valid argument?

2 MR. MAXSON: Well, what we're saying here  
3 is that assuming the antennas are above the trees at  
4 65 feet, the terrain surrounding the site is the  
5 primary limiter of coverage. The vegetative cover  
6 is not.

7 CHAIRMAN CLYMER: Uh-huh.

8 MR. MAXSON: It has an affect, but the  
9 terrain is the primary limiter.

10 Perhaps except in the easterly direction,  
11 as we're talking about, heading towards the rotary  
12 where that, because of all that open space, the  
13 signal decays from green to blue, and then there's  
14 quite a bit of yellow before it overlaps with the  
15 yellow from the existing facility.

16 So now we've got a site which is just on  
17 the west side of Hosmer Street, so that would be at  
18 the auto place. Concord Hotel. Okay.

19 And we just see that the footprint from  
20 this location is very different. It does not  
21 provide a blue or green coverage at all to that  
22 other section of Route 2 or School Street, although  
23 there is this little blast of blue here (indicating)  
24 that I believe is sort of spillover from the

1 proposed facility or the alternate facility at the  
2 hotel.

3 And there's one with the tower on the east  
4 side of Hosmer Street, which is at the -- on the DOT  
5 property. Was there one there?

6 MR. SOUSA: 70 Hosmer.

7 MR. MAXSON: And what we can see here is  
8 that we've moved from the hotel to 70 Hosmer, and  
9 we've positioned the tower on the high ground.  
10 Because of that, it throws a wonderful signal down  
11 Route 2, even down Route 2 beyond the blue footprint  
12 into that area that was red on the original existing  
13 coverage map, down School Street, into the area  
14 surrounding School Street, into Craig Road, and also  
15 some additional coverage to the west, providing  
16 stronger coverage on Route 2 and to the commercial  
17 developments on the side of Route 2, and to some  
18 degree, residential areas below that.

19 But if we can see, looking south from this  
20 tower height, the terrain appears to obstruct the  
21 signal a little bit because it very quickly goes  
22 from green to blue to yellow, and then it tapers off  
23 to red as it goes south. So there might be a more  
24 optimal location or a more optimal height to get

1 more coverage to the south, to get more of this part  
2 of Acton on this part of School Street as well.

3 So some experimentation could be done  
4 with that, but I think one of the compelling  
5 characteristics of these DOT parcels is that they're  
6 undeveloped, and they're heavily wooded. So placement  
7 of a tower there might be less objectionable to the  
8 community, but I -- again, I don't take any positions  
9 on that. I'm just trying to give you pros and cons  
10 of things to consider.

11 Looking at the setbacks and that sort of  
12 thing, it struck me that the DOT property's on the  
13 south of Route 2. You should be able to meet those  
14 setbacks; whereas, the ones north of Route 2 are  
15 very close to residential development and might  
16 not -- it might be harder to meet required setbacks  
17 for south of Route 2.

18 I'll stop with that. I think that's enough  
19 information. There's more coverage modeling done by  
20 the applicant, and you can peruse that at your  
21 convenience, but I think I've hit the highlights.

22 And I'm just checking to see if there are  
23 any other things I might comment on.

24 We do have a question of CAM because that's

1 a preferred approach in the bylaw. The applicant, I  
2 think, between the transition between the previous  
3 and the current attorney and the holidays and all  
4 that, we got what I would consider to be a partial  
5 answer to the question about what CAM would have to  
6 be like, and they provided a drawing of a CAM that  
7 has a 41-inch diameter. I think that's continuous  
8 base to top.

9 MR. SOUSA: It is. That's right.

10 MR. MAXSON: So it's a cylinder. There's  
11 no taper to it at all in order to accommodate the  
12 antennas of AT&T. Because the antennas are -- there  
13 would be three around, and they're fairly large as  
14 they get to these new, lower frequencies in the  
15 radial spectrum where the antennas' dimensions are  
16 somewhat proportional to the -- inversely proportional  
17 to the frequency. The lower the frequency, the  
18 larger the antenna. And they also have to put, in  
19 some cases, these electronic boxes with the antennas  
20 now that are called radio heads.

21 So they take up a little space as well,  
22 and that's where the applicant has indicated that if  
23 it's a CAM, they would like to see 20 feet of space  
24 reserved for AT&T rather than 10 feet. And being

1 the person in the middle, I look at that and say,  
2 well, gee, can we split the difference? And I would  
3 say, if it improves co-location, we can probably  
4 twist the applicant's arm and say how about 15 or  
5 16 feet instead of 20 feet? So that we can make  
6 more room for other co-locators who might want 15 or  
7 16 feet instead of 10 feet. But they have to start  
8 off with the tower height that you're willing to  
9 accommodate and then figuring out, you know, fill in  
10 the apertures and seeing whether granting them a  
11 20-foot aperture is wasteful of co-location space or  
12 whether in that particular configuration, it's okay.  
13 I would say grant it to them if it's not a problem.

14 AT&T does use an approximately 15-foot  
15 aperture on the Reeves Hill Tower in Wayland. Now  
16 it's not a CAM, but it's the same idea. How closely  
17 packed can they put those two sets of antennas, one  
18 above the other.

19 There was also a submission from a  
20 resident that I'd like to comment on briefly, and  
21 that is it's the conundrum that we talked about last  
22 time that the Board has to consider the applicant's  
23 coverage data. The wireless company's coverage data  
24 on the Internet are based on the same tower databases

1 that their engineers use to produce these more  
2 detailed coverage models. So when they average out  
3 something they say this is good. This is fair.  
4 It's a reasonable representation of something based  
5 on their computer calculations. It's just as  
6 Mr. Grossman explained at the last meeting that it's  
7 not as granular. It's not as articulated with the  
8 little pockets of dots of good and bad, and that  
9 sort of thing. But it is information that tells you  
10 that the wireless company believes it is promoting  
11 good service in certain areas, and the resident  
12 submitted those maps to the record.

13 So those are another set of data that  
14 you're welcome to look at and decide how much they  
15 weigh into your decision-making process as you  
16 review the facts in making the decision.

17 And if you'll bear with me, I'll just go  
18 through my list of questions here to make sure I  
19 haven't overlooked something.

20 I think I've touched on everything I was  
21 intending to touch on this evening. I'm happy to  
22 answer questions and work with you on the process.

23 Thank you.

24 CHAIRMAN CLYMER: So, Dave, one question

1 on item 2, so are all the assumptions laid out for  
2 you, and you felt that those were all reasonable? I  
3 noticed that in your second comment, you know, you  
4 had some questions about methodology for the drive  
5 test. Has that all been resolved?

6 MR. MAXSON: They sent me the methodology  
7 of the drive tests, and then with some further  
8 discussion before the meeting started tonight, I  
9 came to the conclusion that it appears that there's  
10 a slight apples and oranges distinction between what  
11 was measured in the drive test and what the computer  
12 is simulating on the simulated maps. So they're not  
13 to be compared one for one and color for color.  
14 They still both indicate roughly where the signal  
15 levels are very depressed or where the signal levels  
16 are very good, and we do see a small difference in  
17 terms of computer modeling, a large difference in  
18 terms of land area where at School Street and  
19 Route 2, the drive test is more consistent with  
20 Isotrope's analysis than it is with the applicant's  
21 analysis because there is pretty good coverage in  
22 that area at this time.

23 CHAIRMAN CLYMER: Again, I guess what I  
24 was asking is the drive test, there's a number of

1 factors that go into that, and I guess my question  
2 was are there any factors that would give an answer  
3 that you felt under -- or made the coverage data  
4 look worse than it really is?

5 MR. MAXSON: Yes. And I think I just  
6 described the key factor which is that we estimated  
7 there's better coverage in that open area particularly  
8 along School Street and Route 2 from the existing  
9 facility in Concord. The applicant's computer model  
10 doesn't show that; and it's with the caveat that  
11 we're doing, as I say, a slight apples to oranges  
12 comparison because the drive test data does not  
13 appear to be completely normalized to the way the  
14 computer was doing the modeling.

15 CHAIRMAN CLYMER: Okay. Anybody have  
16 questions? Derrick?

17 MR. CHIN: No.

18 CHAIRMAN CLYMER: Okay.

19 MR. SOUSA: Mr. Chairman, if I could  
20 address --

21 CHAIRMAN CLYMER: Yes, absolutely.

22 MR. SOUSA: Mr. Chairman, first with  
23 respect to the correspondence between Mr. Maxson and  
24 myself, I did have the incorrect e-mail to

1 Mr. Maxson that I sent this information last week.  
2 It went to dot com instead of dot im. He and I did  
3 speak yesterday, and we spoke again today, and the  
4 RF engineer Mr. Md has also spoken to Mr. Maxson.

5 With respect to a certain characterization  
6 that Mr. Maxson was looking for, that was not  
7 provided. I'm not so sure that was necessarily  
8 requested of us earlier. We're happy to provide  
9 that if the Board feels that it would be helpful in  
10 trying to clear up the comparison of apples and  
11 oranges as Mr. Maxson states. We're happy to do  
12 that, and if Mr. Maxson feels it would be helpful to  
13 this Board, we can take the time to do that. It was  
14 a discussion that was held literally 15 minutes  
15 before the hearing tonight. And so we're happy to  
16 clear up that question that was posed to us just  
17 this evening.

18 CHAIRMAN CLYMER: Okay.

19 MR. SOUSA: Secondly, what I'd like to do  
20 is turn to -- just take a step back and understand  
21 that the nature of this application is that AT&T  
22 Wireless has shown to this Board, through its radio  
23 frequency plots, that it does have a significant gap  
24 in coverage. It wouldn't go through the effort of

1 filing this application and deploying the resources  
2 and the time to fill that gap in coverage if the gap  
3 did not exist and if it was not important to AT&T  
4 Wireless' network, and that's why this proposal is  
5 here before you.

6 In addition to that, what SBA is trying to  
7 do with AT&T is not only to propose a structure that  
8 is going to accommodate and fill that gap in  
9 coverage, so that AT&T customers and other wireless  
10 customers can have reliable coverage in this part of  
11 Acton, but it's also trying to propose a structure  
12 that's going to accommodate not only AT&T but other  
13 future carriers.

14 As you know, there are at least right now  
15 four wireless carriers, four major wireless carriers,  
16 that need to be accommodated; and the nature of your  
17 bylaw itself is that when a structure is proposed,  
18 it's supposed to accommodate future co-location.

19 And so we have submitted as part of our not only our  
20 original application but a supplementary application,  
21 a number of different designs and while we feel that  
22 the monopine design is something that is best suited  
23 for this location and allows the carriers to install  
24 not only their current equipment but to do their

1 equipment upgrades in the future -- we think that's  
2 the best design -- we're also amenable to a CAM  
3 design, a pure flagpole design. We also proposed  
4 yet a third design, which is a three-legged structure,  
5 which is not necessarily permitted under your bylaw,  
6 but it's something that we had submitted because it  
7 was requested of us.

8           And so there's been a lot of flexibility  
9 with respect -- from the applicant itself relative  
10 to the design aspects of this installation, but I  
11 think it's important to take a step back and  
12 understand why this application is being proposed in  
13 the first place. It's really because there is a  
14 significant gap in coverage that we are required to  
15 fill and that we need to fill in order to have  
16 reliable coverage for AT&T Wireless' network.

17           At the outset of Mr. Maxson's report to  
18 the Board, he suggested that we did submit to  
19 Mr. Maxson for his review not only 3G plots but 4G  
20 plots, and I'd like to have an opportunity for  
21 Mr. Md to show those to you on the screen, so that  
22 you can see the difference.

23           The nature of the future wireless networks  
24 is that all the carriers right now are upgrading

1 their networks to a 4G LTE standard or a 4G standard,  
2 I should say. AT&T is using an LTE standard as well,  
3 and that's really the future of wireless that's  
4 going to allow customers to access wireless networks  
5 and do so much more at much higher speeds and with  
6 much more bandwidth than they can on a 3G network.  
7 So it's an important aspect of the network  
8 development process for AT&T Wireless, and so, yes,  
9 we would like you to consider those plots as part of  
10 this application.

11 But before I do that, I'd like to turn to  
12 the first point, which is this Board asked us to  
13 look at State properties along Route 2, and  
14 Mr. McGovern, Steve McGovern, who's in the room  
15 tonight, he had submitted an original site acquisition  
16 affidavit regarding his efforts in other possible  
17 sites in this vicinity to fill this gap in coverage,  
18 and he's been working trying to get an answer from  
19 the State, and he has prepared a site acquisition  
20 affidavit that I'd like to submit to the Board that,  
21 to a great extent, confirms what Mr. Maxson reported  
22 in the fact that currently this site is not  
23 available. Currently there is not an RFP on State  
24 property along Route 2. But that we have made

1 significant efforts to try and encourage them to  
2 make that available, and it simply is not available.  
3 It's simply not a viable option at this point.

4 And so what I'd like to do, Mr. Chairman,  
5 is just submit that affidavit to the Board, and I'd  
6 like to ask Mr. McGovern to just walk through  
7 briefly the steps he's taken to try to discern  
8 whether or not that property is or is not available,  
9 if I could.

10 CHAIRMAN CLYMER: Sure. Before you do  
11 that, I'd just maybe pause for a couple of questions  
12 here.

13 MR. SOUSA: Sure. Of course.

14 CHAIRMAN CLYMER: So I know that, you  
15 know, we have seen the -- we've seen the plot maps,  
16 and obviously we've seen the marketing maps that  
17 AT&T --

18 MR. SOUSA: Right.

19 CHAIRMAN CLYMER: -- addresses with their  
20 coverage, and, you know, we heard Mr. Maxson explain  
21 the difference. I'd like to hear that from you.

22 MR. SOUSA: Yeah. Sure. I think the way  
23 Mr. Grossman, my colleague, described it is that  
24 they are marketing materials. Just like any other

1 company, there are marketing materials that show  
2 generally what coverage is, and then there are more  
3 specific, more definitive plots that are submitted  
4 as part of this kind of exercise to determine  
5 whether or not there is a significant gap and where  
6 those gaps are. And so clearly these maps are the  
7 ones that you should rely on for purposes of this  
8 application, these plots that are submitted by our  
9 radio frequency engineers.

10 And in addition to that, we've taken the  
11 extra step of not only submitting radio frequency  
12 plots which are computer-simulated plots that  
13 simulate what the coverage is and will be for the  
14 future if this site is approved and constructed, but  
15 we've taken that extra step of doing a drive test,  
16 which reaffirms what the gap is in that area; and so  
17 we respectfully think that the radio frequency plots  
18 prepared and submitted by an RF engineer from AT&T  
19 Wireless, together with the drive test data, from  
20 C Squared Systems is the data that you should consider  
21 as part of this application.

22 CHAIRMAN CLYMER: Okay. And, you know,  
23 and I think just from -- you know, just speaking for  
24 myself, not for the entire board --

1 MR. SOUSA: Sure.

2 CHAIRMAN CLYMER: -- you know, I think it  
3 is hard when you, you know, you have one set of data  
4 for customers and one set of data that is the real  
5 data that we should consider; and, you know, I do  
6 think that when you start talking about significant  
7 gaps with one set of data that doesn't show  
8 significance, I think it becomes harder to believe  
9 that others are significant; but, again, I think it  
10 would be -- you know, it is unfortunate that the two  
11 maps are so different because it clearly is the  
12 voice that AT&T is putting out to customers.

