1

2   BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

3

4   SPECIAL PROJECT
                                          NO. 980000A-SP
5

6   )
   In Re: Fair and reasonable residential)
7   basic local telecommunications rates.)
)
8   _____)

                             DAY 2
9

10

11 IN RE: Staff Workshop

12
    CONDUCTED BY: Anne Marsh
13

14 DATE: Friday, October 2, 1998

15 TIME: Commenced at 8:30 a.m.
                              Concluded at 12:15 p.m.
16

17 PLACE: Betty Easley Conference Center
                              4075 Esplanade Way
18   Room 148
                              Tallahassee, Florida
19

20 REPORTED BY: NANCY S. METZKE, RPR, CCR

21

22   C & N REPORTERS
              REGISTERED PROFESSIONAL REPORTERS
23   POST OFFICE BOX 3093
              TALLAHASSEE, FLORIDA 32315-3093
24   BUREAU OF REPORTING (850)697-8314 / FAX (850)697-8715

25   RECEIVED 10-12-98

───

1   MS. MARSH: We are ready to get started again

2   this morning. We don't have any preliminary matters. The

3   only thing I want to mention, a lot of you who are not used

4   to the microphones have not been picked up very well on

5   them. You really have to lean into them the way I'm

6   doing. I know those of you who speak here regularly are

7   used to it, but for those that are not, please try to lean

8   into the microphone so the court reporter and the audience

9   can hear you.

10   Mr. Perry, are you ready to start?

11   MR. PERRY: Yes, I am.

12   MS. MARSH: Okay. Our first speaker is Don Perry

13   on behalf of the large LECs.

14   MR. PERRY: Good morning. My name is Don Perry,

15   and I'm here representing GTE, BellSouth and Sprint. And

16   what I'm going to be discussing this morning is

17   affordability and the value of local telephone service, and

18   I'm going to do that from a perspective of looking at what

19   we have seen in the literature which comes to bear on the

20   question of affordability; and also what we are going to do

21   is turn around and talk about, not only retrospective but

22   prospective looks at affordability.

23   Now being an economist, my primary biases are

24   towards looking at what has actually occurred in the

25   marketplace. And the economists are generally nervous

1 using survey data, but there are cases where you have to do
2 that; and that's usually in cases where you are going into
3 something that you've never experienced before. And so we
4 are going to look at how these two bodies of knowledge
5 really compare, what sort of differences we see between
6 them and hopefully try and make some sense out of this.

7   So what I'm going to turn around first beginning
8 this morning, what I'd like to do, is I'd like to begin
9 with a discussion of what we have learned from real market
10 experience. And I'm going to touch on four different
11 areas; and that is, we'll be looking at information from
12 the census center population survey, the FCC data on trends
13 in subscribership; and then I'll turn to looking at what
14 have been trends in prices of local service and inflation
15 and changes in income; and then I'd like to take a look at
16 what I'm calling residential demand studies, which is the
17 econometric work that has been done on penetration rates
18 and subscribership in the U.S.

19   And, finally, I'd like to turn to what I consider
20 a retrospective study, what we have learned in California
21 about affordability of service. And this is a particular
22 interesting study because what it -- you know, a lot of
23 what we are looking at is information on whether people
24 have or don't have phones, but the California study in
25 particular turns around and looks at people who did not

1 have phones. It was a very expensive study. My memory, I

2 think we contributed somewhere like between 250 or five

3 hundred thousand dollars. I'm not entirely sure how much

4 any more. And it was a study that was commissioned by the

5 California commission specifically to do that and fielded

6 by Field Research Corporation. So I'll talk about what,

7 you know, what they learned about interviewing these

8 people. And as you can imagine it's very difficult to get

9 ahold of people who don't have phones.

10   What I'd like to do briefly now is just go over

11 what we have seen in trends in subscribership. And some of

12 this information, I understand, has been covered

13 previously, and I'm going to, you know, give you my take on

14 it. First off, what we see is that generally Florida is

15 fairly close to the national average in terms of

16 penetration statewide. Florida currently is about 93.3,

17 and nationwide the average is 94.1; and within the

18 statistical sampling properties of the current population

19 survey, these are not statistically distinguishable. What

20 we do see though is that, not surprisingly, penetration is

21 lower for lower income groups; and you can see for the

22 group that is 20K annually or less that subscribership is

23 lower than the national average, and it's lower than the

24 other income groups.

25   One thing though -- sorry. We're coordinating

1 our slides here. Thank. This is the first time we've done
2 this road show, so get our eye contact down better here as
3 we move along.

4   What has happened is that subscribership levels
5 though for the low income groups have improved over time.
6 During the last decade, subscribership in the low -- these
7 two low income groups that we are looking at has increased,
8 as you can see, from 1987 from 80% to 84%; and for the 20K
9 group from 89 to 92. It's primarily attributable to the
10 success of programs like Likelink and Link-Up America, and
11 so we have -- as you can see, we do have improvement in
12 this area. Obviously there is still room for continued
13 improvement.

14   If we take a look now --

15   COMMISSIONER DEASON: Excuse me.

16   MR. PERRY: Oh, I'm sorry.

17   COMMISSIONER DEASON: Are those income levels
18 adjusted for inflation over that time period?

19   MR. PERRY: No, those income levels are not.

20   COMMISSIONER DEASON: Those are absolute?

21   MR. PERRY: Nominal or absolute, right, they are
22 in constant dollars. They are not in, you know, not in
23 real inflation adjusted dollars.

24   We take a look now at per cap -- compare what has
25 been going on in basic local service rates compared to

1 changes in income and growth in general inflation. What

2 you see is that the lowest line on this graph, the one that

3 is kind of an orange-ish red there, shows that the GTE R1

4 rate has increased by approximately 2% in the period from

5 1987 to 1997. And in contrast, what we have seen is that

6 inflation has gone up by approximately 42% during this

7 time, and real income has grown over this time by -- sorry,

8 nominal income has grown by approximately 12% over that

9 same time period.

10 And if we take a look at how much local telephone

11 expenditures are as a proportion of the entire

12 telecommunications budget, just on the wireline side, they

13 represent one third of total telecommunications spending.

14 COMMISSIONER DEASON: Does that "Other"

15 include --

16 MR. PERRRY: Less than -- Sorry.

17 COMMISSIONER DEASON: Does the "Other" include

18 cellular

19 MR. PERRY: No, it doesn't. This is just, I'm

20 sorry, just wireline expenditures; so this would be your

21 basic local service and your toll expenditures and any

22 optional services such as custom calling.

23 COMMISSIONER DEASON: Where does the 3.50 SLC

24 enter into that?

25 MR. PERRY: The 3.50 SLC would be -- I believe

1　the 3.50 SLC is outside of this, I'm not sure. Okay, I

2　think it is outside of this, so it would be outside of

3　that; and that would represent -- it would probably take us

4　to maybe 27, 28 because it's about a three, three and a

5　half dollar charge.

6　　　　　One final piece in sort of this, what we have

7　seen in trends here is just a simple slide here presenting

8　more or less that the fact that what we see is that

9　penetration rates vary across the country, and they vary by

10　different price bands. For example, in the price band that

11　we are currently in, this 9 to $12 range, what you see is

12　that across the United States penetration varies somewhere

13　between 86.1% and 97%. And then if you go up into higher

14　ranges, like the 12 to 14, it varies between 87 and 98%.

15　And in ranges like 15 to $20 range, it varies between 91

16　and 97%. And so what we are seeing is that, you know, it's

17　not clear that you can draw a conclusion that, you know,

18　that if you -- I wouldn't want to draw the conclusion that

19　if you raise prices you can raise inflation -- or raise

20　penetration levels; but what we see is that there is

21　considerable variation in both rates and penetration across

22　the country. And this gives us a realistic basis for

23　assessing some of the survey information I want to talk

24　about later.

25　　　　　MR. DUNKEL: Excuse me, what is the data source

1   for this?