13 MR. SOUSA: Yeah, I understand your point.  
14 There is a marketing world, and there is this network  
15 building world, and when we're in this forum, we  
16 have to say that what you rely on is radio frequency  
17 plots that are to that higher level of detail than  
18 Mr. Md has submitted.

19 In addition to that, there is this yet  
20 higher level of detail, which is drive test results,  
21 and when I've been involved in an application with  
22 Mr. Maxson as consultant to the Town, he has almost  
23 always requested that we do this extra step, this  
24 drive test, to reaffirm what that data is; and the

1 nature of network building is that it's very  
2 incremental. I wish I could make that map all green  
3 and blue with one installation. We simply cannot do  
4 that. There are a lot of topographical issues.  
5 There is a dynamic associated with where the  
6 existing sites are, and with respect to those  
7 existing sites, each carrier is at different heights  
8 depending on when they installed at that particular  
9 structure. And so they're going to be getting  
10 differences in propagation.

11 And so this is not a perfect world. It  
12 takes a while to build out these networks to the  
13 level that we need to, and as you can see from the  
14 plots that we've submitted, even if this site is  
15 built, there will be gaps in coverage in Acton. We  
16 simply cannot fill all the gaps with this application.  
17 We're not proposing to do so.

18 It's an incremental process. But we do  
19 feel that this is a responsible location to build  
20 the site to fill the gap in coverage that we've  
21 identified as part of this application.

22 CHAIRMAN CLYMER: Any other questions  
23 before we hear from the site acquisition?

24 MR. YACOUBY: Just an observation. The

1 reality of the world is there's marketing data, and  
2 it had to do with resolution and granularity. One  
3 is the marketing kind of general, and the other is  
4 engineering specific. And what we're looking at is  
5 engineering specific data, and that's what we should  
6 base the decision on. Any good engineer's going to  
7 tell you that. To use the marketing data would, in  
8 fact, not be appropriate from an engineering  
9 standpoint, again, if you're looking purely at  
10 engineering because it's -- from an engineering  
11 standpoint, it's meaningless data. So I think if  
12 the Board were to use the marketing map, quite  
13 honestly is ridiculous.

14 CHAIRMAN CLYMER: Yeah, I didn't suggest  
15 that. I just suggested that it's a little  
16 disconcerting --

17 MR. YACOUBY: No, but I can understand  
18 someone coming in and saying that to us. I'm just  
19 saying it's our fiduciary responsibility to understand  
20 this is a very technical area. So you have to look  
21 at technical data. That's my point.

22 CHAIRMAN CLYMER: Uh-huh.

23 MR. YACOUBY: I don't want to get lost in  
24 well, but, you know, I heard someone give a speech

1 somewhere saying that, you know, the map's all red.  
2 It's apples and oranges. So I think that's why we  
3 really need to make sure we understand and can  
4 defend what data we're looking at to make the  
5 decision on, and that's all.

6 MR. CHIN: I'd like to go back to  
7 something more basic.

8 MR. SOUSA: Of course.

9 MR. CHIN: Three years ago on the previous  
10 application by SBA for a wireless permit --

11 MR. SOUSA: Yes.

12 MR. CHIN: -- Clearwire. Clearwire?

13 MR. SOUSA: Clearwire, that's correct.  
14 That's right. They were the co-applicant.

15 MR. CHIN: Was rejected by this Board  
16 because it was not considered a personal  
17 services -- personal wireless service provider.

18 MR. SOUSA: Correct.

19 MR. CHIN: There was a second applicant,  
20 and there were many meetings held. That applicant  
21 was T-Mobile, and at no time at any of these  
22 hearings did anyone from T-Mobile ever attend. So  
23 this Board asked for a clearer letter of interest  
24 from T-Mobile and someone that would be the contact

1 point from T-Mobile. A letter supposedly was  
2 obtained showing an interest, but it was never dated.  
3 And what transpired later was T-Mobile essentially  
4 dropped out, and in May of 2010, it was withdrawn by  
5 SBA. I just want to know. Do you have a letter of  
6 intent from AT&T?

7 MR. SOUSA: Yes, we do. From AT&T?

8 MR. CHIN: Yes.

9 MR. SOUSA: Yes.

10 MR. CHIN: Can you send that to the --

11 MR. SOUSA: We can provide a redacted copy  
12 of that -- of the letter of intent, yeah. They  
13 would not have authorized themselves to be a  
14 co-applicant as part of this application unless they  
15 had a strong interest and had an agreement with SBA  
16 to utilize the tower.

17 I thought you were going to ask if I had  
18 one from T-Mobile. I don't have one from T-Mobile,  
19 but I can provide one from AT&T Wireless. So it's  
20 an agreement between AT&T Wireless and SBA to utilize  
21 this structure.

22 MR. CHIN: Thank you.

23 MR. SOUSA: Yes. And it is my understanding  
24 that Clearwire, at least at that stage, was an

1 Internet service provider and did not have the  
2 protections under the Telecommunications Act of 1996  
3 because they were not providing voice at all. They  
4 were simply providing Internet access, high speed  
5 Internet access. That's not the case for AT&T  
6 Wireless.

7 And not to belabor the point with respect  
8 to the information that's been provided, the  
9 marketing material and the RF material that's been  
10 submitted from the RF engineer from AT&T Wireless,  
11 but you've taken that second step of the drive test  
12 data, but you've taken yet a third step which under  
13 your 53(g) account, you've asked for the opinion of  
14 Mr. Maxson who can reaffirm whether or not there's a  
15 gap or not in this area.

16 So, Mr. Chairman, if I could, I'd like to  
17 ask Mr. McGovern just to step up briefly and describe  
18 and just reaffirm his discussions with the State  
19 relative to the Hosmer property.

20 CHAIRMAN CLYMER: That's fine.

21 MR. SOUSA: Thank you.

22 MR. MCGOVERN: Steve McGovern, Airosmith  
23 Development, 100 Merrimack Street, Suite 205B,  
24 Lowell, Mass.

1 Good evening.

2 Again, my name is Steve McGovern. I am  
3 Manager of Real Estate Analysis for Airosmith  
4 Development. I'm working on behalf of SBA here.  
5 They hired my company, Airosmith, to assist them in  
6 this application, and thus they got me.

7 In essence, I started working on this  
8 property and specifically attempted to contact  
9 people among others at the State back in June. I  
10 had some success finally reaching somebody at the  
11 Department of Transportation, specifically Mr. Frank  
12 Vallarelli. He had indicated that there again may  
13 be some interest, but at that point, this was very  
14 nebulous in his mind.

15 He also indicated to me at the time that  
16 there was a specific issue that he was concerned  
17 about on this particular property. Again, the  
18 specific property in question is the one at 70 Hosmer  
19 Street, and that is that when the State built the  
20 group residence for the group home that sits on that  
21 property, their intention at the time was to  
22 subdivide that lot, chunk a portion off for the sake  
23 of that home, and then do whatever they were going  
24 to do with the rest. We're not sure what that was,

1 whether they were going to convey it to someone or  
2 hold it in their surplus accounts.

3 Mr. Vallarelli at that moment was quite  
4 concerned about being able to go forward with  
5 anything because of this situation that they are  
6 still under obligation to draw this survey,  
7 delineate some property line somewhere, and take the  
8 rest of it and do something with it. At that point,  
9 in my original affidavit, I suggested to the Board  
10 that it was, therefore, unavailable.

11 Subsequent to your request to go back out  
12 and discuss this matter with them again, spoke with  
13 Mr. Vallarelli one more time. He indicated to me  
14 that he was attempting to survey it, but that his  
15 attempts had not yet been initiated. That is not  
16 just the RFP for this particular application that  
17 stands in front of you hasn't been initiated, even  
18 the point of survey hadn't yet been initiated.

19 About a month later, I reached out to him  
20 again, and he summarily asked me not to bother him  
21 with this. I'm not sure if any of this was extended  
22 to you.

23 Mr. Polera was, in fact, on those e-mails  
24 as well. It's year end. The State's extremely busy

1 at year end, just like the rest of us. And that is  
2 why, again in my mind, at this point, I'm not sure  
3 what their intentions are, whether or not they're  
4 prepared to go forward, whether or not they've begun  
5 to survey this property. There is a residence of  
6 sorts on this property somewhere. You guys do, in  
7 fact, have a setback of, I believe it's 350 feet,  
8 from this residence that needs to be considered.  
9 Again, I'm sure you considered this. Is the parcel  
10 generally big enough? It would appear to be.

11 I'm typically traditionally a real estate  
12 professional. I don't come from exclusively  
13 telecommunications. A lot of what I've done in the  
14 past has been traditional commercial and/or other  
15 infrastructure matters, and my experiences in  
16 situations like this is that depending again on  
17 where that property line comes down and where that  
18 setback lies from that residence, the State is going  
19 to wish for that to be as far away from the group  
20 home as possible for obvious reasons. You guys are  
21 going to wish for it to be as far away from the  
22 shoulder of Route 2 as possible for obvious reasons.  
23 I'm worried about where these two areas would meet  
24 in this particular property. Again, it's nothing

1 that can't ultimately be worked out, but this site  
2 is certainly, in my mind, problematic.

3 MR. SOUSA: Thanks, Steve.

4 So, Mr. Chairman, what I was trying to do  
5 with Mr. McGovern is just to explain to you that  
6 having lease rights on a particular site is crucial.  
7 We can't proceed on a site that's not leased and/or  
8 possibly leased, and I think there are too many open  
9 questions with respect to the 70 Hosmer site. And  
10 while we provided plots in response to Mr. Maxson  
11 and the Board's request, we don't think it's a  
12 viable option, but we did provide the plots so you  
13 could see what it would look like.

14 And on that point, if I could, I'd like to  
15 ask Mr. Md to talk about -- I won't walk you through  
16 the 3G plots again because Mr. Maxson, I think, did  
17 a good job of showing you those, but if he could  
18 walk through the 4G plots, I would appreciate that,  
19 just because it is an important -- it's important  
20 not only for the future of AT&T Wireless, but it's  
21 important for our current network needs as well  
22 right now.

23 CHAIRMAN CLYMER: Okay.

24 MR. SOUSA: And if Mr. Maxson needs time

1 to perhaps digest those or incorporate those into  
2 his report, we'd be happy to give him that extra  
3 time.

4 CHAIRMAN CLYMER: Just one question.

5 MR. SOUSA: Sure.

6 CHAIRMAN CLYMER: Do we have a document  
7 somewhere that addresses every property that you  
8 guys looked at as viable in the area?

9 MR. SOUSA: I believe there was an original  
10 site acquisition affidavit that was submitted by  
11 Mr. Grossman as part of the supplementary filing  
12 that he submitted. Let me see if I have a copy of  
13 that.

14 CHAIRMAN CLYMER: I'm sure we have it in  
15 our materials. It's been a while since we looked at  
16 this the first time.

17 MR. McGOVERN: That was my original  
18 affidavit. It covered certainly a very large number  
19 of plots that we reviewed under these circumstances.

20 CHAIRMAN CLYMER: Okay.

21 MR. SOUSA: If you look at tab 7 to the  
22 original application.

23 Yeah, tab 7.

24 CHAIRMAN CLYMER: Okay.

1 (Pause.)

2 CHAIRMAN CLYMER: All right. We can  
3 consult.

4 MR. SOUSA: Okay. Sure. I don't believe  
5 there's a microphone there, so Mr. Md's going to try  
6 to set himself up, so that he can come to the  
7 microphone and explain these plots, which relate to  
8 the 4G network, which is really the new standard to  
9 which wireless carriers are building their networks.

10 Go ahead.

11 So Amjad, go ahead.

12 MR. MD: Thank you.

13 Hi. Good evening, Chairman and board  
14 members. My name is Amjad Md, and I work for AT&T  
15 as an RF design engineer.

16 Well, on the board we have the current  
17 coverage for the 4G LTE, which is the future  
18 technology, and this coverage is the 1900 coverage  
19 which we are showing for both 3G and 4G.

20 So as you see, on Route 2 with the 4G LTE,  
21 Mr. Maxson had already explained the threshold. I  
22 can go through that again. The green dots, what you  
23 see here, they are the current AT&T on-air sites.  
24 On the east of the one that you have, on the

1 northeast that's in Concord, and the one in the  
2 southeast is again in Concord; but on the west, you  
3 can see the three on-air sites. Where you can see  
4 the large green and blue colors, those are in Acton  
5 and with all these on-air sites are the plots for  
6 1900 4G LTE. And if you see, near the 1037 site, we  
7 have a good amount of red shown which is 9.16.  
8 That's again, red is a nonreliable coverage what we  
9 consider. That means like Mr. Maxson said, when  
10 you're trying to make a call, it's highly a chance  
11 of not getting connected, or you might get connected  
12 depending on the capacity of all the other on-air  
13 sites.

14 And the yellow is like 106 they show which  
15 we considered as a good outdoor coverage like when  
16 you're outside and you're trying to make the call,  
17 there's a good chance that you get connected, but  
18 again the areas where there are yellow, more on the  
19 residential areas, when you're trying to make a call  
20 from your basement or something, you might not be  
21 able to get connected where you see the yellow  
22 color.

23 And the third, blue is like 96 which is  
24 what we consider is in-vehicle coverage. That means

1 when you are driving, and you are trying to use  
2 applications -- nowadays like when you're using GPS  
3 and trying to reach somewhere, you use the data  
4 services. So wherever you see the blue, that's like  
5 when you're traveling in the car and trying to use  
6 applications, you might be able to get connected to  
7 the data service.

8 And the last, the green color, it's the  
9 good in-building coverage. That means the area that  
10 you see with green, those areas will have when you  
11 make a call from your home or from the basement, you  
12 might be able to -- you might be able to have a good  
13 voice connection and even good data connection.

14 So in this current coverage, I can see  
15 near the site, we have outdoor yellow color and the  
16 red color which I said before like it's unreliable  
17 coverage, and yellow is just for outdoor coverage,  
18 but you see more amount of gray that means as per  
19 the network analysis, those areas we might not be  
20 able to make calls on LTE phones; and also when  
21 you're trying to use the data, Internet high speed,  
22 you might not be able to browse the Internet or use  
23 different kind of applications.

24 And going to the next proposed coverage.

1 Thank you.

2 This proposed coverage that you see, like  
3 in 3G, what we are seeing before which Mr. Maxson  
4 has presented, even in 4G, you will see a good  
5 amount of green and blue. That means good in  
6 building, especially on the south where you have a  
7 lot of commercial and residential too.

8 And, of course, on Route 2, we need good  
9 in-vehicle coverage because it's a busy road, and  
10 people will be traveling, using their phones. I  
11 mean not to make calls but for other applications  
12 like GPS or finding a gas station or something.