2   MR. PERRY: This data source is the Current

3   Population Survey, March '97.

4   MR. DUNKEL: From the FCC?

5   MR. PERRY: Yes, that's correct. It's, you know,

6   Alexendar Belinfante's publication.

7   MR. DUNKEL: And what is the source of the rates?

8   MR. PERRY: The source of the rates is the one

9   entitled price indices.

10   MR. DUNKEL: Okay.

11   MR. PERRY: I can get you the full reference if

12 you like.

13   MR. DUNKEL: I'd appreciate that.

14   MR. PERRY: Off line here.

15   MR. DUNKEL: Yes.

16   MR. PERRY: Certainly.

17   Okay. What I would like to turn now to is the

18 econometric analysis of this. The previous slide showed us

19 essentially a series of ranges of penetration by different

20 price levels across the various states in the United

21 States, and what you would like to be able to do is you

22 would like to be able to control for the different effects

23 that take place. So we would like to be able to control

24 for differences in prices, differences in income across the

25 states, differences in toll rates, vertical services, those

1   sorts of things; and that is essentially what the

2   econometric studies have attempted to address. And

3   generally, what the findings have been is that the demand

4   for local service, for the price of basic local service is

5   relatively inelastic. Most of the studies that have come

6   in within the last 10 years basically say that demand is

7   relatively insensitive to the change in price of basic

8   local service, so we see very, very little movement in

9   penetration. That surely was sort of brought out by that

10   slide earlier that we saw where you see the range is

11   very -- is reasonably restricted in terms of the

12   penetration by price bands.

13   What we have found which has been perhaps a

14   little bit surprising is that demand for basic service is

15   very sensitive to other prices, of other telecommunicaticn

16   prices. And in particular what we found is that it's

17   sensitive to the toll prices, and there is a cross price

18   effect we call it, and it's also sensitive to prices of

19   vertical services. It is sensitive to measured rate and

20   flat rate options and the nonrecurring charge, obviously.

21   So the idea here, and it's been expressed more or less in

22   the idea of the total bill concept, but what we see is that

23   people's decision to purchase a phone is predicated not

24   simply cn the single price variable of the monthly

25   recurring charge, but it's based on the total bill, what

1 they have to pay for everything once they get a phone.

2   Now in terms of just socio-economic variables

3 such as age, number of people in the house, that sort of

4 thing the key determinant we found that affects disconnects

5 is income, and that is one thing which sort of stands out

6 in these studies. So once you get beyond price and the

7 sort of normal economic variables, the key demographic

8 variable is income.

9   Now the two particular studies I'm going to

10 review -- there is a series of them in Lester Taylor's

11 book. It certainly goes through the history of this

12 literature quite well, but the two that I'm going to review

13 are basically the Hausman, Tardiff and Belinfante study

14 that was done in 1993 and presented before the American

15 Economic Association; and then I'm going to also talk about

16 some work that Mark Porter and I did which we reestimated

17 the Hausman, Tardiff and Belinfante model.

18   And the reason I'm focusing on these two studies

19 are: One, is that it represents the most current data

20 available. They were working with the current population

21 survey data, and this has updated the Pearle study

22 considerably. And they've also had -- during that time

23 period we've had more movement in prices, both in basic

24 residential service and in toll prices than we have seen

25 historically in the past. So it gives us a chance to get

1   better estimates of those effects.

2   Now what Mark and I did in 1995 is we reestimated

3   the Hausman model. And essentially what we were interested

4   in doing was we were interested in obtaining state level

5   estimates. So that's my primary -- or not my primary

6   contribution, my primary difference between what Professor

7   Hausman did and what we did, because his was done on a

8   national level. We wanted to be able to estimate state

9   specific elasticities for Florida and for, you know, the

10 other 28 states that we serve so that we can make it a

11 study which represented them.

12   So in terms of methodology, very quickly, as I

13 said, what Hausman and Tardiff and all looked at was that

14 they took the data from the census on penetrations

15 beginning in 1985, using the CPS data. That information

16 has something on the order of five hundred plus MSAs. They

17 had information on the price for basic local service, the

18 price for toll. And what they did is they predicted, or

19 essentially they estimated what the effects were of each

20 of these different variables.

21   And what we come out of that result -- the main

22 results that come out of that is that the price elasticity

23 for the monthly recurring charge, again, is very small.

24 The price elasticity, if I remember correctly, is minus

25 .01, for example; and to give you some perspective on that,

1 we -- the intraLATA toll elasticity generally, just look at

2 the demand elasticity for that, it's somewhere generally

3 viewed to be between minus .12 and minus .4. So this is

4 something that is 20 to 40 more times more price responsive

5 than basic measured -- or the basic local service, and long

6 distance is believed to have elasticity in the neighborhood

7 of about minus .7.

8   COMMISSIONER DEASON: Excuse me, clarify

9 something for me.

10   MR. PERRY: Certainly.

11   COMMISSIONER DEASON: When you talk about long

12 distance, are you saying the elasticity in terms of people

13 actually using the toll service, or does the price of toll

14 have an affect as to whether they even have a telephone in

15 the home?

16   MR. PERRY: No, no, no, the former please.

17 You're right. What I meant by that is that when we are

18 talking about the demand for toll service and how much you

19 are willing to pay and how much you you use, okay? We are

20 just talking about that elasticity being .7.

21   Now in terms of the cross price effect which is

22 the second point here --

23   COMMISSIONER GARCIA: Let me go back.

24   MR. PERRY: Certainly.

25   COMMISSIONER GARCIA: Explain that elasticity of

1   the local service as opposed to the long distance. I

2   understand that the long distance -- what you mean by the

3   long distance having more elasticity is that people are --

4   people's expenditures there fluctuate much more based on

5   price than basic service?

6   MR. PERRY: That's correct.

7   COMMISSIONER GARCIA: So basic service is more

8   inelastic?

9   MR. PERRY: That is correct, relatively more

10   inelastic.

11   MR. OCHSHORN: This is Ben Ochshorn from Florida

12   Legal Services, if you could help me with something too.

13   The population of your study is all subscribers, isn't it?

14   MR. PERRY: Yes, sir, that's correct.

15   MR. OCHSHORN: Okay. Thank you.

16   MR. PERRY: Well, sorry the population study is

17   not all subscribers. The population is both subscribers

18   and non-subscribers as sampled by the census bureau.

19   MR. OCHSHORN: Okay.

20   MR. PERRY: Okay? So --

21   MR. OCHSHORN: I guess my question is, it's like

22   a representative sample of --

23   MR. PERRY: It's a statistical

24   MR. OCHSHORN: -- the full gamut of people who

25   would subscribe or not subscribe to telephone service.

1   MR. PERRY: Right. You're correct. The unit of

2 sampling is a household, whether or not it has phone

3 services, okay?

4   MR. OCHSHORN: Okay. Thank you.

5   MR. PERRY: Certainly.

6   Okay. Turning to the magnitude of the price

7 elasticity with respect to toll services, what we see is

8 that this is called a cross price elasticity because it's,

9 you know, it's not the price of the service in question.

10 It's a price of a complementary or related service. And in

11 that case, the price elasticity is approximately minus

12 .026, I think, in Florida; so that means that the

13 penetration rate is twice as sensitive to a change in toll

14 prices than it is to a monthly recurring charge change.

15   Now the implications are of -- essentially the

16 main implications are of the Hausman --   Sorry, do you

17 have a question, sir? You had that look.

18   COMMISSIONER GARCIA: Thinking out loud.

19   MR. PERRY: No, that's fine. I'm sorry. I just

20 wanted to stop if you did.

21   The main implication of this is that what we are

22 going to be talking about generally in surveys is, you

23 know, focusing only on a single price change. The thing

24 that this is pointing out is that there are offsetting

25 effects that -- you know, and it's one of the

1 considerations in a rate rebalancing effort. If we are
2 looking at moving prices towards cost, the general effect
3 of rate rebalancing would be to raise or to increase
4 residential rates towards cost than to lower toll and
5 access rates; and these effects can be offsetting, and that
6 is the main implication of these studies.
7   COMMISSIONER GARCIA: I'm sorry, these effects
8 can be offsetting because since local service is inelastic,
9 people are forced to purchase that local service and,
10 therefore, the revenues stay the same?
11   MR. PERRY: No, no, that's not what I'm saying.
12 What I'm saying is that as we raise, you know, the minus
13 .01 sign, as we raise residential service, if that were all
14 we were going to do and we did nothing else in rate design,
15 did not change toll rates, did not change vertical service
16 rates, anything, okay? What would happen is that that
17 would show that you would have a decrease in penetration,
18 and so there would be people who would fall off the
19 network, okay? But in contrast, if you also lower toll
20 prices simultaneously or vertical services prices, what
21 this says is that may be enough to offset the effect of an
22 increase in basic residential rates. Essentially the bills
23 are remaining -- the total bill is remaining the same.
24   COMMISSIONER GARCIA: The rates will remain the
25 same even though you would have drop off on subscribership?

1   MR. PERRY: No, no, no. No, I'm sorry, I must
2   have misstated that. What I'm saying is that if all you
3   did -- Okay, let's just take one case and compare it to a
4   second case here. The first case is that we raise only
5   residential rates. In that case you would have people
6   actually fall off the networks, a small amount in this
7   case, depending on the size you go, but you would have
8   people fall off the network.

9   Now if -- the second option is you both raise
10   residential rates and you lower toll rates. Then what is
11   happening to the total bill? Well, intuitively we know
12   that the total bill is changing and it may be the same, it
13   may be a little higher, may be a little bit lower; but in
14   this case what it's saying is that the consumers take that
15   into account so that they don't just focus only on the
16   increase in basic monthly recurring charge, they also
17   recognize that their long distance rates are going down.
18   And what they are really paying attention to is the total
19   bill in effect.

20   MR. OCHSHORN: Mr. Perry, from the company's
21   standpoint then, for your study, if the price -- if the
22   demand for local service is basically inelastic and it's
23   more -- demand is more elastic for the other services, in
24   a rate rebalancing, the company would make more money if it
25   rebalanced, wouldn't it, because they would be getting all

1 it's going to depend on revenues versus costs as to whether
2 we make any money at that, okay, whether the basic charge
3 is set at cost or not.

4   Okay. Now the second part is on the toll side --
5   COMMISSIONER GARCIA: But before you move off
6 that --

7   MR. PERRY: Oh, sorry.

8   COMMISSIONER GARCIA: -- you stated that basic
9 service is very inelastic and were certain that that
10 revenue is going to come in because it's inelastic, people
11 are going to purchase it regardless, or the ones that just
12 drop off?

13   MR. PERRY: Well, yeah, in this case what the
14 assumption was that the toll rate decrease was low -- or
15 was low enough to offset the effects.

16   COMMISSIONER GARCIA: I understand, but --
17   MR. PERRY: Yeah, so --
18   COMMISSIONER GARCIA: -- following up on
19 Mr. Ochshorn's question though, if you raise that, because
20 it's inelastic, you are going to get that revenue.

21   MR. PERRY: That's right. You increase revenue,
22 but the question is whether you increase profitability too.

23   COMMISSIONER GARCIA: Right.

24   MR. PERRY: And that depends on --

25   COMMISSIONER GARCIA: I just wanted to understand

1 the first part of that, and forgive me for ignorance. I'm

2 not an economist, but when you state inelastic -- and

3 correct my perception on the term "inelastic." It is that

4 it's something that -- I wish I had a word for what I think

5 it is, sort of -- it's a necessity, it's basic, you are

6 going to buy it almost at any price?

7   MR. PERRY: I mean that is one possibility.

8 It's not, you know, we could say --

9   COMMISSIONER GARCIA: Why don't you tell me what

10 you mean.

11   MR. PERRY: Yeah. No, I mean --

12   COMMISSIONER GARCIA: Because you are using it a

13 lot.

14   MR. PERRY: Okay. No, I mean the strict

15 definition of "inelastic" says that the demand elasticity

16 is less than one in absolute terms, okay? And what that

17 means is that the percentage -- if you have a percentage

18 change in price, the percentage change in quantity demanded

19 is less than a percentage change in price, so 10% change in

20 price results in a less than 10% change in --

21   COMMISSIONER GARCIA: It's like oxygen. If you

22 don't have oxygen, you are going to buy it. You need it.

23 It's essential.

24   MR. PERRY: But there are two things, I mean the

25 thing is that relatively inelastic could indicate exactly

1 what you're saying, that it is a necessity and people

2 require it. Another thing it can also reflect though is

3 that it's a small proportion of the budget and, therefore,

4 the changes -- you know, if it constitutes less than, say,

5 half a percent of your budget, then what might happen is

6 that you don't really pay much attention to changes in

7 prices like this, because, you know, it just doesn't cost

8 you that much. There is a lot of literature in this and in

9 the electric utility industry about about commercial energy

10 and building expenditures, energy expenditures there. And

11 the thought was for a long time that the demand for energy

12 is inelastic, but it also constitutes less than 5% of the

13 company's normal budget in operating expenses and,

14 therefore, they really didn't pay attention to it. It

15 wasn't essentially an essential service. So it could be

16 either of those two cases.

17   COMMISSIONER GARCIA: Okay.

18   MR. BECK: Mr. Perry?

19   MR. PERRY: Yes.

20   MR. BECK: Did your study assume that the

21 residential local increase would be offset by an equal

22 residential long distance decrease?

23   MR. PERRY: No, what I am reporting is not an

24 assumption here. What I am reporting is what we observed

25 in the past, up until, I think this was like 19 -- you know

1 the 1990s.

2   MR. BECK: Okay.

3   MR. PERRY: So in the past there were changes

4 when we -- when this model was estimated, the Hausman,

5 Tardiff and Belinfante model was estimated. There were

6 cases where residential rates had gone up and down. There

7 were cases where toll rates had gone up and down, and what

8 they are doing is they are showing what the effects -- what

9 they have identified as what are the effects of these

10 individual variables on penetration.

11   MR. BECK: If you increased residential local

12 rates but decreased toll, there would be a shift between

13 residential and business, wouldn't there?

14   MR. PERRY: I'm sorry. Would you say that again?

15   MR. BECK: Well, if you increase residential

16 rates and increase (sic) toll that is used by both business

17 and residential by an equal amount, wouldn't there be a

18 shift between the residential and business classes?

19   MR. PERRY: Would people move to residen -- I

20 mean you're saying people would --

21   MR. BECK: No, no. If you use the amount of

22 money from a residential increase to decrease toll, both

23 business and residential would benefit by the toll rate

24 reduction.

25   MR. PERRY: Rate reduction in toll rate.

1   MR. BECK: So that the residential increase would

2   be paying for a rate reduction that is enjoyed both by

3   business and residential?

4   MR. PERRY: Well, that's not the way I would

5   phrase it, no. I think, I mean your point is that would

6   people benefit from a reduction? Would both business and

7   residential benefit from a reduction in toll rates? Yes,

8   that's true, and the problem -- you know, the question is

9   from more of a policy perspective is, are rates below cost,

10   and should they be raised towards cost to promote economic

11   efficiency, okay?

12   MR. BECK: I guess what I'm wondering is if it

13   would be revenue neutral for residential customers as a

14   class; and since it seems do me the residential funds, a

15   decrease that is going to be spread across business and

16   residential that business as a class, of course rates would

17   go down, but residential that wouldn't be true.

18   MR. PERRY: Well, that is not necessarily not

19   true. I mean I don't -- I haven't done the analysis on any

20   particular rate proposals for Florida, okay? And that

21   wouldn't be my bailiwick anyway, but what is true is -- I

22   mean what we see -- what this study is saying is that if

23   the rates are offsetting, penetrations don't change, and

24   the speculation is that's because the total bills don't

25   change much.