13 MR. SOUSA: So, Amjad, if you could just  
14 for the record, explain to the Board why there's  
15 such a bigger -- Dave, if you don't mind, could you  
16 go back to the previous plot.

17 Why does the 4G coverage gap seem so much  
18 bigger? Could you just describe that or explain  
19 that to the Board.

20 MR. MD: Sure. When we run the 4G LTE,  
21 ultimately we ran the plots on 1900 frequency, which  
22 means that as for AT&T, the 1900 becomes a good  
23 in-building coverage. So we are trying to build a  
24 network with more and more sites close to each

1 other, so that we can provide good in-building  
2 coverage; and in the 4G LTE when I ran the plots  
3 with all the on-air sites, which are around, this  
4 candidate which we are trying to do, these on-air  
5 sites when I run the plot at 1900, they're going to  
6 give a very less propagation. That means the  
7 signals which are close to those on-air sites will  
8 be high only in building areas, but the signals will  
9 not go in the form of like spread out. It's going  
10 to be concentrating only the areas which are close  
11 to that site; so that's why you will see less amount  
12 of green and less amount of blue in the -- where the  
13 on-air sites are available.

14 MR. SOUSA: Can you also talk about sort  
15 of the migration -- oh, I'm sorry. There's a  
16 question.

17 MR. CHIN: A question.

18 MR. MD: Yes.

19 MR. CHIN: You're talking about 4G?

20 MR. MD: Yes.

21 MR. CHIN: And possibly LTE?

22 MR. MD: LTE is nothing but 4G.

23 MR. YACOUBY: It's AT&T's 4G product.

24 MR. CHIN: Oh, okay.

1 MR. MD: Yeah, it's the other name of 4G.

2 MR. CHIN: Is your competitor Verizon  
3 having coverage gaps along this area?

4 MR. YACOUBY: Yes.

5 MR. MD: I do not know about this.

6 MR. YACOUBY: Yes.

7 MR. MD: I will not be knowing about their  
8 propagation and what coverage they have in that  
9 area, but I can speak to you for AT&T that as you  
10 can see in the current, we don't have a good amount  
11 of 4G LTE right now, especially on the 1900 band,  
12 which we think that it's going to provide in-building  
13 coverage. So the people who are trying to use their  
14 phones in the basement or in the houses, they're going  
15 to get fast Internet on the phone, and this fast  
16 Internet we are talking about, not just on phone  
17 gaps, our Internet, what we have which gives only  
18 56 Mbps of the speed, but this LTE is going to be  
19 like more than 100 or 200 Mbps speed. That means  
20 it's going to be very fast, and you can have  
21 different applications like when you are doing Skype  
22 or video monitoring or even students when nowadays  
23 they try and take the E courses. That means, you  
24 know, trying to take classes from the homes; so when

1 they have a good high speed Internet in their iPads  
2 and note pads, that will be helpful to them.

3 MR. CHIN: This map that you have shown,  
4 is this based on Craig Road as a source? A cell  
5 tower on Craig Road?

6 MR. MD: Yes.

7 MR. MAXSON: No.

8 MR. SOUSA: The first one doesn't  
9 have -- this is just the gap. This is just the gap.

10 MR. MD: This is the current coverage map  
11 where we have not considered the site on the Craig  
12 Road. That means we have not switched on the site,  
13 the proposed site which we are trying to get.

14 MR. CHIN: In other words, is this  
15 coverage based on antennas that you have let's say  
16 at Annursnac Hill Road in Concord?

17 MR. SOUSA: Yes.

18 MR. MD: You mean the on-air site which is  
19 on the northeast, which is in Concord? Yes. Yes.  
20 This current coverage we have considered the site in  
21 the Concord which is on the higher elevation. We  
22 have considered the site, and we ran the propagation  
23 plot.

24 I hope I answered your question.

1 MR. CHIN: Well, this map, is this a -- is  
2 this on existing antennas on more than just  
3 Annursnac Hill? How about Post Office Square?

4 MR. MD: Yes, this current coverage is  
5 with the existing antennas on the Concord site,  
6 which is -- which is MA 34 -- 3403, which is on Hill  
7 Road -- 40Y Annursnac Hill Road, if I'm pronouncing  
8 the name right. It's Annursnac Hill Road. Right.  
9 So we have to jump that site, and we have it under  
10 current coverage.

11 MR. MAXSON: Excuse me. Can I try to  
12 clarify what you're looking at. Perhaps I can get  
13 direct to the bottom of what your question is.

14 You'll see the locations where colors are  
15 green. That's closest to a cell site, the light  
16 green, and you'll see a label that begins with MA  
17 and then a number. Those are cell sites. In this  
18 image, the cell site in the center, which is orange  
19 is -- has a number, but it's not activated. That's  
20 Craig Road. The other cell sites -- I think Post  
21 Office Square may be the one at the top. We have  
22 Great Hill off to the left; Annursnac Hill, upper  
23 right; and another couple further to the south and  
24 to the southeast. So those areas, and I'll point to

1       them are where the computer has active cell sites  
2       that it's modeling for this image (indicating).

3               MR. CHIN: In other words, putting more  
4       antennas on these sites will not improve this?

5               MR. MAXSON: That's correct.

6               MR. CHIN: Thank you.

7               MR. YACOUBY: Exactly.

8               MR. SOUSA: Yeah. And if I could just to  
9       put a point on that. We did provide a list to  
10      Mr. Maxson of those other existing sites, and they  
11      are located at 211 Main Street, 111 Old Nine Acre  
12      Corner, 36 Knox Trail, 533 Main Street, and  
13      40 Annursnac Hill Road, and so those are all  
14      existing sites.

15              Once again not to repeat what Mr. Maxson  
16      said, but those are all existing sites that you see  
17      providing coverage in that area and notwithstanding  
18      those sites, we still have a fairly large gap in  
19      coverage as delineated in the gray areas, the red  
20      areas, and to some extent at least in the yellow  
21      areas.

22              MR. CHIN: Thank you.

23              MR. SOUSA: Sure.

24              MR. BOURDON: What is proposed to go into

1 this tower? Is this going to be 3G? Is it going to  
2 be 3G and 4G? Is it going to be just 4G?

3 MR. SOUSA: It's both. For AT&T, it's  
4 both. And so currently we're sort of in that  
5 transition period, I would say. You know, carriers  
6 have 3G networks, but they're all upgrading their  
7 existing sites to 4G standards. If you read a lot  
8 about sort of the future of wireless, more and more  
9 carriers are proposing to migrate more and more into  
10 just a 4G standard and even provide phone service  
11 through their 4G networks through what's called  
12 VoLTE, Voice Over LTE. When that's going to happen,  
13 we're not sure. It's going to be once again an  
14 incremental process, and so the carriers find  
15 themselves having to supplement or to build out  
16 their 3G and 4G networks, and it's going to take  
17 time. And so that's why we've talked a little bit  
18 about the fact that AT&T's going to take up two rack  
19 centers, two center line centers, two sections of a  
20 flagpole; and if they take up two sections of a  
21 flagpole design, then there are fewer sections left  
22 for the other three carriers.

23 And as Mr. Maxson has suggested, perhaps  
24 we could require AT&T to take up less vertical

1 space, and I think AT&T, if SBA -- if that was a  
2 real concern of this Board, SBA could approach AT&T  
3 and say, okay. Try to take up as little vertical  
4 space as you can, so that in the future, we can  
5 accommodate the other future carriers that are  
6 coming to this pole, and I think that's something  
7 that they would be receptive to.

8           You don't have those limitations if you go  
9 with the other two designs that we proposed, which  
10 are in monopole design, whereby the carriers would  
11 each take up one vertical space because they can put  
12 up all their antennas and the remote radio heads in  
13 that same vertical space. That's why we proposed  
14 that design to begin with because it just -- we've  
15 seen so many of these carriers do their upgrades  
16 with new antennas and new remote radio heads, and at  
17 some point, it gets hard to accommodate that in a  
18 flagpole design.

19           So to answer your question, both  
20 technologies initially will be accommodated.

21           MR. BOURDON: Thank you.

22           CHAIRMAN CLYMER: Can we flip back to the  
23 next map with Craig Street.

24           MR. SOUSA: Sure.

1           CHAIRMAN CLYMER:  When you guys look at  
2    this, do you ever look at the number of households,  
3    number of businesses that are affected by this.  I  
4    mean I see the big green region there, and a lot of  
5    that is open fields.

6           MR. SOUSA:  Yep.

7           CHAIRMAN CLYMER:  And obviously Route 2  
8    goes through the middle, but I mean what is the -- I  
9    mean is that something that you guys look at on how  
10   many households might be affected by this change?

11          MR. SOUSA:  Yeah.  I would say yes.  Yes.  
12   Absolutely.  So I take your point that there's a big  
13   area that's wooded area along Route 2, but we also  
14   do have Route 2.  We want to be able to provide  
15   seamless coverage along Route 2, and that's crucial.

16          CHAIRMAN CLYMER:  I understand that.  But  
17   we're talking about basements and making calls in  
18   basements.  That's not an issue for Route 2.  I just  
19   wonder how many of those issues are covered by this.

20          MR. SOUSA:  There's a fair number of homes  
21   to the south.  There are businesses along Route 2 to  
22   the west and to -- along Route 2, there is the  
23   hotel.  So there are -- it is a factor.  We would  
24   not -- to answer your question, we could not put a

1 tower in the middle of the woods to service one  
2 family. I just don't think that would get funded.  
3 It simply --

4 CHAIRMAN CLYMER: No, I agree. I'm just  
5 trying to get the idea is this a Route 2 issue, or  
6 is it really the issue that, you know, you were  
7 talking about about reception in basements and  
8 issues like that. Is this more Route 2? And,  
9 again, I don't have a great number for -- I can only  
10 look at that and see that there's a lot of open  
11 field there. So I'm not sure how many houses are  
12 impacted by that, but I was just curious if you guys  
13 had --

14 MR. SOUSA: So as I looked at it, and as  
15 I've talked to the RF engineers and to our clients,  
16 this is sort of a two-step answer. It is Route 2,  
17 but that's not our only concern. It's also an  
18 incremental way to provide seamless coverage in  
19 Acton.

20 It's going to take time, and so, once  
21 again, you need -- in order to develop a network,  
22 you need sites that work for RF; that you can lease;  
23 and that you can zone. We think this is a responsible  
24 location in a limited industrial zone. We think

1 we've come up with a design that's acceptable; that  
2 meets your standards and can also accommodate not  
3 only AT&T but a number of other carriers, and it  
4 does fill a fair amount of the gap.

5 Does it fill all the gaps? No, it doesn't.  
6 Will there eventually have to be a solution to all  
7 the residential areas to the north of Route 2 and  
8 the south of Route 2, to the west? There will need  
9 to be a solution. We don't have that solution  
10 today. I'm not sure what that is, and I am not -- I  
11 can tell you for sure I don't know -- I don't have a  
12 proposal for this Board to fill those gaps in  
13 coverage and get 4G service to those areas.

14 What I do know is that on many nights of  
15 every week of this year, I plan to be at communities  
16 like Acton to try to fill in these gaps because it's  
17 an important initiative for all these wireless  
18 carriers. We can't simply say that we're going to  
19 provide 4G services to the major arteries or to some  
20 residents in particular municipalities. Our goal is  
21 to be able to provide seamless reliable coverage to  
22 everybody who wants it. That's an obligation under  
23 our FCC license, and it's an initiative for these  
24 companies as well. So I think it's a twofold

1 answer.

2 CHAIRMAN CLYMER: Okay.

3 MR. SOUSA: You know, and I think Mr. Md  
4 has provided as much as he can regarding the 4G. I  
5 don't necessarily believe that Mr. Maxson has been  
6 able to incorporate it into his report, and so if he  
7 needs time to do that, I'd be happy to accommodate  
8 that.

9 Go ahead, David.

10 MR. MAXSON: Thank you.

11 A couple of thoughts. One is it's just  
12 accurate to reiterate that -- first of all, I don't  
13 think I mentioned this before. The applicant did  
14 give us a table of data about the 3G cell sites that  
15 you see on the map, and we used that to populate our  
16 computer model and to do some analysis; and it  
17 didn't change much from our original analysis. So  
18 we didn't burden the Board with additional coverage  
19 plots.

20 But we had not done the same thing with  
21 the 4G LTE technology. As I said earlier, we didn't  
22 get the data on the 4G facilities to put into our  
23 computer model, and also there was no drive test.

24 So I would suggest that if you think

1 consideration of LTE as part of your deliberations  
2 regarding whether there's a significant gap or not,  
3 if you think that's an important part of your process,  
4 then we might want to go down the road of reviewing  
5 the LTE data. If on the other hand, you're convinced,  
6 perhaps even tonight, from the data that you've seen,  
7 even though there are some discrepancies, that there  
8 is a significant gap in 3G, it may not be necessary  
9 to burden the applicant with additional analysis.

10 So I think, you know, there are  
11 opportunities for some off ramps here if you feel  
12 you have enough data now to make a good decision;  
13 otherwise, we can go forward and do some, you know,  
14 additional vetting of their data.

15 CHAIRMAN CLYMER: Yeah. I think what we  
16 want to do is give the public a chance to speak, and  
17 then maybe after that, we can decide what we want to  
18 do coming out of that. So I don't know if you want  
19 to say any more before we open it up to questions  
20 from the public.

21 MR. SOUSA: I think we're sufficiently at  
22 a late time of the evening that I'd like to give the  
23 public an opportunity to speak and then have the  
24 opportunity to respond, if appropriate.

1 CHAIRMAN CLYMER: Okay. Perfect. And if  
2 I could just ask everyone from the public when you  
3 come up, name, spelling, and address, please.

4 MR. SHEA: Christopher Shea, S-H-E-A, at  
5 303 School Street.

6 A couple of things, and please bear with  
7 me a minute. I'm not a 3G technology person. So to  
8 me it seems it's inadequate data right now to support  
9 the application if we're talking about 4G technology  
10 and he didn't do the analysis for a 4G analysis. Is  
11 that correct?

12 MR. MAXSON: Rephrase the question.  
13 Repeat the question.

14 MR. SHEA: Right now we're talking about  
15 your analysis was done using a 3G platform. We're  
16 talking about a 4G, perhaps largely 4G.

17 MR. MAXSON: Through the Chair, yes,  
18 if -- that's correct. If 4G is the crux of the or a  
19 crux of the significant gap assessment for the  
20 Board, then we have not collected as much due  
21 diligence on the 4G coverage as we have the 3G.

22 MR. SHEA: And so then also if it's the 4G  
23 is what we're talking about here is the 4G technology  
24 on the other cell towers with the 127 antennas,

1 within a four-mile radius of Craig Hill Road, are  
2 they all outfitted with 4G technology? Because that  
3 picture could look very different. If I could just  
4 walk up here for a minute. If you look at the large  
5 green area, that's relatively wide open space as you  
6 walk around, and we're talking about expanding to  
7 have this so that everybody can have green. So  
8 here's one -- here's a tower, and it's this big  
9 (indicating), and that's pretty much ideal  
10 conditions. So we need another tower here  
11 (indicating) and another tower here (indicating) and  
12 another tower here (indicating) and another tower  
13 here (indicating) and another tower here  
14 (indicating) and another tower here (indicating).  
15 Right? I think that's what we're talking about  
16 ultimately.

17 So I think, again, at least look at is  
18 the -- are the 4G LTE technologies already outfitted  
19 on all the other existing things that we have?

20 And a couple other things. Also --

21 MR. SOUSA: Could I answer that?

22 MR. SHEA: Yep.

23 CHAIRMAN CLYMER: Sure.

24 MR. SOUSA: Would it be appropriate? Is

1 that all right?

2 MR. SHEA: Yeah, that's fine.

3 MR. SOUSA: And actually I'm going to  
4 defer to Amjad. With respect to the five sites that  
5 we listed that surround this location, have those  
6 sites been upgraded to 4G?

7 MR. MD: Yes, currently, the five sites  
8 which are around, we have upgraded them to 700  
9 frequency. That means it is similar to the UMTS 3G  
10 850 frequency, but we have not upgraded that to  
11 1900, which we consider that to be more like  
12 in-building and good, strong signal inside the  
13 houses. So we have not upgraded to 1900, but, yes,  
14 we have upgraded them to 700 for now.

15 MR. SOUSA: And just a follow-up question.  
16 I'm sorry. If you -- when do you anticipate  
17 upgrading them to 1900 or do you anticipate?

18 MR. MD: Yes, in the future, we will  
19 upgrade them to 1900, but I don't have the exact  
20 dates right now when.

21 MR. SOUSA: And would that help -- would  
22 that fill the gap in coverage around 5 Craig Road if  
23 you did that?

24 MR. MD: This plots the current and

1 proposed. What I have submitted is with the future  
2 putting the 1900 frequency plot. This is not the  
3 700. This is the 1900. I have considered how this  
4 is current and how the proposal is going to look  
5 like when in the future we will turn on 1900 LTE 4G.

6 So I would also like to add, I mean, if I  
7 can, the question about having more sites at a very  
8 smaller distance. In the future, like I have shown,  
9 that the 4G LTE 1900 here, and still we see the gap  
10 of like in the southwest or the southeast part, it  
11 depends on the topography and the terrain. Like in  
12 the future, if you get something more on this area  
13 (indicating), which is a little higher elevation,  
14 compared to these flat areas. So we might not need  
15 more sites, but if you get something -- if they have  
16 a plan in the future, we might get something on the  
17 higher elevation, and we will try and cover these  
18 gaps here (indicating). So just to answer that.

19 MR. SOUSA: Thanks, Amjad.

20 MR. CHIN: A question. There are limited  
21 sites right now; so if you're going to expand in the  
22 future, where are you going to go?

23 MR. MD: So currently in Acton we have  
24 only four on-air sites for AT&T, and like in the

1 future, I don't know how many they're going to try  
2 and get more sites, or they're going to be sufficient  
3 with the current, the Craig Road. I cannot answer  
4 that what's going to happen like in the near future.  
5 If they did get some more funding, they might get  
6 more sites, and also they might be sufficient with  
7 the current coverage; and with the Craig Road, Acton  
8 Craig Road site, if they feel that currently with  
9 this site, we are okay. So they might not even  
10 consider like in the future if they want anything.

11 MR. CHIN: I'm just looking at this map,  
12 and I'm saying you're going to expand on Route 2?  
13 Does that mean that you're going to build these  
14 towers right on Route 2?

15 MR. MD: No. No. On the Route 2 with  
16 this site, we will be able to cover the gap. If we  
17 get this site, we will be able to cover the gap, the  
18 whole gap what we have on Route 2, but I'm talking  
19 about like in the future, all these areas like the  
20 gentleman suggested, like, we have coverage gaps  
21 here and here (indicating). So for that, we don't  
22 have any sites right now in this area.

23 So in the future, whether they're going to  
24 come with new sites or not, I'm not sure about that,

1 but on the Route 2 with this site, we will not need  
2 any more new sites. If we get this proposed site  
3 here, then we will be able to fill the gap which we  
4 have on Route 2.

5 MR. CHIN: I'm not sure I followed your  
6 answer. All I'm saying is I see Mr. Shea said  
7 there's a whole bunch of areas that are not covered  
8 right now except for that big green thing right in  
9 the center.

10 MR. SOUSA: Right.

11 MR. CHIN: So if you try to expand and  
12 cover, where are you going to get these sites from?

13 MR. SOUSA: So the sites are -- all the  
14 new sites are -- I can't give you any specific  
15 answers, but typically new sites are new structures  
16 unfortunately, unless there's a water tank, unless  
17 there's a church steeple, unless there's a National  
18 Grid electricity stanchion. Unless we can utilize  
19 an existing structure, the only way to fill a gap in  
20 coverage is to, in fact, propose a new structure,  
21 which is what we're doing here.

22 However, what we're trying to tell you is  
23 that it's an incremental process, and it depends on  
24 budgets, and it depends on what becomes available.

1 MR. YACOUBY: It's a rhetorical question.  
2 Okay. Fundamentally we're asking a rhetorical  
3 question. And in my opinion -- it's also going to  
4 be a question of infrastructure. I think you're  
5 seeing a massive State change right now. Landlines  
6 are going away. They are going away. And the  
7 businesses that offer are going away. People are  
8 going to be demanding this. So you're going to see  
9 very, very quickly over the next 15 to 20 years that  
10 this is not going to be an issue of this carrier.  
11 It's going to be demanded of them why can't I get  
12 coverage, because I'm going to be relying on 911,  
13 all sorts of stuff. And then it becomes a question  
14 of, you're right. If this was the turn of the  
15 century when they were putting up electrical lines,  
16 it was flagpoles. Basically you're putting up poles  
17 all over the place; the functional equipment in this  
18 day and age are the same thing.

19 So I'm not sure it's germane to this  
20 discussion of this particular pole. It's a  
21 rhetorical, general question because those gray  
22 areas, I guarantee you, 20 years from now when  
23 people are living there are going to demand that  
24 service. They're going to expect that service

1 because that's how you're going to be doing  
2 communications. That's how you're going to be doing  
3 Internet period because you're not going to have  
4 copper to your house. And fiber is going to be only  
5 for other things.

6 MR. CHIN: I'm just trying to find out  
7 where do they get these land sites from?

8 MR. YACOUBY: He said it's an incremental  
9 process. What will happen is I'll be down here  
10 saying I need something and between the other  
11 carriers and then they'll identify a place. They'll  
12 come to the Board and say we want to put up a pole  
13 in your backyard. That's what's going to happen.  
14 By definition.

15 Where is it going to be or what it's going  
16 to be, we don't know today. That's how it's going  
17 to happen. And like he said, if there's an existing  
18 structure, they'll use that. If there's not, if I  
19 own a house and say, oh, great, I'll lease my land  
20 and put it in my backyard, and then we'll have a  
21 Board hearing and people will argue that they want  
22 it or don't want it and what have you. That's the  
23 nature of the beast. That is the nature of the  
24 beast.

1 MR. MAXSON: Mr. Chairman.

2 CHAIRMAN CLYMER: Yes.

3 MR. MAXSON: I support that observation.  
4 I think the way to visualize this is to simply look  
5 at the history, and that will continue. The history  
6 was that the wireless carriers went to towers on  
7 places like Great Hill where there were already  
8 towers. And then they went to nice spots like  
9 Annursnac Hill and put up towers, and then they went  
10 to places like the Post Office Square area and put  
11 up a tower, and now they're coming back and saying  
12 let's put one at Craig Road; and then as the  
13 gentleman was pointing out, there are other areas  
14 here that look like they are soft and look like they  
15 may have a density of residences or other uses that  
16 might in the future foster a proposal for another  
17 tower.

18 And there is no master planning process to  
19 any of this. It is simply the wireless companies  
20 plan 12 to 18 months ahead. They have a target list  
21 of where they want to get facilities to improve  
22 service, with the most bang for the buck, and we  
23 can't ask them to look two years ahead.

24 So the best we can do as a community is

1 try to plan ahead for them and tell them where they  
2 can go.

3 MR. CHIN: No. No. All I'm getting from  
4 all of this is if you can find someone who's willing  
5 to lease a backyard to them, they'll put a tower up  
6 there if it's easy.

7 MR. MAXSON: That's the risk, yes.

8 MR. YACOUBY: That is the risk, but also  
9 the other layer you have to add on to this is  
10 government regulations because you do have -- part  
11 of what's going on is we're going to force you  
12 carriers. You better be at 100 percent coverage; so  
13 that's a conundrum that the carriers are having  
14 because they're saying as a public policy, as part  
15 of their infrastructure, this is going to  
16 become -- in this particular area, I guarantee you  
17 this is going to become more of an issue. Because  
18 as landlines go, we rely on this. It's there. It  
19 works. It's great. But when you don't -- there are  
20 households today having huge arguments. Do I even  
21 keep a landline? Why should I have a landline?

22 CHAIRMAN CLYMER: Dave, I'd like to move  
23 off this point, but I do have one really -- I'll try  
24 to make it a really quick question because I know

1 we've only had our first comment, and we're already  
2 asking questions on the comments; but obviously  
3 "significant" is a relative term, and I guess my  
4 only question as a follow-up is if you look at an  
5 area, and it's an area that's heavily residential,  
6 and you look at it and say, geez, there's not a lot  
7 of places I can put towers that would give good  
8 coverage for the entire Town, is significant at all  
9 relevant? I mean I look at this chart, and if it  
10 was all gray, and it was one speck, you know, I  
11 don't know if that would be curing a significant  
12 gap. And I just wonder if when people try to  
13 address significant, if that's ever a factor?

14 MR. MAXSON: Well, you bring up an  
15 important point. Significant gap is something that  
16 comes out of case law that comes out of the  
17 Telecommunications Act of 1996. A significant gap  
18 is not an engineering construct. It is a political,  
19 legal construct.

20 MR. YACOUBY: That's my point.

21 MR. MAXSON: So when the Board is  
22 reviewing evidence for what the applicant is  
23 claiming is a significant gap, it's not simply that  
24 the signal level is below minus 84 dBm at 30 of the

1 90 residences or whatever, it's the -- the picture  
2 that's being painted in its totality, and the courts  
3 look at that, and you have advice of your planners  
4 and advice of counsel on what the courts have said  
5 is significant and what isn't; and oftentimes it's  
6 brought up rather humorously that if you go back to  
7 the pornography case from what was it the 1960s,  
8 where the judge said it's hard to write a law that  
9 exactly describes what pornography is, but I know it  
10 when I see it. And that really is what it comes  
11 down to in some cases with an evaluation of whether  
12 a gap is significant, and something I like to point  
13 out is what the extent of that purported gap is.

14 Is it the green? Is it the blue? Is it  
15 the yellow? Is there enough green? I mean, what  
16 you're hearing from the applicant is, yeah, it may  
17 take two, three, four, five, ten years for us to  
18 come back before we think it's important enough to  
19 try to fill in the next neighborhood down. And  
20 maybe yellow and red is good enough for "X" percent  
21 of the population in Acton today.

22 So this whole question of significance  
23 is -- it's something I tread very lightly on and try  
24 to help you with the facts --

1 CHAIRMAN CLYMER: Right.

2 MR. MAXSON: -- and it's up to you, the  
3 Board, to decide whether you agree or to how much of  
4 an extent you agree with the applicant's  
5 characterization of a significant gap.

6 CHAIRMAN CLYMER: Okay. Thank you. Sorry  
7 we've --

8 MR. SHEA: That's okay.

9 Two other things: In terms of the real  
10 estate, it feels like the process for vetting a  
11 property would take too long for any Town to  
12 effectively offer alternatives, and I don't know if  
13 there's some way that we could address that. The  
14 Town was generous to grant a continuance to the  
15 applicant, and I don't think we should be punished  
16 for doing that. I think we need to take a little  
17 bit more time to go through this and then look and  
18 explore some of these properties and look further  
19 and see if there's something else we could do.

20 In terms of a significant gap, talking  
21 about that, it's not just a technical term; it's  
22 also a marketing term, and that's kind of what we're  
23 doing right now. If we're talking about the future,  
24 following all of these applicants and all of these

1 4G towers, at some point, we're going to probably  
2 all have satellite phones, and then I wonder who the  
3 companies are who are going to be responsible for  
4 taking down all of these towers. We're talking  
5 about getting rid of landlines and pretty soon,  
6 we'll be getting rid of cell phone lines. Before  
7 you know it, we'll be having satellite phones. So  
8 it's some things to consider.

9 That's it. Thank you.

10 CHAIRMAN CLYMER: Thank you.

11 MR. WEIR: Hi. I'm Justin Weir. I live  
12 at 305 School Street, pretty much across the street  
13 from the proposed site.

14 Just I have a few points. I'll try to get  
15 through them quick. So, first of all, I want to ask  
16 if the 1996 Telecommunications Act protects wireless  
17 data services, or if it's just protecting voice  
18 services? I asked this last time, and no one had an  
19 answer. I'm wondering if anyone has an answer this  
20 time.

21 CHAIRMAN CLYMER: I'll let Dave answer  
22 that, if you would.

23 MR. MAXSON: I am not an attorney, so what  
24 I'm going to describe to you is based on my

1 knowledge and experience from participating in these  
2 processes since before 1996.

3 If you read the Telecommunications Act, it  
4 goes into personal wireless service, and then if you  
5 read the FCC regulations and FCC determinations,  
6 they -- and commercial wireless services actually  
7 which is -- of which personal wireless services is a  
8 subset, those services are defined at that time as  
9 being connected to the telephone network, which is  
10 administered under what's called a North American  
11 Numbering Plan, area code exchange and number.

12 So there has been in a number of the  
13 hearings that I've participated in in the last  
14 decade a question in some of these outlying cases  
15 where an applicant comes in, and they're not  
16 connected to the North American Numbering Plan  
17 Network, there's a question as to whether they're  
18 entitled to be treated as a personal wireless  
19 service, and that your Board here answered that in  
20 its opinion with respect to Clearwire, which was not  
21 providing voice services.

22 Also in this regulatory environment, there  
23 is this concept of information services which enjoys  
24 a slightly different regulatory track than telephone

1 services, and it's very complicated and far beyond  
2 me, but I'm aware of these two distinctions. And  
3 you heard the applicant's attorney talk a little bit  
4 about Clearwire being an Internet service, and the  
5 Board treated it as that rather than a telephone  
6 service.

7 With respect to AT&T, they provide  
8 telephone service. LTE does not presently provide  
9 telephone service, but there are some manufacturers  
10 who are now manufacturing LTE phones that are  
11 equipped to provide the Voice Over LTE when it  
12 becomes available.

13 MR. WEIR: And will those phones be able  
14 to make calls without LTE if they're in the middle  
15 of Wisconsin or something?

16 MR. MAXSON: As --

17 MR. WEIR: We'll probably have that  
18 hardware for a long time; correct?

19 MR. MAXSON: As long as the carriers are  
20 offering multiple services, it's very likely that  
21 the phone that does LTE will also be able to do 3G,  
22 and that's just a matter of how that evolves in the  
23 future.