1   COMMISSIONER DEASON: Excuse me. What is the
2 relative cross elasticity of toll versus vertical services?
3   MR. PERRY: Toll versus vertical services.
4   COMMISSIONER DEASON: You keep talking about
5 toll.
6   MR. PERRY: Right. This --
7   COMMISSIONER DEASON: And then you extend the
8 conclusion to vertical, but I haven't heard you say what
9 the cross elasticity is for vertical.
10   MR. PERRY: I'm sorry. This particular study,
11 Hausman, Tardiff and Belinfante did not address the
12 vertical services ones. The vertical service elasticities
13 I have sign on penetration are somewhere between, you know,
14 the basic local service and the toll elasticity we have
15 seen here, somewhere between the minus .01 and the minus
16 .02.
17   MR. DUNKEL: I have a few simple questions.
18   MR. PERRY: Yes, sir.
19   MR. DUNKEL: First of all, in this state is it
20 true most of your residential customers are flat rate and
21 not local measured?
22   MR. PERRY: That's my understanding.
23   MR. DUNKEL: Okay. Is there some reason you
24 didn't show flat rates on here instead of showing local
25 measured.

1   MR. PERRY: I'm sorry, what -- Oh, local

2   measured. No, I'm sorry, I've got to think about this

3   slide for a moment here.

4   COMMISSIONER GARCIA: While you --

5   MR. PERRY: Oh, the reason is, is that -- I

6   think we just mislabeled this slide here, but the

7   coefficient in this model has, as is explained, is the

8   local basic rate. So what we are presenting here really is

9   the local basic rate, and the way measured service is

10   accounted for in the Hausman, Tardiff model is, it is a

11   coefficient which is the difference between flat and

12   measured, okay? So I have a mislabeling on that slide.

13   That should just be the basic local elasticity coefficient.

14   MR. DUNKEL: I'm not sure I understood that, but

15   I'll move on.

16   MR. PERRY: Oh, okay. Well, I'm sorry, what --

17   Let's just say that there is a mislabeling here.

18   MR. DUNKEL: Okay.

19   COMMISSIONER GARCIA: All right. But before --

20   So this is not measured service. This is local flat?

21   MR. PERRY: This is the basic local coefficient.

22   COMMISSIONER GARCIA: Okay.

23   MR. PERRY: Because what we would have to do,

24   there are two coefficients in here, one of them which gets

25   the measured as well; and it doesn't report directly the

1 measured elasticity. You have to add it up with the

2 measured -- with the basic service, so everything is

3 pivoted off of that.

4 　　　　MR. DUNKEL: One thing that has been discussed in

5 this case is a possibility of lowering business rates and

6 presumably offsetting that by raising residential rates.

7 Taking that as the -- if that was the only change made,

8 would there be any offset that would cause you to believe

9 that the result would not be just driving customers off of

10 residential? If we had a simple range, we raised

11 residential, lowered business basic, wouldn't that drive

12 residential customers off the --

13 　　　　MR. PERRY: If all you did were to raise

14 residential access rates regardless of what other else you

15 did, you're correct. I mean you would lower penetrations.

16 　　　　MR. DUNKEL: So to the extent some portion of the

17 residential increase goes to business and is not offset by

18 some other residential reduction, the net effect would be

19 drive residential customers off the network?

20 　　　　MR. PERRY: Well, I don't think that's -- you

21 know, I don't think that's quite the way to look at things,

22 I guess. I mean what my understanding, and I'm not an

23 expert in cost studies right now, but it's been published

24 widely in the literature, the residential rates have been

25 underpriced relative to their cost and business rates are

1 overpriced relative to their cost. And if you are going

2 to go to a competitive --

3   MR. DUNKEL: Well, I --

4   MR. PERRY: If we are going to transition from a

5 regulated to a competitive economy, what we want to do is

6 we want to send proper price signals to customers, and they

7 should be closer to cost than they are; so that's what I

8 think we're -- I think that's what we are talking about.

9   MR. DUNKEL: But the area you are testifying on,

10 to the extent you raise residential basic rates to reduce

11 business rates, the result will be to drive residential

12 customers off the network?

13   MR. PERRY: Under your assumption that that is

14 what is going on, yes, that's true.

15   MR. DUNKEL: Thank you.

16   MR. PERRY: And the extent of it will, of course,

17 based on what the price changes are.

18   MR. DUNKEL: Thank you.

19   MR. PERRY: Okay. Let me move on here for a

20 moment then. What Mark and I did really, like I said, was

21 to take the Hausman, Tardiff and Belinfante study, and try

22 and cast it -- basically reestimate it so that we could get

23 state specific elasticities, and we've -- this is

24 information that we used for our own forecasting purposes.

25 And what this shows is basically a summary of where Florida

1 fits in when you take a look at this. And the Florida

2 elasticity -- these numbers should all have negative signs

3 in front of them, but economists -- since they are all

4 negative, we just drop the sign.

5   You can see the Florida elasticity for basic

6 local service is minus, .01 and what we see if we compare

7 to the various states is that it falls more or less in

8 between the least price sensitive state, Massachusetts, and

9 the most price sensitive state, Mississippi. And what this

10 says is that, you know, Florida is on neither end of the

11 spectrum. It's just pretty much smack dab in the middle in

12 terms of price responsiveness. And the same is also, it's

13 also true of toll, and it's also true of the elasticity for

14 the basic installation charge, the nonrecurring charge that

15 comes from installing your phone service.

16   What I would like to turn to now is the

17 California affordability study, the one that was done by

18 Field Research Corporation; and like I discussed earlier,

19 this is a -- I think this is a really unique study. It's

20 really hard to get -- it's both hard and expensive to get

21 ahold of folks who don't have phones. I mean it's

22 really -- How do you find them in the first place? That's

23 one of the things. And the experience with this study, as

24 I said, is that it was inordinately -- I mean it's

25 amazingly expensive to do, and I can't remember the exact

1 price, but my guess -- my vague remembrance of this is that

2 it cost between a half million dollars to a million dollars

3 to do this survey. It was jointly funded by Pac Bell and

4 GTE California, and it was funded because the California

5 commission wanted us to do the -- wanted the survey to do

6 it, not wanted us to do the survey. They wanted the survey

7 to be done.

8   And as far as I know most of the design effort

9 took place between Field Research Corporation and the

10 Division of Ratepayer Advocates and the California Public

11 Service Commission. I don't believe, in contrast to some

12 other comments, that California -- or that GTE California,

13 or Pac Bell had much influence on the design of this. It

14 was a study commissioned specifically to get at questions

15 that the commission was interested in.

16   And like I said, what it did is it basically went

17 out and studied people without telephone service, and what

18 they found is that, yes, you know, the expenses do matter.

19 The expense of local phone service is an important

20 determination -- or determinant in whether people choose to

21 get off the network or not. I said here that approximately

22 25% of these people said they could not afford telephone

23 service at perceived rates.

24   Now it turns out that most of this group said

25 that when they talked about the bill being too high or the

1 cost being too high, what they were saying is that they

2 could not control the number of calls and others who used

3 the phone. As a matter of fact, it turns out my number

4 understates this. I looked at the results this morning and

5 it said 39% of the group said that they actually said that

6 they could not do this because of cost, and it was that the

7 bill was too high or they could not control the number of

8 calls of those that use the phone.

9 So I mean I think this, you know, what we're --

10 the point isn't -- One of the points is, is that here, is

11 that we have seen an econometric study that has said that

12 the total bill is important, that it's not only the basic

13 monthly recurring charge which is important in determining

14 penetration. And when we go and actually ask people why

15 they took the action they did rather than asking them what

16 action they are going to take. This is a retrospective:

17 Why did you take what action you did? What we see is that

18 an important determinant is the ability to control

19 variable charges and to control the total bill.