24 MR. WEIR: So that's my -- my main point

1 is that we are only talking about data; right? He  
2 said that, you know, phones that have poor LTE  
3 signals would experience dropped calls, and then  
4 right after that, he said that the technology for  
5 making phone calls over LTE is not in place yet. So  
6 those clearly don't agree.

7 He also said that 4G and LTE are  
8 equivalent terms. That's not true.

9 And, you know, as I've just said when the  
10 VoLTE system is in place people are getting calls,  
11 every device will still be able to make phone calls  
12 for a long time until, you know, some other  
13 technology comes on, and LTE is not even used any  
14 more. So that's nonsense.

15 We're only talking about a gap in 4G data  
16 coverage here for pretty much residential areas  
17 where everybody has WiFi and wouldn't use it, the  
18 soccer fields, and cars where people have -- I mean  
19 I'm an AT&T customer, and I was streaming audio the  
20 whole way here down Route 2. So I don't think that  
21 that's a problem. Maybe I wouldn't be able to watch  
22 Netflix in my car while I'm driving, but I think  
23 there's plenty of data there.

24 I think this is a solution looking for a

1 problem. The owner of the land wants rent for the  
2 tower. The tower company wants to build towers, but  
3 I don't believe that there is a need here for this.

4 And let's see -- what else? I think that  
5 there's a decent chance that the data has been  
6 massaged to look worse than it is. It's just the  
7 same way that the data was massaged to look much  
8 better than it was in the marketing materials. In  
9 truth, I would expect it's somewhere in the middle  
10 because engineers are very good at massaging  
11 numbers.

12 And let's see, I would like to respond to  
13 your claim that, you know, this is going to be more  
14 and more and more crucial in the future, which is  
15 certainly possible; but if you're going to try to  
16 predict what the technology is going to look like  
17 five years from now, you know, there's a good chance  
18 you're wrong. I mean, wireless doesn't always win.  
19 Look at, say, the rise of cable television, where  
20 you went to --

21 MR. YACOUBY: Cable television is dying.

22 MR. WEIR: Sure.

23 MR. YACOUBY: Cable television is in  
24 trouble.

1 MR. WEIR: I don't have cable. You don't  
2 have to tell me.

3 MR. YACOUBY: That's what I'm saying.  
4 People are --

5 MR. WEIR: But I do have fiber in my house  
6 for my Internet service where I have WiFi. I mean,  
7 my point is that you can't always predict these  
8 things. Technology is often cyclical. You go to  
9 wireless in one era; you go back to wire the next.  
10 So I think to say, well, you know, ten years from  
11 now, you know, people are going to want this  
12 technology and say that with certainty.

13 MR. YACOUBY: My point was not -- maybe  
14 you're correct, but I wasn't saying people would  
15 want -- I'm saying if you look at the infrastructure  
16 we're putting in place in this country, that's where  
17 it's going. I'm talking an infrastructure question.

18 MR. WEIR: Right. That's where it's going  
19 right now.

20 MR. YACOUBY: And anybody who cannot -- has  
21 not acknowledged that is sticking their head in the  
22 ground.

23 MR. WEIR: Right.

24 MR. YACOUBY: Just look at the

1 infrastructure being put in place.

2 MR. WEIR: Yes, but I mean, you can't  
3 say --

4 MR. YACOUBY: That's all I'm talking  
5 about.

6 MR. WEIR: -- with certainty that that  
7 trend is going to continue forever. It's not going  
8 to necessarily even continue to when this LTE  
9 coverage is, like, actually needed; right? The  
10 point when this is actually needed, I think, is a  
11 long way off. Certainly long enough that --

12 MR. YACOUBY: But you're speculating now  
13 too. We don't know, but I think Mr. Maxson's point  
14 is the most relevant. We don't know the next year  
15 to two years beyond that. We're all speculating.

16 MR. WEIR: Right. But --

17 CHAIRMAN CLYMER: I don't --

18 MR. WEIR: But I feel like there's an  
19 argument being made that there's some urgency here,  
20 and I'm saying that I do not believe that that is  
21 true. I think the only urgency is for SBA to expand  
22 their holdings, and for the owner of the property to  
23 start cashing rent checks; right? And that's going  
24 to come at the expense of all the residential

1 property in the area. The property values are going  
2 to decrease, and I think that that should be  
3 considered, and those are all my points.

4 Thank you.

5 MR. JUSSAUME: Good evening, members of  
6 the Board. My name is Richard Jussaume,  
7 J-U-S-S-A-U-M-E. I live at 8 Russell Road.

8 I have a few points. Hopefully I'll try  
9 to get to them concisely.

10 The first ones I want to deal with are  
11 just some things that came up during the hearing.  
12 Mr. -- I'm sorry -- Chin, you made a really good  
13 point earlier on, and you asked for something that  
14 was promised to you. You asked do you have an  
15 agreement with -- does SBA Towers have an agreement  
16 with AT&T where they're going to -- where they  
17 actually want this tower? And they said, yeah,  
18 we've got an agreement. We'll give that to you.

19 I would suggest, Mr. Chin, that you've  
20 asked for the wrong thing. What you really want is  
21 you want the piece of paper that came from AT&T  
22 first that sent SBA Towers out and said, hey, we've  
23 got a gap here. Would you go find us a tower, a  
24 place for a tower. So that's really what you want.

1                   What came first, the chicken or the egg?  
2                   Right? AT&T says we've got a horrible gap here.  
3                   Somebody we got to find some resolution for this.  
4                   There should be some piece of paper from AT&T  
5                   sending SBA out to look for this, rather than the  
6                   other way around. So I would suggest perhaps that's  
7                   a good thing to ask for.

8                   Oh, another point. I forget this  
9                   gentleman's name, but the site acquisition  
10                  specialist who was talking about the difficulties in  
11                  dealing with the State. I have great news for you.  
12                  The surveyors are in my backyard today. They  
13                  started in December, and they're talking about  
14                  carving off sections of that State property for the  
15                  group home. So guess what, it's game on.

16                  Now, perhaps I can get Mr. Maxson to help  
17                  me out in switching back and forth to some of these  
18                  slides. The first one I'd like to see is the one  
19                  that was sited at 70 Hosmer Street, the 100-foot  
20                  tower.

21                  This is the State property that we're  
22                  talking about. Living at 8 Russell Road, I know  
23                  this area quite well enough -- and I thank you if I  
24                  can be uninterrupted while I try and get through

1 this stuff.

2 I think that's the one.

3 All right. Here we are. This here is  
4 School Street (indicating), and over here is Hosmer,  
5 and that little dot there is located smack dab on  
6 top of 70 Hosmer Street, which is the group home.  
7 Obviously they can't put a cell tower in the parking  
8 lot. They've got to put it on the State land. And  
9 actually since I live there, my kids sled on the  
10 hill that's just there (indicating). I can tell you  
11 that that's in a little hollow.

12 Now, the best place to put that tower is  
13 actually on the State land right up there  
14 (indicating), where it would be shielded from all  
15 the houses down here by the giant section of woods  
16 that's right there (indicating). Up near the road,  
17 50 feet off the road maybe, you'll get easily 350  
18 feet away from everyone, and you'll get a wonderful  
19 coverage if -- if coverage is even needed here.

20 I would like to point out just a legal  
21 point in regard to the affidavit that was referred  
22 to. There's case law out there. I didn't bring it  
23 with me today, but if need to, I can provide it,  
24 that says affidavits like the ones I've seen in this

1 file that say I looked at this property, this  
2 property, this property, this property, blah, blah,  
3 blah, and none of them were available. There's case  
4 law that says those affidavits aren't worth the  
5 paper they're written on. You need to go further.  
6 You need to show in detail the efforts you made as  
7 to each and every property you sought as alternative  
8 locations.

9 The affidavit provided doesn't do that.  
10 The affidavit provided is very conclusory. It goes  
11 one, two, three through all these places and says  
12 checked into them, couldn't do it. Just like we've  
13 heard tonight.

14 The State's actually out there. They've  
15 been out there for -- I went away on vacation  
16 December the 19th. December the 18th the gentleman  
17 from the Commonwealth knocked on my door and said,  
18 hey, don't worry about us. We're surveying up here  
19 to carve off a piece of land. So they've been at  
20 this since the 19th of December, and this man has  
21 come before you tonight and said I don't know  
22 anything about it. That's -- what is it? Three  
23 weeks?

24 My main point. If we could have that,

1 Mr. Maxson, if you wouldn't mind, the map showing  
2 the gap in the 3G as exists.

3 Now, Mr. Clymer, is -- am I saying your  
4 name properly?

5 CHAIRMAN CLYMER: Yes, you are.

6 MR. JUSSAUME: Mr. Clymer has hit the nail  
7 on the head. The question in this case is is there  
8 a significant gap? The attorney for the cell  
9 company said the exact same thing. Mr. Yacouby, you  
10 said the same thing. Am I saying your name right?

11 MR. YACOUBY: (Nods.)

12 MR. JUSSAUME: Thank you.

13 And whether there's a significant gap  
14 depends upon a whole bunch of different things.  
15 Some of the most important things are: Are there  
16 people that aren't being served? Who could argue  
17 that if there was a house up there (indicating), a  
18 whole bunch of houses up there, who could argue that  
19 there was a significant gap? Clearly there would  
20 be. Right?

21 Down here (indicating) we in Acton know  
22 what's down here. This is School Street, Wetherbee,  
23 and in here is a giant cornfield with trees all in  
24 here. And over here is a horse field for the State

1 Police and a barn, and over here (indicating), we  
2 have more cornfield, and over here we have soccer,  
3 and the Town well and a bunch of trees, and  
4 maybe -- I don't know -- 20 houses right along in  
5 here (indicating), some of which include Mrs. Quinn.  
6 She's not too interested in AT&T's coverage, I  
7 think. There's Mr. Maglothin. I don't think he's  
8 interested in their coverage. A number of other  
9 people have come out. Mr. Weir, I think, lives over  
10 there.

11 MR WEIR: I live there, and the coverage  
12 is fine.

13 MR. JUSSAUME: Well, I don't want to get  
14 into their coverage, but they're probably not too  
15 interested in whether they get better coverage. And  
16 there's a few other houses here.

17 Now, if we could flip forward to the  
18 proposed coverage on the 3G, what we'll notice here  
19 is the improvement. The improvement, as has been  
20 pointed out -- Mr. Maxson said this -- the  
21 improvement is to, guess what, the farm fields, the  
22 Town watershed, more farm fields. My house is right  
23 there (indicating), so we get some. I'm not going  
24 to be using AT&T. And more farm fields.

1           The improvement is clearly along Route 2,  
2 but let's look at that drive test that they just  
3 did. The drive test shows -- let's see. That's  
4 School Street right there (indicating). It's the  
5 far one over here, Mr. Maxson. It's the --

6           MR. YACOUBY: The PowerPoint.

7           MR. JUSSAUME: The PowerPoint one right  
8 there.

9           That drive test -- and let's keep our  
10 minds on School Street, and then the other one was  
11 Hosmer Street. This here (indicating) is School  
12 Street, and that's Hosmer (indicating). That is  
13 Russell Road (indicating).

14           Now, at Russell Road where I live, I can  
15 drive from Hosmer Street to my house which is at the  
16 very end, that little piece of road in 10 seconds at  
17 20 miles an hour. That little chunk right there  
18 (indicating), when taken in connection with their  
19 current map and their improved one that we just  
20 looked at a minute ago shows that the gap is just  
21 that little bit there (indicating). That is just  
22 maybe -- I don't know -- there's no scale of miles  
23 here, but it's not particularly longer than Russell  
24 Road, is it? That means that a car traveling at,

1 let's say they're doing the speed limit of 45 miles  
2 an hour, fat chance on Route 2A.

3 (Laughter.)

4 MR. JUSSAUME: Let's say they're doing the  
5 speed limit are going to be traveling through that  
6 horrible red zone for about what? A second? A  
7 second? That's a significant coverage gap? I mean,  
8 the notion that there's a significant coverage gap  
9 here is preposterous. The only place that looks  
10 good, the only place it makes sense is if you put it  
11 on a map, and say oh, my God, look at the hole.  
12 That's it. There's no people that are short of  
13 coverage around here. You've heard people talk  
14 about what coverage they have.

15 My neighbor here -- I'm sorry -- I can't  
16 pronounce his last name. This is Raj. He lives  
17 right down the street from me. He did a drive test.  
18 So this isn't anecdotal. This was real time, and he  
19 videotaped it. He set up a little box in his car  
20 with his AT&T brand telephone right there with his  
21 GPS, filmed the whole thing, and he drove this. He  
22 drove out here, up here, around here, down here,  
23 around here, up there, and back (indicating).

24 Did I get that right?

1 MR. RAJKUMAR: Yes.

2 MR. JUSSAUME: And guess what? Beautiful  
3 bars the whole time. We've got it on videotape, and  
4 we can put it up: Let me see. I wrote  
5 down -- because I'd like this to be part of the  
6 record in case anybody wants to see it. If you want  
7 us to put it up, it's six and a half minutes. I can  
8 run it in the background. You can watch as he  
9 drives the entire thing and doesn't run into a bit,  
10 not one bit of dropped coverage. Everything is  
11 three bars or better the entire time. In fact, in  
12 fact, it's funny if you watch this videotape -- and  
13 I'll give you the address of it. If you watch the  
14 videotape, he pulls out here, and it's three bars,  
15 three bars, three bars. He turns the corner here  
16 and guess what happens? It pops right up to four.  
17 It pops up to five. Five. Five. Five. And it's  
18 only down in here (indicating) that it drops down to  
19 three. Never less than three.

20 This videotape is located at  
21 [www.youtube.com/watch?v=BuwoOP\\_f-jA](http://www.youtube.com/watch?v=BuwoOP_f-jA), and we can put  
22 it on there. Anybody want to watch it?

23 MR. YACOUBY: Not right now.

24 MR. JUSSAUME: All right. There it is.

1 You can look it up. We'll be happy to send the link  
2 if need be.

3 The point being that when you combine  
4 their initial map showing what they claim to be this  
5 horrid coverage gap with their proposed remedy of it  
6 which remedies all of that (indicating), that's the  
7 only place that that gets any better. In the entire  
8 Town of Acton, the only improvement when you overlay  
9 those two maps is right there (indicating), and guess  
10 what, that's about 300 yards at most, of Route 2,  
11 not any significant houses.

12 No improvement whatsoever. That isn't a  
13 significant gap. That's not enough people to worry  
14 about. That's not enough people dropping calls. 3G  
15 is beautiful in there. To suggest -- I'm  
16 flabbergasted frankly at the notion that they're  
17 even here with a straight face suggesting that  
18 there's a significant gap here. He says -- they  
19 come in here and says, well, there's a significant  
20 gap. We wouldn't be here if it wasn't a significant  
21 gap. Mr. Weir hit the nail on the head. Of course,  
22 he'd be here. SBA wants a tower there. This  
23 location here on Craig Road seems to be the nexus of  
24 cellular need in the universe because --

1 (Laughter.)