20 Another thing which came out of the study too is

21 that there are what I'm going to call awareness and

22 eligibility concerns. A number of people have

23 misconceptions as to what it takes to get local phone

24 service. A number of the people interviewed thought that

25 they had to have a valid U.S. drivers' license or a

1 passport, criteria which, you know, are at odds with what

2 it takes to get a phone -- to get phone service; and

3 that's, I mean that's a problem area which obviously needs

4 to be addressed. But in addition to that, what we have

5 seen, particularly where you have a high migrant population

6 or a highly new immigrant population is that we see low

7 penetrations initially, but the longer they remain in the

8 country, and this is probably because of increased

9 awareness, the penetration increases; so they become aware

10 of what it actually takes to get phone service and feel,

11 apparently, more comfortable doing so.

12   MR. DUNKEL: I have a question. Isn't it correct

13 that in this study what they found the major toll problem

14 was international toll, again, with the migrant population

15 as you've mentioned?

16   MR. PERRY: I don't -- Let's see, my memor'

17 isn't -- It could well be. Let's say I don't remember

18 specifically international toll.

19   MR. DUNKEL: Well, I think you said you looked at

20 the study this morning. Isn't it correct if you look at

21 the study that that is the toll they express as being the

22 one that's the greatest problem, international calling?

23   MR. PERRY: You could be correct, sir.

24   MR. DUNKEL: Thank you.

25   MR. PERRY: Okay. What I would like to do now,

1 we've been looking pretty much at what I've called

2 retrospective analysis of what's happening out there in the

3 marketplace, and we have been looking at real market

4 behavior which, you know, like I said, most economists feel

5 more comfortable with. And I'm going to wonder into an

6 area which, you know, we generally are less comfortable

7 with, but I will boldly venture in anyway.

8   What I would like to begin with is I'd like to

9 talk about the Florida PS -- the Florida staff's

10 affordability survey, and I have some concerns which I'm

11 going to -- I'll express in doing this. I think it's a

12 really good idea when you are going into, you know, when

13 you are venturing into areas where you haven't -- where you

14 don't have really good information on what people are going

15 to do. If you are going to go where we have large price

16 increases or, you know, you are going to go into an area

17 where where we may be looking at something that has i't

18 happened in the past. And as we've seen here in Florida,

19 rates have only gone up by about 2% over a ten-year

20 period. It's worthwhile to take a survey to go ahead and

21 see what's going to happen.

22   In this kind of survey that we are trying to do

23 here or the staff is trying to do here at this point is

24 what is called -- classically in the literature it's called

25 a willingness-to-pay survey. And there are three ways that

1 you might go about asking willingness to pay questions or,

2 you know, willingness to pay for local service· and one way

3 is an open-ended question. And If you've taken a look at

4 the Wyoming survey that Mr. Bird did for the Wyoming

5 commission, what he did is he did what is called an

6 open-ended question. And what you do in an open-ended

7 question is I basically come to you and say, well, how much

8 would you be willing to pay for local service? And that

9 kind of question usually has problems which are known as

10 strategic behavior; and that is, is that if I come

11 particularly as, you know, a representative of the

12 commission and say, What would you -- How much would you

13 like to pay? My answer is going to be nothing more than

14 I'm paying today. I mean it's a rational answer. I don't

15 want rates to go up even if I could afford it. So this

16 kind of strategic behavior is a concern, and the open-ended

17 question is -- the open-ended type question is,

18 particularly has problems with that. I'm actually sort of

19 surprised Mr. Bird's results didn't have more problems, so

20 it actually seems to be pretty -- have some reasonable

21 information in there.

22   Another approach, which I've characterized the

23 staff's is, is what is called an iterative bidding

24 approach. In an iterative bidding approach what I do is

25 give you a sequence of prices. I'm going to come to you

1 and say, well, okay, what would you do if rates went up by

2 $2? And you tell me. And then I'm going to say, okay,

3 what would you do if rates went I by $5? And then we

4 continue the progression, and that's a technique which was

5 really widely used during the 1980s. It became real

6 popular in the natural resource literature to try and get

7 at the value of natural resources this way, and the

8 problem was, is at the end of the 1980s a number of people

9 who had been working in this field found something called

10 "starting point bias." And what we mean by "starting point

11 bias" is that the price at which I start this iteration has

12 a heavy influence on what your final willingness to pay is;

13 that is, low bids are associated with low willingness to

14 pay; high bids are associated with high willingness to

15 pay.

16   So in addition to problems as strategic behavior,

17 iterative bidding was found to have problems with starting

18 point bias. And as a consequence, a number of people

19 really left the iterative bidding time mechanisms and moved

20 on to something that was developed in response to it called

21 "take it or leave it." And "in take it or leave it" what

22 happens is I just ask you a question very simply, What

23 would you do if rates went up by $5? And what you do is

24 you give me a response. And since I'm not going to a ask

25 you any additional questions, there is no chance for you to

1   gain the survey responses.

2   So that's the main reason, you know, most folks

3   have done that. And there is a book out by Richard Carson

4   and Robert Mitchell which summarizes all this, and their

5   recommendation is that they basically say, you know, given

6   the problems that you -- the potential problems you have

7   with starting point bias and strategic behavior, they

8   recommend that you never -- you shouldn't use an iterative

9   bidding approach, that you should use a take it or leave

10   it.

11   And so along those lines, I mean when we saw the

12   first draft of the staff's instrument or questionnaire, my

13   major concerns were drawn on the literature that, look, you

14   know, these kind of instruments are prone to having these

15   sorts of problems. They can have problems with strategic

16   behavior. You can have problems with starting point bias.

17   And, you know, one of my recommendations during the

18   conference call was, is that we use a take-it-or-leave-it

19   approach, and also some things are going to come up in

20   terms of how we explain who is sponsoring the survey and

21   who -- and what the purpose of the survey are can also

22   influence what is going to happen.

23   So if you go on to the next slide, Renita.

24   MR. OCHSHORN: Mr. Perry.

25   MR. PERRY: Yes.

1   MR. OCHSHORN: In your testimony on this subject,

2 and maybe you are going to get to this, on page 29 you

3 point out a concern you have about the study that where if

4 when people were given a list of different increases, at

5 first you say if there was a $2 increase that 23% said they

6 would disconnect; a $20 increase, 54%. And then when the

7 order is reversed, people start out at a $20 increase

8 saying 12% would disconnect; and by the time you got down

9 to $2, 45% said they would disconnect. I have two

10 questions.

11   MR. PERRY: Yes, sir.

12   MR. OCHSHORN: One is --

13   MR. PERRY: Do you --

14   MR. OCHSHORN: Go ahead.

15   MR. PERRY: You want to hold? There is going to

16 be a slide on this.

17   MR. OCHSHORN: Oh, okay. Okay, I'll --

18   MR. PERRY: Would you like to hold your question?

19   MR. OCHSHORN: Okay. I'll wait.

20   MR. PERRY: Yes.

21   MR. FRANK: Mr. Perry, my name is David Frank I

22 represent AARP.

23   MR. PERRY: Yes, sir.

24   MR. FRANK: Just one quick question: You are

25 here on behalf of the three big LECs?

1   MR. PERRY: Yes, sir.

2   MR. FRANK: Did any of the three companies, or

3   did you do any sampling, large or small, where you did not

4   identify the PSC as the sponsor so that you could show us

5   some objective data that your number -- because if you go

6   to your slide, your number 2 point is that, "Strategic

7   behavior -- when respondents seek to influence the outcome

8   of the survey through their responses," because the PSC

9   disclosed on the survey that it was, indeed, they who were

10 conducting the survey, that your conclusion is it was

11 biased. And my question is: Did you do any sampling at all

12 where there was not a PSC imprimatur on it to show with

13 objective data that it would have been different?

14   MR. PERRY: Yes, sir, I did.

15   MR. FRANK: Okay. Can you identify those?

16   MR. PERRY: Yes, sir, I will, later in this

17 presentation.

18   MR. FRANK: Okay. Thank you.

19   MR. PERRY: Yes. Okay. So let's see, I've

20 talked about two things there. The third thing I want to

21 do before I move on for a moment is just talk briefly, the

22 way that the instrument was worded, we call it what is

23 called a "forced choice." What the respondents were asked

24 to do is they were given three options. It was essentially

25 you can discontinue current phone service. You can pay

1 the increase and not adjust your spending on any other
2 greens, or you could pay the increase and adjust other
3 spending. And you were asked to choose one of those three
4 options, and we'll get into the wording on that in a
5 minute.

6   We found in the past a lot of times when we are
7 doing, even working in new market research, that when you
8 gets a forced response, it's possible to -- it's
9 essentially possible to force an action which the
10 individual isn't going to take so that you don't get really
11 good correlations between what they say they are going to
12 do and what they're going to actually -- what they do
13 actually afterwards in the market place. So that was
14 another concern that I had as well.

15   Now if we turn right to the preamble we'll see
16 what I talk -- what I'm going to talk about in strategic
17 behavior. In the preamble what they wording was, as you
18 see in red, was: "Your response will help the Public
19 Service Commission understand how Floridians view the price
20 of local telephone service." And then, so just dealing
21 with that point right now. What I'm going to say is -- I
22 mean we talked with Doctor McCarty on this, and I
23 understand his reasons for doing so. He represents the
24 University of Florida, and he is a public agency, and he
25 feels that it is their obligation to go ahead and disclose

1   who the sponsor of the survey is because they are a public

2   service on obligation. And I think, you know, you make

3   these kind of tradeoffs when you are doing things like

4   that. You decide, do I have a potential for strategic

5   behavior? Do I disclose who the survey -- who the sponsor

6   is? And am I concerned about strategic behavior response?

7   And I think being from a public, you know, being from a

8   publicly funded university, his, you know, what his

9   concerns are are going to be different than what we would

10 do in private market research. As a matter of fact, in

11 most cases in private market research you would never

12 disclose who the sponsor is, at least until the end of the

13 survey. Most of the time we never disclose it anyway in

14 order to avoid strategic behavior. You want to get the

15 best unbiased estimate you can, and you remove -- you take

16 steps to mitigate it.

17   So having said that, then I want to also focus on

18 the next part, which is in the "Choice Question" it says:

19 You are limited to reacting in three different ways. And

20 what you have to hope is that when you limit people to

21 react in these three different ways that you've captured

22 the type of behavior that they're actually going to do

23 because, if you haven't, you have forced them into taking

24 an unrealistic situation.

25   Now if we go to --   Now I'm coming to your

1 slide, sir.

2   MR. OCHSHORN: Oh, okay.

3   MR. PERRY: These were results. You know, we've

4 done some preliminary analysis on the data, and so I'm

5 going to present what we have seen here; and there are, the

6 data are complicated to analyze because of the --

7 essentially because of the system that they are putting it

8 in. It turns out that for each group who received a $2

9 question, I think that there are six data fields that tell

10 you what the response was, and so you have to sort your way

11 through everything. And I think we've done this correctly

12 at this point, but we have like a, you know, a quick period

13 to do this in. And these numbers, you know, I think that

14 the numbers generally reflect what is going on underneath

15 there.

16   Anyway, what we see is that -- let's come on down

17 to the second part of the slide -- is that at a $2 for

18 the --   The sample was split into two groups. There was a

19 group of people who received prices ranging from two to

20 $20 -- rate increase, I'm sorry -- rate increases from two

21 to $20. It went from 2, 5, 10 and 20, and they were asked

22 what they were going to do.

23   And then the second half of the sample was given

24 a starting increase of $20, and then it worked its way down

25 to $2, and the idea is that if you had starting point bias

1   perhaps you could use this to offset that. And, you know,

2   maybe you could, but it looks like there is both starting

3   point -- the problem here is that it looks like there is

4   both starting point bias and strategic behavior taking

5   place.

6   If you just take a look at the two extremes, in

7   the 2 to $20 range what we see is that people who were

8   given the $2, 23% of the respondents said that they would

9   disconnect for a $2 increase. In contrast, compared to

10 $20, what it shows is 12% would disconnect. I mean those

11 two widely varied numbers, I mean do not seem to, would not

12 seem to make sense and would concern me.

13   And in addition, I think the point you were

14 making out here is that if you look at the group that is

15 going from 20 to $2, we start them off with a $20 rate

16 increase, 12% say they would disconnect. And then what we

17 do is we move on. We say, okay, for those of you who

18 haven't disconnected, what would you do if you only faced a

19 $10 increase? And what happened is an additional 9% said

20 they were going to disconnect. I mean they didn't say they

21 were going to disconnect at 20, but they said they were

22 going to disconnect at 12.

23   MR. FRANK: Mr. Perry.

24   MR. PERRY: Yes, sir.

25   MR. FRANK: You have four of us over here

1 absolutely baffled.

2   MR. PERRY: Oh, I'm sorry.

3   MR. FRANK: What is the separate survey and the

4 numbers you're referring to? We see the staff survey.

5   MR. PERRY: Mine will be coming up after we

6 finish -- after I get through these, okay?

7   MR. BECK: Mr. Perry.

8   MR. PERRY: Yes, sir.

9   MR. BECK: GTE conducted a deposition of

10 Professor McCarty, did you not, concerning the survey?

11   MR. PERRY: Yes, sir.

12   MR. BECK: Professor McCarty was a consultant to

13 staff on this.

14   MR. PERRY: Yes, sir.

15   MR. BECK: And wasn't he asked about, you know,

16 what reaction you should get from the difference between

17 the ascending and descending group? And wasn't his

18 response that he thought that the biases would offset each

19 other if you took the two and combined them?

20   MR. PERRY: That was his response, sir, and I

21 don't agree with that statement.

22   MR. BECK: Okay. So simply a professional

23 disagreement between yourself and Professor McCarty.

24   MR. PERRY: I, you know, I don't know whether

25 Doctor McCarty made that opinion based on having looked at

1   the data carefully or not, but my look at this data and

2   these results say that simple combining these two will not

3   solve the problem.

4   MR. OCHSHORN: This is, I guess, my basic

5   question before: What would be your opinion about throwing

6   out the sample that seemed illogical and keeping the one

7   where the numbers go in the order that you'd expect it to?

8   MR. PERRY: Okay. Well, I'm going to -- I think

9   the thing that you have to do then, let's take the next

10   step and then compare this to what we actually have

11   observed in the real marketplace. And the problem I would

12   have with your suggestion, sir, is that I don't see any

13   evidence that 23% of folks are going to disconnect at $2,

14   okay?

15   MR. OCHSHORN: You mean evidence in addition to

16   this survey?

17   MR. PERRY: That's right, yes, sir.

18   MR. OCHSHORN: Okay. So --

19   MR. PERRY: And I'm going to describe that. I

20   will continue with the description of that evidence here in

21   a minute.

22   MR. OCHSHORN: Okay. So there is a survey where

23   they say they will, but then you are going to describe

24   other --

25   MR. PERRY: Yeah, you know, generally -- you

1 know, I mean generally when you do surveys, lots of folks

2 are concerned -- Well, there is a vast body of literature

3 on whether or not people actually take the actions that

4 they are going to take, okay? And there is a paper by

5 Silicone (phonetics) somebody in marketing research that

6 presents a good summary of this; and they, for example,

7 have looked at new products and services and asked people

8 how often they ended up buying goods that they said they

9 were going to buy during the survey. And the correlations

10 range is as low from 40% up to 60%. You know, this is new

11 goods and services and durable products, okay?

12   So you always have this problem. You always have

13 a concern. I shouldn't say you always have a problem.

14 Sometimes you do, sometimes you don't.

15   MR. OCHSHORN: Okay.

16   MR. PERRY: But you have a concern about the

17 difference between stated preference, what you say you are

18 going to do, and revealed preference, what you actually do

19 in the marketplace.