2 MR. JUSSAUME: -- I mean think of the  
3 coincidence. Clearwire has to have a cell tower  
4 here. T-Mobile has to have a cell tower here.  
5 AT&T just there, and it defies -- it defies sense to  
6 get this beautiful coverage over one, two, three,  
7 four farm fields, and it's absolutely critical.

8 What's critical is SBA's got an anchor  
9 tenant, somebody that they can hang their hat on.  
10 That's what's critical.

11 What about this 4G business? We know that  
12 the 3G coverage is fine, and that's not anecdotal.  
13 We demonstrated it. I gave you the address of the  
14 videotape.

15 Their own affidavit from  
16 Mr. Deepak -- Deepak Rathore, who I don't know if  
17 he's ever appeared before the Board, but he's the  
18 one that submitted the original report, admits that  
19 this is all about data. It's not about voice. He  
20 says -- he says AT&T is also designing a network to  
21 provide high speed data services, and then the rest  
22 of his -- the rest of his affidavit, or it's not  
23 even an affidavit because it's not sworn, but the  
24 rest of his report is all obfuscation. It's amazing

1 obfuscation. It would make some -- well, it would  
2 make some people proud at how well it hides the  
3 ball.

4           Statements like -- oh, here's a beauty.  
5 In order to build out its network and meet customer  
6 demand for voice and data services as well as to  
7 enhance its network to improve high speed data  
8 services, AT&T must have in place a system of low  
9 power cell sites to serve portable wireless  
10 communication handsets and mobile telephones.

11           Well, gee whiz, that sounds an awful lot  
12 like we need a cell phone tower here. That's not  
13 what it says. It just says that we need cell phone  
14 towers to provide cell service. That's all it says.  
15 This report doesn't once say that there's a  
16 significant gap here and that AT&T needs it  
17 remedied. It doesn't say it, and I don't think  
18 Mr. Majid -- or I can't say it -- Mr. Md has said  
19 that either.

20           He said that there's a piece of paper that  
21 shows that cell signals don't -- you know, don't  
22 reach here and there, and we can fix that by putting  
23 in a tower. He hasn't dealt with the issue  
24 of -- the issue of --

1 CHAIRMAN CLYMER: Well, I think that is  
2 really our issue of whether it's significant or not.  
3 So I think we understand that.

4 MR. JUSSAUME: All right. Let's see here.  
5 I just want to make sure I've touched on every base  
6 that I wanted to.

7 Ah, 4G. We can see it coming. The  
8 argument, well, this is 4G. It's the next best  
9 thing. First of all, no one has told you that AT&T  
10 plans on offering 4G voice. This is all about 4G  
11 data, and we know that if your only reason for  
12 having a cell tower is so that you can use it for  
13 data, that doesn't apply in Acton. Clearwire proved  
14 it. You got an opinion from counsel that said that.

15 Here's an article from PC Mag, dated  
16 today, at 3:38 p.m., apparently the CEO of AT&T was  
17 talking at the CES Convention in Las Vegas. I don't  
18 know what that is, but it sounds like some kind  
19 of --

20 MR. YACOUBY: Consumer Electronics Show.

21 MR. JUSSAUME: There you go.

22 Mr. De la Vega was speaking at this, and  
23 he talked about AT&T's VoLTE, Voice Over LTE, and  
24 what he says is that it essentially turns voice

1 calls into Internet data on their new LTE network.  
2 Well, if that's the case, what he's doing is he's  
3 talking about transmitting data. This is different  
4 than what the other carriers are doing. The other  
5 carriers are using codecs, which again I don't know  
6 what it means, aside from it's not what AT&T is  
7 doing. It's some kind of software. They're using  
8 these codecs in order to achieve 4G, whereas AT&T  
9 wants to somehow transform it into data which --

10 MR. YACOUBY: I feel compelled. It's all  
11 about turning everything into data these days. So  
12 just understand the infrastructure is all about  
13 turning it into digital data.

14 MR. JUSSAUME: Well, I can explain only  
15 one thing, and that is that apparently the other  
16 companies everyone except AT&T is using the software  
17 to do it.

18 MR. YACOUBY: We're talking about  
19 competing technologies. They're all doing the same  
20 thing.

21 CHAIRMAN CLYMER: Why don't you just  
22 finish your point, and then we'll get --

23 MR. JUSSAUME: That's fine. That's a good  
24 idea.

1           So my last point is there are some cases,  
2           and I'm going to give you the names of them.  
3           There's one called USCOC of Greater Iowa versus  
4           Zoning Board, a 2006 case. And there's another case  
5           called Liberty Towers versus Zoning Hearing Board of  
6           Township of Lower Makefield. That was 2011 from  
7           Pennsylvania.

8           And in both of those cases, the courts  
9           looked at a situation where a provider came in and  
10          said, look, our service isn't so great. People can  
11          get our calls, but we can do better. Let us have a  
12          cell tower, and we can provide much better quality  
13          service.

14          The Court said no, you don't have a right  
15          to come in and improve the quality, and that's what  
16          we're talking about here with 4G over 3G. 3G  
17          they've got. There's really no dispute that 3G  
18          exists here in all of this area.

19          The question is whether they get this HD  
20          4G, and that's an improvement of quality. It's not  
21          an improvement of provision of the service.

22          That means that there is no gap, where the  
23          sole purpose of the application is to improve the  
24          voice quality, to make it sound like we're in the

1 same room as opposed to people on a phone. These  
2 cases say that, and there's no reason this Board  
3 needs to do anything other than that. You have  
4 enough information, as Mr. Maxson has indicated, to  
5 decide tonight that this isn't a significant gap at  
6 all, and even if it were, you guys already provide  
7 3G coverage across the board here. We don't have to  
8 take into account 4G at all.

9 I would ask one last thing: If the Board  
10 is inclined to vote, that the opponents be given the  
11 same kind of opportunity to put forth a coherent  
12 case over a like time that the applicant has been  
13 given and to present evidence of their own before  
14 that vote is taken.

15 Thank you.

16 CHAIRMAN CLYMER: Thank you.

17 So, Mr. Maxson, do you want to respond to  
18 any of the comments made at all from the public?

19 MR. MAXSON: Thank you. I'll tread  
20 lightly.

21 I appreciate the input from the residents.  
22 They clearly have done their homework and have made  
23 some points that the Board can weigh in evaluating  
24 the evidence.

1           One of the things that had come up earlier  
2           that I forgot to comment on last time I had the  
3           microphone is there was a question raised about  
4           populations served. These computer software  
5           packages, including Isotrope's and AT&T's are  
6           capable of measuring census population within a  
7           particular signal level. So if the Board is  
8           inclined to continue this hearing and collect more  
9           information, and if the Board is curious about the  
10          performance of a hypothetical site on, say, DOT  
11          property versus the site here on Craig Road, we can  
12          do a census count. So can the applicant at  
13          particular signal levels and compare them and see if  
14          there is a dearth of residences served by the  
15          proposed facility, as some had suggested, and  
16          whether a facility, for instance, at the DOT site  
17          might be more effective in serving residences.

18                 Now, it doesn't count commercial buildings  
19                 because population is not counted in those. We  
20                 don't have tools for counting those kinds of  
21                 buildings other than looking at a map and counting  
22                 them, which we can do. The applicant may have some  
23                 other database that could do that as well.

24                 So there are ways to get a little deeper

1 into what the real benefits of the proposed facility  
2 are and compare them to an alternative. We should  
3 probably stick with alternatives that the Board  
4 considers to be something that is viable and not to  
5 just go hunting around for random locations.

6 And I think that's probably far enough to  
7 go with that. You've certainly heard the discussions  
8 of different perspectives on the coverage maps and  
9 that sort of thing.

10 And I am reminded of one other thing as  
11 I'm about to close, and that is we had discussed at  
12 the last meeting that if there was enough  
13 inconsistency in the information that the applicant  
14 provided and the information that our computer  
15 modeling produced for us, that Isotrope might  
16 conduct its own drive test, and the Board had  
17 delegated to Mr. Bartl the authority to authorize us  
18 to conduct such a drive test after the last meeting  
19 with to -- to approve us to do that. And we didn't  
20 go down that road because we did get some new  
21 coverage, a new drive test from the applicant.  
22 Unfortunately we didn't get to the bottom of how  
23 that drive test was conducted until the last couple  
24 of days.

1           So we're still in a position if the Board  
2           is inclined, to conduct a drive test. Now, we can  
3           do that and not only collect signals for any data  
4           but also collect something like call drop data where  
5           we would have a phone dial up to a standard  
6           connection, a bridge, and log wherever the call is  
7           disconnected for a lack of coverage and then map  
8           that as well as a signal strength on the drive test.  
9           And that would tell us once and for all whether there  
10          are any major holes in coverage.

11          One qualification of that, of course, is  
12          that it is now winter. And if our drive test is  
13          conducted in the winter without the foliage, we will  
14          expect to have in areas that are foliage constrained  
15          better signal than we would in the summertime. In  
16          areas that are terrain constrained, the foliage  
17          doesn't matter, and we could expect to have the same  
18          kind of performance.

19          So one thing about a drive test is that at  
20          this time of year, it favors the applicant -- well,  
21          I'm sorry. It favors the existing coverage which  
22          the applicant might say disfavors their position  
23          which is summer performance. Similarly, the drive  
24          test that was videotaped and was made available to

1 you on the Internet, if that was conducted after the  
2 foliage came down, that would be a challenge that  
3 the applicant would have for the veracity of that  
4 test as well.

5 CHAIRMAN CLYMER: Why don't we hear from  
6 the applicant, and then we can give you some  
7 direction on what we need to do.

8 MR. SOUSA: Mr. Chairman, I wouldn't have  
9 any objections to Isotrope performing their own  
10 drive test.

11 I would state though Mr. Maxson has  
12 worked, I think, on the other side of C Squared  
13 Systems for on a number of applications. They are a  
14 very reputable source. They did perform this drive  
15 test. He has reviewed the data. He has looked at  
16 the characteristics that they looked at. If he  
17 needs to reincorporate the 4G information into his  
18 analysis, I think that's fine. Whether or not we  
19 need to take yet another step above and beyond the  
20 RF plots that AT&T provided, the drive test data  
21 that C Squared has provided, and yet another drive  
22 test by Isotrope, I'm not so sure we need to take  
23 that step; but I would be amenable to it if that's a  
24 direction the Board wants to go.

1           We do believe strongly that there is a  
2 significant gap in coverage. It's shown not only in  
3 the plots but also in this drive test. We're not  
4 just looking at that small section of red. We're  
5 looking at a fair amount of red and yellow. We can  
6 provide some pops. information, some population  
7 information if that's something that would be  
8 helpful to Mr. Maxson and to the Board as well.

9           There are some statements that we're just  
10 building a data network, and that's not the case.  
11 We're building -- and it was stated a number of  
12 times on the record that we're building for a 3G and  
13 4G, for voice and data services. The fact that we  
14 provide both is something that we're not only  
15 allowed to do, but we're licensed to do so under the  
16 FCC license that we were -- that we obtained.

17           The definition of "significant gap," just  
18 to put a point on what Mr. Maxson said is that the  
19 courts, I don't believe, have done a very good job  
20 in defining significant gap. I think there  
21 are -- it allows boards like this to take into  
22 consideration all the factors or many factors. One  
23 of the things it has said is that two houses at the  
24 end of a cul-de-sac is not a significant gap. I

1 haven't heard much more of a definition that's  
2 clearer, but we know that above and beyond that, not  
3 only do you have to have a significant gap, but you  
4 need a carrier who needs to fill that gap. So it's  
5 not just about SBA building a tower and adding to  
6 its portfolio. Believe me, AT&T would not sign up  
7 for a long-term lease on a facility like this if it  
8 didn't need to fill that gap in coverage.

9           It has resources that it can deploy in  
10 only a certain number of sites, and it's only going  
11 to deploy those resources and sign up sites where it  
12 actually needs to fill gaps in coverage. And so  
13 there's clearly a need here to fill that gap. It's  
14 not just about SBA adding to its portfolio.

15           And we think the drive test data and the  
16 RF plots speak for themselves, and you have a  
17 consultant here who's experienced in this area to  
18 review that information and to guide you, and I  
19 think it would be -- I think he would be hard  
20 pressed to say that there's not a gap in coverage in  
21 this area.

22           I also think that we've submitted a number  
23 of proposals to fill that gap in a responsible way  
24 with different designs that comport with the

1 requirements under your bylaw, and if you wanted to  
2 talk about those any further, we're amenable to  
3 doing that as well.

4 CHAIRMAN CLYMER: Okay. If you have a  
5 brief comment --

6 MR. JUSSAUME: Very brief.

7 CHAIRMAN CLYMER: Once he's done, if you  
8 have a brief comment, we'll --

9 MR. JUSSAUME: Very, very brief.

10 In terms of the drive test -- this is a  
11 point I intended to make and forgot to. This is  
12 significant. The drive test, this drive test shows  
13 all of these roads down here (indicating), all these  
14 roads over here (indicating) as being in red. The  
15 significant thing about this is that the AT&T models  
16 showing improvement, none of that, none of that up  
17 top, none of that, and none of this down here  
18 (indicating) is improved. None of it. None of it.

19 So if you actually look at the map that  
20 they show, showing improvement, assuming the tower  
21 is put there, this road down here (indicating), this  
22 road down here (indicating), Lawsbrook, School  
23 Street, all the way out here to the end of Piper  
24 Road, everything north of Route 2, none of it is

1 shown as improved in any significant way by their  
2 map, which means that the drive test has only  
3 certain relevant portions. You can drive around  
4 down here (indicating), and it won't show -- you  
5 know, it may be red, but so what? That tower was  
6 never going to help that.

7 This tower here (indicating) is not going  
8 to help this (indicating). It's not going to help  
9 this (indicating). It's not going to help this  
10 (indicating), and that's not me saying it. It's  
11 their map that shows that.

12 So the drive test that's important is just  
13 this part right here (indicating) because that's the  
14 only part that their map, their computer model will  
15 show any improvement over existing conditions.

16 That's the point that I wanted to make,  
17 and that's absolutely critical in terms of talking  
18 about a drive test.

19 MR. SOUSA: So at no point did we suggest  
20 that this site on Craig Road would fill the gaps  
21 that the gentleman was talking about.

22 The reason we drove further out is so that  
23 we could see where we do have coverage. Those are  
24 the areas that are close to those five surrounding

1 sites that we talked about before. And so that's  
2 why you'll see an extensive drive test is so that we  
3 can drive to those areas where there is coverage,  
4 where there is another site. And so that's why this  
5 drive test data is compiled as it is. More  
6 information is not a bad thing.

7 MR. DUBE: Mr. Sousa, I have one question  
8 for you.

9 MR. SOUSA: Sure. Of course.

10 MR. DUBE: You heard Mr. Jussaume describe  
11 case law in this area, and he specifically talked  
12 about the law with respect to the difference between  
13 significant gap and an improvement in quality.