20   MR. OCHSHORN: That's true. If you use other

21 ways of getting this information, then there are other

22 issues that you have to deal with.

23   MR. PERRY: That's right.

24   MR. OCHSHORN: I mean it isn't like there is a

25 pure way to get the truth when you do these.

1   MR. PERRY: Not without actually throwing them
2   into the lab, you know, so that's true.

3   Yeah. And so I mean what I'm going to do is we
4   are going to turn around and take a look at -- you know, we
5   talked about some of this revealed data, the market, you
6   know, the market retrospective data, and I want to compare
7   that to what we have seen there. And what you see is, is
8   that -- I mean, for example, right now let's just do a real
9   quick one. If we take a look at staff's survey and do just
10 what you suggested, let's just drop the lower numbers,
11 okay? And if we did that, what would be our predictions of
12 what market share permutations would be? And that
13 ascending group up above says, you know, currently in our
14 Tampa-St. Pete area we are -- our basic residential rate is
15 about $12 a month, okay? And we have currently about 95%
16 residential penetration. And if you raise the rates by $2,
17 what that first set of results said is that penetrations
18 would drop to 74%, and then it would continue all the way
19 down to 44%.

20   Well, if you remember that slide earlier that we
21 had, we saw a range of about 86 to about 96% in our current
22 range. So I mean a 74% figure is well outside of that
23 range, well outside that range, and so I mean it doesn't
24 pass a reality check is my point.

25   MR. OCHSHORN: Well, that's correct, although you

1   would acknowledge that there is a difference between a rate

2   that has been around a while and the effects of that and

3   the effects of an increase?

4   MR. PERRY: Sure, the difference between short

5   range adjustments and long range.

6   MR. OCHSHORN: In a rate, yeah.

7   MR. PERRY: I think that's true too but, you

8   know, I mean I guess --   What you're talking about here is

9   well over 10, 15, at least a 10% difference between what we

10 have seen in the past and, you know, that just doesn't

11 compute.

12   MR. OCHSHORN: Okay.

13   MR. PERRY: Okay? The descending group,

14 obviously we have problems, I mean just in interpretation

15 here. And, you know, I don't know, you know, staff may

16 choose --   I don't know how staff, what staff is going to

17 do with this data at this point. This is raw reports. Now

18 lots of folks calibrate their models, and staff nay choose

19 to do that, and I don't -- so I don't know exactly what is

20 going to come out of that. We are just looking at my

21 preliminary analysis of their data without any adjustments,

22 okay?

23   COMMISSIONER DEASON: Excuse me.

24   MR. PERRY: Yes, sir.

25   COMMISSIONER DEASON: Explaining the descending

1 group.

2   MR. PERRY: I'm not sure that I can, but I'll

3 tell you what I know about them.

4   COMMISSIONER DEASON: Intuitively --

5   MR. PERRY: It doesn't make sense.

6   COMMISSIONER DEASON: -- it doesn't make sense,

7 right?

8   MR. PERRY: You're exactly right.

9   MR. OCHSHORN: Yeah, I think what happened is

10 they divided the survey group in half, and half of the

11 people who were called were given the rates --

12   MR. PERRY: That's correct.

13   MR. OCHSHORN: -- the increases in ascending

14 order and the other half in descending order, and in both

15 cases the longer people were asked the question, the more

16 decided that they would disconnect.

17   MR. PERRY: And see, that is the point about

18 strategic behavior. I mean what it amounts to is that if I

19 ask you -- you know, it's kind of like I ask you $2 and you

20 tell me you are going to do something and you haven't

21 disconnected yet. And then I ask you at five, and you

22 eventually get the idea that I want you -- you know, not

23 that I want you to disconnect, but you can get rid of me by

24 disconnecting. So I mean that is part of strategic

25 behavior, and it is always a concern in surveys, okay?

1   COMMISSIONER DEASON: Well, let me -- I'm trying

2 to understand.

3   MR. PERRY: Sorry, sir.

4   COMMISSIONER DEASON: On the descending group,

5 was one individual person that was selected in the sample

6 and responded to the survey, were they asked just

7 descending questions? They weren't asked any ascending

8 questions?

9   MR. PERRY: That's correct, sir.

10   COMMISSIONER DEASON: But they were asked

11 everyone of those descending questions.

12   MR. PERRY: No, sir, that's correct.

13   COMMISSIONER DEASON: Okay. They were just --

14   MR. PERRY: Let me -- I can clear that part up.

15   COMMISSIONER DEASON: Okay.

16   MR. PERRY: It's the interpretation I have

17 trouble with, okay? What happened is that we started

18 off -- they started off with individuals. I would come to

19 you, sir, and say, if rates were to go up by $20, which of

20 those three actions would you take?

21   COMMISSIONER DEASON: Okay.

22   MR. PERRY: If you chose to disconnect then what

23 happened is you skipped out and you weren't asked my more

24 price questions, and you would never be asked a price

25 question again. If you had not disconnected at $20 and you

1 told me what -- I would go on and say, okay, now what I

2 would like you to do is I'd like you to assume that rates

3 only increased by $10, forget that $20 number we had

4 before. What would you do? Okay, and then if you didn't

5 disconnect there, I would go on and ask you at five, okay?

6 So you got kicked out if -- you essentially got kicked out

7 of the pricing question if you disconnected; and if you

8 didn't disconnect, you got asked the next part of the

9 question, you know, the next bid. Does that clear that up,

10 sir?

11   COMMISSIONER DEASON: You're saying that you were

12 asked would you disconnect at a $20 increase, and if I said

13 no, then you would sometime later in the survey ask me if I

14 would disconnect at a $10 increase?

15   MR. PERRY: Yes, sir.

16   COMMISSIONER DEASON: Well, if I wouldn't

17 disconnect at 20, why you think I would disconnect at a $10

18 increase?

19   MR. PERRY: That's the problem I'm having with

20 interpreting these results.

21   COMMISSIONER DEASON: Oh.

22   MR. PERRY: Okay? That's exactly the point. It

23 doesn't make sense. You know, it just -- I mean what

24 it -- I mean you can either appeal to customer confusion

25 or strategic behavior or, you know, I mean those are the

1 only survival options.

2   Sir, you had a question?

3   COMMISSIONER JACOBS: I think you just answered

4 it. You would assume that the numbers would descend as

5 well? In other words, that there would be less likelihood

6 as you go down, down this spiral of a disconnection, but

7 the numbers don't say that?

8   MR. PERRY: You're exactly right, sir, that would

9 be my expectation.

10   COMMISSIONER JACOBS: Okay.

11   MS. SIMMONS: Hello, this is Sally Simmons.

12   MR. PERRY: Hi, Sally.

13   MS. SIMMONS: I just wanted to make a comment on

14 some of this discussion. I know we've got the research

15 staff here that has been -- they've been analyzing results,

16 and a couple of comments. We are looking at the

17 plausibility of the responses; and in addition, based on

18 some analysis the research staff has done, we believe that

19 the numbers may have been misinterpreted. We are not sure

20 at this point, but they are -- apparently analyses don't

21 show numbers in some cases that look like the ones you've

22 presented. Obviously, we are still looking at it though.

23   MR. PERRY: No, I think it's -- you know, I mean

24 it's a very complicated database to analyze, because in

25 order to -- what they did in order to make sure that there

1 was no item order bias, they had to rotate each of the

2 three responses. That then generated six sets of questions

3 for each of the -- each one of the prices, and those are

4 all handled separately, and you've got to be sure that all

5 of your code logic is working to get this all outright, so

6 there's --

7   MS. SIMMONS: Yeah, I just wanted to indicate

8 apparently our preliminary information looks somewhat

9 differently from what you've presented.

10   MR. PERRY: Yeah, I would like to discuss with

11 you guys sometime, if we get a chance to do that.

12   MS. SIMMONS: Also, since I'm at it, let me just

13 make a mention, on your last slide you were talking about

14 limiting choices, you know, to specific categories.