14 MR. SOUSA: Yep.

15 MR. DUBE: Has he got that right? Is  
16 there something that the Board should be hearing  
17 about that particular issue that's different than  
18 the way he described it?

19 MR. SOUSA: Well, I think you should reach  
20 out to counsel relative to that issue. I think it  
21 would be prudent of you to do so. I think the cases  
22 that he cited are not from this circuit. There's a  
23 big difference of opinion in circuits relative to  
24 cases under the Telecommunications Act of 1996.

1           The way the First Circuit and the way that  
2 many of the federal courts have looked at this is if  
3 the user does not have coverage, then he is being  
4 prohibited from accessing that network, and that  
5 could be deemed -- and so if there's a quality issue  
6 in the form of no coverage or inconsistent coverage,  
7 then that could be deemed a violation of the  
8 Telecommunications Act; and so it needs to be looked  
9 at.

10           And above and beyond that, we've also  
11 shown you not only quality, but we've also shown you  
12 a coverage gap along Route 2, both on 3G and 4G.

13           MR. DUBE: Thanks.

14           MR. SOUSA: You're welcome.

15           CHAIRMAN CLYMER: Any more questions?

16           Okay. We're not going to close the public  
17 hearing. I think there's more work that needs to be  
18 done, so just to get that point. I know -- I'm sure  
19 there's many of you that will be interested in that.

20           So I think we need to decide what we want  
21 done, and it sounds like you're amenable to, you  
22 know, additional work being done by Dave to help us.

23           MR. SOUSA: We are. Yeah, we'd like you  
24 to have a comprehensive report from Mr. Maxson

1 relative to the 4G and 3G networks that we're trying  
2 to build.

3 CHAIRMAN CLYMER: And I do think that  
4 the -- to help us to address significance, I do  
5 think that the population or the household count or  
6 whatever, whatever specifics come out of that, and  
7 there may be some gaps, but I think that would be  
8 very useful data to have, and I'm glad we don't have  
9 to ask Kristen to try to figure out how to get that  
10 out of our internal systems, but I think that would  
11 be helpful.

12 I think the other question is the drive  
13 test.

14 MR. YACOUBY: I don't -- I don't know.  
15 I'm conflicted. That's like -- if it's a reputable  
16 company, what are we going to get out of doing the  
17 drive test again other than spending more money and  
18 time. I don't see a benefit to that. I mean, what  
19 I heard from both of them it's a reputable company.  
20 So what's the point?

21 CHAIRMAN CLYMER: I mean --

22 MR. YACOUBY: I don't see any additional  
23 data other than basically oh, let's spend some more  
24 money and spend more time to get data that's not

1 going to be material and affect anything that would  
2 work, in my opinion.

3 I mean, unless this company that did the  
4 drive test is an incompetent firm. You're just  
5 going to have to do the same test over again just to  
6 do it over again? I don't see the benefit at all.

7 On population I could not agree more.  
8 That would be useful, but doing another drive test,  
9 it's just like okay. Let's make them run around the  
10 block again.

11 CHAIRMAN CLYMER: Well, I guess what we  
12 don't know are some of the factors that go into the  
13 drive test.

14 MR. YACOUBY: Maybe getting an explanation  
15 of how the drive test was done, I would agree with  
16 that, but to say go do it again.

17 CHAIRMAN CLYMER: Well, maybe we should  
18 ask -- maybe we should ask the question is, you  
19 know, if you were to do a drive test, I mean, are  
20 there factors that you think you -- I mean, you  
21 know, are we really testing the veracity of the firm  
22 that did this or are there other factors that, you  
23 know, could influence the results --

24 MR. YACOUBY: What additional data could

1 we get?

2 CHAIRMAN CLYMER: -- that we would get out  
3 of our doing -- by doing a drive test?

4 MR. DUBE: I'm sorry to interrupt, but  
5 didn't you describe two types of drive tests? One  
6 you're just testing -- I'm going to use laymen's  
7 terms, for the signal; whereas, the second thing you  
8 described most recently was actually placing the  
9 call?

10 MR. MAXSON: That's correct.

11 MR. DUBE: And that's -- the latter thing  
12 hadn't been done yet; right?

13 MR. MAXSON: Right. Two companies  
14 participated in producing that drive test map that  
15 you see. C Squared Systems drove the route,  
16 collected the data on their system, and passed the  
17 data off to AT&T. AT&T's engineer took a column of  
18 that data and mapped it. And in my conversation  
19 with AT&T just before the meeting, I found that  
20 there was potentially a discrepancy between the  
21 column of data that was mapped and what the computer  
22 was told to map.

23 MR. YACOUBY: Fair enough.

24 MR. MAXSON: So it was hard to compare the

1 two, even though they use the same signal level  
2 thresholds.

3           The other aspect to this is while we make  
4 this leap of faith that negative 82 dBm or stronger,  
5 the blue and green, is reliable in car coverage as  
6 testified to by the applicant; that's a leap of  
7 faith. If we've got all the other variables set  
8 properly on the computer model, and if we really,  
9 you know, are being fully -- having full faith in  
10 the computer model, the reality is typically  
11 that the thresholds that are used on these maps are  
12 very idealized. They're very high because they want  
13 to have high expectations for the quality of service  
14 they're providing, and carriers do sometimes make  
15 mistakes. I have caught plenty. And the question  
16 here is that you now have some data -- at least  
17 testimony to some data that is a drive test of sorts  
18 where a video camera was monitoring the number of  
19 bars on a cell phone. Now, that doesn't directly  
20 equate to signal strength because the bars are  
21 typically based on a quality metric of the signal  
22 and not just the strength, but having three bars, if  
23 you've ever had a phone conversation with three  
24 bars, you know you can have a phone conversation

1 with three bars.

2 So this does raise the question of whether  
3 the threshold for a significant gap in voice coverage  
4 has been crossed by the way the network is operating  
5 today, and to do a drive test with call continuity  
6 testing, that's one of the ways to verify whether  
7 and where you have significant depressions in the  
8 performance of the network.

9 MR. YACOUBY: Good question. You  
10 indicated that they use a particular column of data.

11 MR. MAXSON: Yes.

12 MR. YACOUBY: Is this other data that  
13 you're talking in that that's already been collected  
14 and could it be analyzed? Or was it not collected?

15 See, that would be my -- it sounds like  
16 they have the data, and we haven't analyzed the data  
17 that we already have. That's my only point. So why  
18 don't we --

19 MR. SOUSA: Mr. Yacouby.

20 MR. YACOUBY: -- go back and analyze --

21 MR. MAXSON: If I may, I agree with that  
22 approach. I think I'm in favor of efficiency and  
23 not burdening the regulatory process or the  
24 applicant or the residents with unnecessary effort,

1 and what were the questions you had come up as we  
2 were trying to move forward after this meeting or at  
3 the end of this meeting, the question would have  
4 come up what information do you want?

5 I would ask the applicant to provide the  
6 raw data from that system with some certification  
7 from the person producing the raw data that it is  
8 unmolested. So that we get the original data for  
9 sure, and we can look at that and plot it and look  
10 at the different columns and see whether we can make  
11 some good use of the data because I have some comfort  
12 with the methodology that was used to collect that  
13 data.

14 MR. YACOUBY: That would be --

15 CHAIRMAN CLYMER: The only thing that  
16 would get at would be the call interruption?

17 MR. MAXSON: Right.

18 MR. YACOUBY: It would not get at the  
19 calls dropped?

20 MR. MAXSON: No, I don't believe -- what  
21 they described simply was a signal strength. They  
22 were collecting network information but not  
23 necessarily making phone calls.

24 MR. SOUSA: Mr. Chairman, Mr. Md came up

1 to me as Mr. Maxson was talking, and he would be  
2 fine with giving you that data, and I'm not -- and I  
3 don't believe you're even suggesting that C Squared  
4 would mollify its data, but they could provide an  
5 affidavit stating that it is the raw data. So one  
6 column of information is provided as part of this  
7 drive test, but we're amenable to sharing or having  
8 C Squared, I should say, share the rest of the raw  
9 data with you. I think that would perhaps speed the  
10 process and allow you to reverify it as you were.  
11 And I think I made that available to you in my  
12 correspondence to you, my e-mail.

13 MR. MAXSON: Good.

14 CHAIRMAN CLYMER: Would seeing that data,  
15 Dave, give you a sense of whether it would make  
16 sense to do the call interruption or would that just  
17 be totally separate and seeing the data would not  
18 have any indication of that?

19 MR. MAXSON: Well, the -- yeah, one of the  
20 challenges is that we would still be relying on the  
21 signal level thresholds that the applicant is  
22 providing as the measure of where service is very  
23 good, good, good enough, not so good.

24 And, you know, companies have to draw the

1 line, and they do it in a way that is favorable to,  
2 you know, best network design. And I think this is  
3 one of the issues when you get into discussing  
4 significant gaps is is it good enough? Not is it  
5 perfect, but is it good enough? And one of the ways  
6 to evaluate whether something is good enough is to  
7 do actual performance testing, and if the applicant's  
8 concerned about data speeds, we could also do data  
9 through-put testing, you know, as to how fast a file  
10 gets moved up and down. I'm not suggesting that  
11 because I think the crux of this is probably on the  
12 three bars that the member of the audience indicated  
13 is showing on the video.

14 CHAIRMAN CLYMER: Okay. Do you have a  
15 comment to that?

16 MR. SOUSA: No. Just that we're amenable  
17 to sharing the data.

18 And I guess the only other comment would  
19 be that -- David, I assume that you would never  
20 build a wireless network utilizing the bars on a  
21 phone as a measure of whether or not something works  
22 or not?

23 MR. MAXSON: I would go into more depth  
24 for sure, yeah.

1 MR. SOUSA: Okay.

2 CHAIRMAN CLYMER: Because I do think that  
3 the Board would like to understand that. Because of  
4 all of the different comments and different things  
5 that have come out of the discussion, I do think  
6 that that would be helpful because it would give us  
7 another data point to determine whether this is  
8 significant.

9 So, you know, and I guess we get into an  
10 issue of this calendar and the timing. I mean, I  
11 don't know what's involved -- I mean it seems  
12 like -- it's seemingly from someone who's never  
13 done a drive test, it doesn't seem like it's a  
14 time-consuming process, but it may be.

15 MR. SOUSA: I'd have to defer to  
16 Mr. Maxson on how long it would take him to either  
17 review the data that C Squared has compiled already  
18 and that they could share with him versus doing his  
19 own drive test.

20 MR. MAXSON: I can have either or both  
21 done within a week.

22 CHAIRMAN CLYMER: Okay. Opinions on the  
23 Board on whether it makes a difference or not?

24 MR. DUBE: You know, without being able to

1 tell what the costs are for the two pieces that  
2 we're talking about: the population piece and the  
3 call interruption side, leaving the cost aside, I'd  
4 be inclined to do both. I think that's very  
5 helpful.

6 CHAIRMAN CLYMER: Okay.

7 MR. BUKOWSKI: Yeah, my only thought is  
8 if, Dave, you're fine with the company that did the  
9 original drive test, just analyze the data. I don't  
10 know about the bars and the dropped calls and all  
11 that, but any time I've dropped a call, I looked at  
12 my phone, and it showed no bars. So there's got to  
13 be some correlation to that; right?

14 MR. MAXSON: Yes. In terms of what  
15 Mr. Sousa was asking me before, it's very strongly  
16 indicative that if the phone was continuously at  
17 three bars, that there is a degree of reliable  
18 signal, but it's not measurements.

19 MR. BUKOWSKI: So the drive test data, are  
20 you looking at what the red data -- the red zones?  
21 Does that mean there's one bar or is there no direct  
22 correlation between what those colors are and the  
23 actual number of bars shown?

24 MR. MAXSON: There's an indirect correlation

1 because it's not only signal strength but signal  
2 quality that the bars indicate. Well, what that  
3 means is if the signal strength is lower than the  
4 threshold but the signal quality is still good  
5 enough, you'll still have the three bars.

6 CHAIRMAN CLYMER: I think based on  
7 the -- and, again, I haven't seen the You Tube  
8 video, and I haven't looked at that, but to the  
9 extent that, you know, that implies that there are  
10 multiple bars that -- I think it would be helpful to  
11 have an independent, you know, call drop test because  
12 I think that would make us feel like we had  
13 something that was done in a way that we could rely  
14 on.

15 MR. DUBE: We haven't had one person come  
16 forward and say that they have trouble in this area  
17 with their cell phone.

18 CHAIRMAN CLYMER: Right. And then Ray  
19 mentioned with another carrier, he has trouble with  
20 them, and I with that same carrier never have had  
21 trouble in my life.

22 MR. YACOUBY: See, that's the problem.  
23 It's anecdotal.

24 CHAIRMAN CLYMER: I do think it is better

1 to get something that was done in a controlled  
2 way --

3 MR. YACOUBY: More scientific. Exactly.

4 CHAIRMAN CLYMER: -- and then at least the  
5 applicant has the ability to question anything that  
6 comes out of that. So, I mean, I think that would  
7 be my view. Again, I know that everyone would like  
8 to keep this moving --

9 MR. SOUSA: Right.

10 CHAIRMAN CLYMER: -- but it sounds like  
11 the time frame to do that is not extensive, and we  
12 need to get you back on the calendar anyway. So I  
13 would think that that would make sense.

14 MR. BUKOWSKI: Absolutely. And is the  
15 dropped call data, is that biased because of the  
16 wintertime as well?

17 MR. MAXSON: Yes. There will be a bias in  
18 favor of reporting good coverage because there is no  
19 foliage, and you sort of have to take that into  
20 account. One of the things that we do is sort of  
21 compensate for that by using a phone inside the  
22 vehicle rather than antenna outside the vehicle.  
23 It's a very informal way to slightly penalize the  
24 results, but that's where you want to have the phone

1 anyway when you're conducting a call drop test where  
2 it's going to be used.

3 So, yes, so there will be some uncertainty  
4 as a result of the fact that there's no foliage.

5 MR. BUKOWSKI: I guess, my opinion overall  
6 is just use the same data that they used; then, you  
7 know, there is no conceivable bias from one side or  
8 the other and do your analysis based on that. I  
9 mean I'm not totally sold on the dropped call track,  
10 but I'm not against it either.

11 CHAIRMAN CLYMER: What do you think,  
12 Derrick?

13 MR. CHIN: Use the existing data.

14 CHAIRMAN CLYMER: Use the existing data  
15 without doing the dropped call test. All right. I  
16 think we have a consensus.

17 MR. DUBE: If we can get the population --

18 CHAIRMAN CLYMER: Oh, we definitely want  
19 the population.

20 MR. DUBE: -- as an overlay of the existing  
21 data.

22 CHAIRMAN CLYMER: Right.

23 MR. MAXSON: The population is what's  
24 going to come off of the computer models, and to the

1 extent that they're variable, we can do it, and then  
2 AT&T can do it, and you can have dueling census  
3 counts.

4 CHAIRMAN CLYMER: And we would actually,  
5 if we could, try to get -- schedule this so we could  
6 get all of this, review it before the meeting, so we  
7 could have a more productive meeting next time. Not  
8 that this wasn't productive, but we can at least  
9 look at it in advance, and then we'll have specific  
10 questions rather than, you know, seeing it --

11 MR. SOUSA: I agree.

12 CHAIRMAN CLYMER: -- as we're sitting  
13 here.

14 MR. SOUSA: Yeah, we'd have the  
15 opportunity to review it ourselves in advance.

16 MR. MAXSON: Right.

17 CHAIRMAN CLYMER: Okay. So I know that we  
18 have someone who would like to speak.

19 Dave, do you have a short --

20 MR. CLOUGH: The name's Dave Clough,  
21 C-L-O-U-G-H, 14 Evergreen Road.

22 I just want some clarity and I have a  
23 question. The thresholds, I think we've been  
24 throwing them around. I'm not sure everyone fully

1 understands what that means. I mean, does it mean  
2 that green is four bars? Blue is three, and so on?  
3 It doesn't mean that what you see on the phone  
4 matches those colors. And those numbers could be  
5 set to pessimistic ranges so that across all  
6 phones -- I mean, I've had different phones in my  
7 house. One will have two bars. One will have three  
8 bars, just by getting a new phone. So there's those  
9 kinds of things. So can we say that these numbers  
10 match the bars on a phone, and is that the  
11 normalization that you've been talking about that  
12 you want to verify that the thresholds are really an  
13 important thing to be looking at?

14 MR. MAXSON: That's a great question.  
15 And, yes, there is variability among different  
16 models of phone for a given ambient condition,  
17 signal strength condition or signal quality  
18 condition. Different phones will respond better or  
19 more poorly largely due to the quality of their  
20 electronics and the nature of the design of their  
21 internal antennas. So there's some variation there.

22 And then in terms of the thresholds that  
23 are shown on the screen, the thresholds are helpful  
24 to give the human eye a way to visualize sort of

1 idealized images. The green is supposed to indicate  
2 areas where yes, the coverage inside your house will  
3 be good.

4 MR. CLOUGH: So pretty much anybody with  
5 any equipment?

6 MR. MAXSON: And, in fact, what it is is  
7 that the green is indicating that the signal  
8 strength is so good that we can expect "X" percent  
9 of the houses in a particular topography will have  
10 really good coverage everywhere, and "Y" percent of  
11 those houses will have good enough coverage in the  
12 basement that the oil burner repair person can make  
13 a call to the shop for a part, you know.

14 And then when you get out to the blue,  
15 does that mean the coverage in the residence goes  
16 away? No. It means the probability of having good  
17 coverage throughout the residence diminishes by some  
18 amount with decreasing signal strength.

19 And so you sort of have to -- for those of  
20 us wearing glasses -- take off your glasses and look  
21 at the map and say what does it look like when it's  
22 fuzzy and blurry?

23 So you get a feel for where signal is  
24 really good and where signal is really not so good,

1 and then the stuff in between is gradation.

2 And then this other question which was a  
3 great one for people to bring up is if you're having  
4 really good signal falling on pastures and horse  
5 fields, is that the most efficacious use of a  
6 wireless facility? And, again, you have to look at  
7 the alternatives and compare them. So doing the  
8 population counts would be a good illustration.

9 MR. CLOUGH: So just -- and I'm not sure  
10 how important this is, but if you're going to do  
11 drop call tests, you just talked about the variation  
12 and the quality of the antenna and the electronics  
13 and so on. What quality phone are you going to use  
14 to make those tests: one that pulls in a signal from  
15 anywhere or one that has a weak signal?

16 MR. MAXSON: Well, at this point it tends  
17 to be when we do the call test through a phone,  
18 connected to our computer system, it tends to be the  
19 better quality phones that have the apps that talk  
20 to the computer system. So in that sense, it favors  
21 the wireless company -- I'm sorry -- it favors  
22 coverage in that it will show coverage because it's  
23 a good phone, but someone who has a less, a poorer  
24 quality phone might not have the same coverage.

1 MR. CLOUGH: Thank you.

2 CHAIRMAN CLYMER: So, Dave, as far as the  
3 calendar goes, I know we have meetings on the 21st,  
4 the 4th of February, and the 18th of February. When  
5 do we believe would be an appropriate time for you  
6 to have to get the information you need, be able to  
7 do the analysis we talked about, provide it to the  
8 applicant in advance, and get it to the Board in  
9 advance of the meeting?

10 MR. MAXSON: Yeah, I'm thinking we can get  
11 work done by the 21st, but I think we'll want to  
12 have the applicant and us have an opportunity to go  
13 back and forth on that, make sure that we have  
14 resolved any discrepancies.

15 So I would suggest a month, but if the  
16 applicant is eager to keep this thing going, we  
17 could have something out within a week, and we could  
18 meet on the 21st. It's just we'll have to jump  
19 through some hoops to make that happen.

20 CHAIRMAN CLYMER: From the applicant's  
21 perspective, what is your --

22 MR. SOUSA: Ideally we'd like to try to  
23 keep the 21st, if possible, as long as we can have  
24 just a few days to review the data.

1 CHAIRMAN CLYMER: Okay. So, Dave, do you  
2 think that's doable?

3 MR. MAXSON: Yeah. Let's just go over the  
4 data we're talking about.

5 CHAIRMAN CLYMER: Okay.

6 MR. MAXSON: The applicant will provide us  
7 with the raw data from the drive test tomorrow.

8 MR. SOUSA: Uh-huh.

9 MR. MAXSON: And we'll start crunching it.  
10 Now, at this point, how -- what is the  
11 sense of the meeting on doing a call drop test? Is  
12 that --

13 CHAIRMAN CLYMER: I think the consensus  
14 was not to do the call drop test at this point.

15 MR. MAXSON: Okay. Well, that simplifies  
16 things then. I think we should be able to turn  
17 something around, you know, a week to ten days,  
18 which would still give them four days to seven days  
19 to review it.

20 MS. GUICHARD: Would that include the  
21 population count?

22 MR. MAXSON: And would that include the  
23 population count? Yes.

24 CHAIRMAN CLYMER: And who's going to do

1 that? You or the applicant?

2 MR. MAXSON: Well, I suggest we both do it  
3 since we both trust our computer models.

4 CHAIRMAN CLYMER: Okay. And then will  
5 your computer model -- you may not know this now,  
6 but will your computer model capture the businesses  
7 that Dave's model will not, or is it going to do the  
8 same thing? It's going to --

9 MR. SOUSA: You know, I don't know the  
10 answer to that technical question.

11 MR. YACOUBY: I don't think --

12 CHAIRMAN CLYMER: Let's --

13 MR. YACOUBY: I think the answer's no just  
14 knowing the data.

15 MR. MAXSON: Well, if you're not doing  
16 census data, certainly, but there are other data  
17 layers that some systems utilize to evaluate, for  
18 instance, building counts within a signal footprint.  
19 I don't know if AT&T has that.

20 CHAIRMAN CLYMER: We're actually -- just a  
21 comment to you for a second. We're actually going  
22 to continue the public hearing so we are -- unless  
23 there's really a critical thing.

24 MR. JUSSAUME: It is actually. Two

1 things, two real quick. It will take me two  
2 seconds.

3 CHAIRMAN CLYMER: Okay.

4 MR. JUSSAUME: One, I suspect the  
5 residents may help you out with your population  
6 count.

7 Second, will the Board ask AT&T to produce  
8 its original requisition -- I think that's the word  
9 Mr. Maxson used last year -- the original  
10 requisition to SBA saying go out and find us a tower  
11 to fill this gap? Will the Board ask them to  
12 produce that?

13 And these papers I picked up by accident.  
14 They belong to somebody else.

15 Will the Board ask them to do that.

16 CHAIRMAN CLYMER: I don't know that  
17 that -- I mean I know you had indicated that you  
18 would send us a redacted copy of the agreement with  
19 AT&T.

20 MR. SOUSA: Right. Yeah, that's what I  
21 will provide.

22 MR. JUSSAUME: They're not the same things  
23 though.

24 MR. SOUSA: The redacted copy of the lease

1 is what I can provide.

2 CHAIRMAN CLYMER: Okay. Okay. And,  
3 again, I think that whether AT&T came to them or  
4 not, I think we've got to judge whether there's a  
5 significant gap in coverage. So I do think that  
6 although, you know, where this came from to me is  
7 not going to dictate whether we judge there to be a  
8 significant gap or not.

9 MR. JUSSAUME: Well, certainly the issue  
10 of whether AT&T went out looking to resolve the  
11 issue bears upon how significant the gap is, doesn't  
12 it?

13 CHAIRMAN CLYMER: I don't think so.

14 MR. YACOUBY: I don't think it's relevant.

15 CHAIRMAN CLYMER: If AT&T is willing to  
16 pay to do this, there's got to be a reason for it.

17 Again, we will say that there's 4G reasons  
18 to do it, but I do think that what we want to do is  
19 make sure there really is a commitment there, and  
20 whether they initiated the commitment or someone  
21 else initiated the commitment, I don't think  
22 really --

23 MR. JUSSAUME: The interests aren't  
24 aligned. Clearly they're not aligned. SBA has an

1 interest in building towers and leasing them. AT&T  
2 has an interest in having a full network. If AT&T  
3 didn't think of itself, hey, we should go out and  
4 get a tower here, but SBA said, hey, by the way, a  
5 tower might work.

6 CHAIRMAN CLYMER: I don't think personally  
7 that's relevant, but we are going to discuss this  
8 with legal counsel anyways. So if they come back  
9 and say your point is extremely relevant, then we'll  
10 react accordingly, but I don't -- personally I don't  
11 think it is but again, I --

12 MR. MAXSON: I can speak briefly to the  
13 process that the wireless companies go through in  
14 order to fund site development. In fact, I just  
15 talked to a site acquisition person for a project  
16 that is maybe pending in Southeastern Massachusetts  
17 for a client of mine that owns a large property, and  
18 AT&T, like all wireless companies, sort of cues up  
19 its most critical locations based on things like  
20 obviously dropped calls, signal strength, and a  
21 variety of different metrics. They kind of shake  
22 that all up into a pot and dump it out, and then  
23 they line up in order of benefit the projects that  
24 they want to do, and they have this big, long list

1 prioritized, and then when the new round of funding  
2 comes around from the corporation, they sit down and  
3 they say okay. How many of these sites can we do?  
4 And as they get further down the list, they might  
5 start looking at ones that are too expensive and so  
6 they'll push it down in priority because there's  
7 another one that's less expensive or might happen  
8 faster. So there's a little bit of log rolling that  
9 goes on, but the companies like SBA Towers -- I've  
10 worked with a number of other companies that have  
11 relationships with the wireless companies.  
12 They -- you know, they certainly make it known where  
13 they have facilities and structures and opportunities  
14 to the AT&Ts of the world, but it's not until a  
15 wireless company says okay. We're funded. That  
16 they sign a document that the applicant is proposing  
17 to provide.

18 MR. YACOUBY: So they're serious at that  
19 point.

20 MR. MAXSON: Yes.

21 MR. YACOUBY: I think that's what we  
22 really want.

23 CHAIRMAN CLYMER: I think we want to see  
24 that. Again, if we do get different guidance from

1 legal counsel, we'll react accordingly.

2 So I know that we're going to extend this  
3 to should we say 8:00 on the 21st? Do we have a  
4 time for the new naming -- the renaming of the road  
5 shouldn't be a time-sensitive thing. So should we  
6 say 8:00, to extend the public hearing to 8:00 on  
7 January 21st?

8 MS. GORMAN: Sure.

9 MS. GUICHARD: Same place.

10 CHAIRMAN CLYMER: Same place.

11 MR. MAXSON: What I propose from the  
12 deliverables is that we're -- first of all, just to  
13 be clear, we're talking about developing some  
14 population counts for the proposed facility and for  
15 some alternates for comparison that I can work with  
16 the applicant tomorrow on the phone to decide what  
17 thresholds we'll use so the applicant can produce  
18 their data; we'll produce our own version of the  
19 data, and I might also include just reducing tower  
20 height at the site just to compare what the  
21 difference in population is as well.

22 And then the second item in addition to  
23 population count is for us to receive the raw drive  
24 test data from the applicant and evaluate it on our

1 computer.

2 CHAIRMAN CLYMER: I think there was a  
3 third piece on the 4G though.

4 MR. MAXSON: Oh, the 4G. Yes. Right.  
5 Thank you.

6 The 4G, so we'll do a little due diligence  
7 on the 4G the way we did on the 3G, which will  
8 require the applicant to give us some data of the 4G  
9 cell sites. Yes.

10 CHAIRMAN CLYMER: I think that sounds  
11 complete.

12 MR. SOUSA: That's accurate.

13 So I'll be in touch with Mr. Maxson  
14 tomorrow then.

15 CHAIRMAN CLYMER: Okay. Do we need to  
16 sign something?

17 MS. GORMAN: Yes. Did you want to extend  
18 the decision deadline right now? It's to February  
19 twenty -- I'm sorry -- February 5th. Did you want  
20 to keep the same --

21 CHAIRMAN CLYMER: I don't think we need  
22 to -- we can always extend that coming out of the  
23 meeting, if necessary.

24 MR. SOUSA: That's right. If necessary.

1 CHAIRMAN CLYMER: Thank you everyone for  
2 your comments.

3 MR. SOUSA: Thank you, Mr. Chairman.  
4 Thank you, members of the board. I appreciate your  
5 consideration.

6 CHAIRMAN CLYMER: Thank you.

7 MS. GUICHARD: I had asked if we don't  
8 extend the decision date, we would basically have  
9 less than a month to write a decision.

10 CHAIRMAN CLYMER: So even though the next  
11 meeting is before the decision date, we would  
12 normally extend the decision date.

13 MS. GUICHARD: I think that's how it is  
14 done at the last continuation.

15 MS. GORMAN: Actually it wasn't. We kept  
16 it the same.

17 MS. GUICHARD: It wasn't.

18 As long as you're open to that. We just  
19 have some concerns to turn it around.

20 MR. SOUSA: I can look into that. If you  
21 need to extend just to that next meeting which  
22 is -- when is that, Kim? In February?

23 MS. GORMAN: February 4th.

24 CHAIRMAN CLYMER: The 4th would be after.

So before, so the 18th would be the one after.

MR. SOUSA: Yeah, we would clearly, if necessary, extend to the 18th. I'm stating that on the record.

CHAIRMAN CLYMER: Okay. Thank you.

MS. GORMAN: Thank you.

MR. SOUSA: Sure.

CHAIRMAN CLYMER: Okay.

MR. BOURDON: Vote to adjourn.

VOICE: Second.

CHAIRMAN CLYMER: All in favor.

All right. Thank you, everyone.

(Hearing concluded at 10:37 p.m.)

C E R T I F I C A T E

I, Julie Thomson Riley, Registered Diplomate Reporter and Certified Realtime Reporter, do hereby certify that the foregoing transcript is a true and accurate transcription of my stenographic notes on Tuesday, January 7, 2014, to the best of my knowledge, skill, and ability.

Julie Thomson Riley, RDR, CRR