15   MR. PERRY: Yes.

16   MS. SIMMONS: I just wanted to comment that we

17 did have concerns about trying to tabulate the information,

18 and that was the reason why we took that approach. We

19 tried to come up with options that were as all encompassing

20 as possible, but that was the reason for doing that as

21 opposed to trying to take some open-ended approach.

22   MR. PERRY: No, and I'll talk about sort of

23 another way that you can do this too in a minute.

24   Let me back up then. Okay. What I want to do

25 now is turn around and try and compare basically what we

1 are seeing from the survey versus what we know from
2 observed market behavior.

3 The first comparison I'm going to make is just
4 with the Hausman, Tardiff and Belinfante study, and I
5 talked about that earlier. What Hausman, Tardiff and
6 Belinfante would predict is that there would be a less than
7 a two tenths -- well, basically a two tenths of a percent
8 change or decrease in penetration; and you can see that
9 compares to the increasing and decreasing frequency
10 responses; and those numbers are quite, you know, quite far
11 apart. Hausman, Tardiff and Belinfante would predict that
12 we have about less then -- well, about four tenths of a
13 percent of, maybe a 4% -- four tenths of a percent decrease
14 in penetration with a $5 increase; and then up to $20 it's
15 slightly less than 2% decrease. So based on observed
16 market behavior, that's -- you know, from the results we
17 have seen from CPS, that is the prediction of the Hausman,
18 Tardiff and Belinfante model.

19 COMMISSIONER DEASON: The HTB study is based upon
20 actual results historically, or is it based upon a survey?

21 MR. PERRY: No, it -- well, it's based on
22 historical results. Okay, it is a sample of customers, so
23 since it's current population --

24 COMMISSIONER DEASON: But it was what did you
25 actually do, not what would you do if this happened?

1   MR. PERRY: Yes, sir, that's correct.

2   COMMISSIONER DEASON: Okay. This happened. What

3 did you do as a result of that?

4   MR. PERRY: That's right, and what they were

5 trying to do is take out the effects of basic, you know,

6 the basic monthly increase, toll rates and account for all

7 of that, changes in income, yes, sir.

8   MR. POUCHER: Earl Poucher, Office of Public

9 Counsel.

10   MR. PERRY: Yes, sir.

11   MR. POUCHER: Could you back up --

12   MR. PERRY: Could you speak a little closer to

13 the microphone, sir? I can just barely hear you.

14   MR. POUCHER: Earl Poucher, Office of Public

15 Counsel. Regardless of whatever the differences are

16 between your view of those responses, staff's and the

17 attorney general's, there is a huge difference between what

18 you perceive to be the elasticity under HTB as opposed to

19 that survey by the University of Florida; is that correct?

20   MR. PERRY: Yes, sir.

21   MR. POUCHER: So, basically, what are you saying

22 here? University of Florida conducted the survey. The

23 customers gave their responses. Florida responses, by the

24 way, not California's. And so you're saying they are not

25 going to do that, what they said in the survey?

1   MR. PERRY: Well, sir, first off what I'm saying

2   is I don't know at this point exactly how staff is going to

3   treat this in the final analysis. That is, obviously,

4   their call. And a lot of people do take survey responses

5   and they calibrate them. I mean what -- for example, there

6   is a procedure which basically says there is only a 40%

7   correlation between stated and actual behavior, so what

8   happens is you may adjust the disconnects by that

9   correlation factor, so instead of a number of --

10   MR. POUCHER: So you show 1.7% lost the market

11 with a $20 increase?

12   MR. PERRY: Yes, sir.

13   MR. POUCHER: And if you average those ascending

14 and descending, it's about 35% from your chart. Whether

15 it's right or wrong, we don't know, but that's a huge

16 difference.

17   MR. PERRY: Yes, sir.

18   MR. POUCHER: So what you're saying they ask the

19 questions, the customers said that they would disconnect,

20 but they are not telling the truth; is that right, they are

21 lying?

22   MR. PERRY: No, I'm not saying that they are

23 lying. No, that is not what the point is. I think the

24 point is that if you look at what people say they are going

25 to do and what actually happens is the correlation isn't

1 perfect. It's not a one-to-one correlation. That's been

2 our experience.

3   MR. POUCHER: Well, the difference is about 33%.

4   MR. PERRY: Yes, sir.

5   MR. POUCHER: And you say that based on your

6 historical data that only less than 2% will disconnect.

7   MR. PERRY: We have --

8   MR. POUCHER: And about 35% say they will

9 disconnect.

10   MR. PERRY: Yes, sir.

11   MR. POUCHER: Now whether you are right or

12 whether the University of Florida is right is probably not

13 really important, but do you think that those 35% of those

14 customers, whether they actually disconnect or not, are

15 they going to be happy, or are they going to be unhappy?

16   MR. PERRY: You know, sir, I really don't have

17 any way of answering that question. You know, I mean it

18 depends on a number of factors. It's going to depend on

19 whether there are offsetting local toll rate charges,

20 whether or not, you know, their income goes up during that

21 period. You know, I really don't know.

22   MR. POUCHER: So basically you don't think there

23 is any validity to the University of Florida study?

24   MR. PERRY: Well, that's not what I'm saying

25 here. What I'm saying is it depends on how -- what they do

1 with the data. It depends on whether they choose to

2 calibrate the results or not. If they choose not to

3 calibrate the survey and present essentially these -- if

4 these were the raw numbers they presented, I would

5 seriously question those results, yes.

6   MR. POUCHER: Your HTB model, does it -- is it

7 based on prior price changes for residential service?

8   MR. PERRY: Yes, sir, it is.

9   MR. POUCHER: Do you have any $10, $20 increases

10 in that data?

11   MR. PERRY: There are at least different -- I

12 don't know that there are $10 increases. I'd have to check

13 the data.

14   MR. POUCHER: I started with 20. I'm going to go

15 descending.

16   MR. PERRY: There are --

17   MR. POUCHER: Are there any $20 residential

18 increases in your database?

19   MR. PERRY: No, sir, there are not.

20   MR. POUCHER: $10?

21   MR. PERRY: There may be.

22   MR. POUCHER: Where?

23   MR. PERRY: There are $10 differences I know.

24 Well, in the state of California -- this is a little

25 premature on this slide, but in the state of California the

1 rates went up from approximately 9 to $18 in our service

2 territory on January 1st, 1995.

3   MR. POUCHER: On one day?

4   MR. PERRY: Yes, sir, it was a flash cut.

5   MR. POUCHER: And that is included in your

6 database?

7   MR. PERRY: Yes, sir.

8   MR. POUCHER: You mentioned the University of

9 California in your surveys about Lifeline. Are you

10 familiar with the Lifeline program in California?

11   MR. PERRY: Sorry, sir, the?

12   MR. POUCHER: Are you familiar with the Lifeline

13 program in California?

14   MR. PERRY: I'm generally familiar with it, not

15 perhaps in all particulars.

16   MR. POUCHER: Is it a self-certified program? In

17 other words, does the customer say --

18   MR. PERRY: Yes, sir, that's my understanding.

19   MR. POUCHER: So a customer says I'm low income

20 or whatever, and they are automatically a part of the

21 Lifeline program in California?

22   MR. PERRY: That's roughly my understanding, sir.

23   MR. POUCHER: And is the California Lifeline

24 program significantly larger than the Florida Lifeline

25 program?

1   MR. PERRY: That I do not know, sir.

2   MS. CASWELL: Before we move off this slide, I

3 think it's important to clarify something because some

4 statements have been made about the University of Florida's

5 role in interpreting the data, and I think staff will back

6 back me up on this, that Doctor McCarty did not do any

7 analysis of the data, he was not paid to do analysis, he

8 did not want to answer any questions about analysis. He

9 was paid primarily to field the survey, as I understand it.

10   MS. SIMMONS: That's correct, yes. I wanted to

11 ask a question too about the HTB model.

12   MR. PERRY: Certainly.

13   MS. SIMMONS: Is that cross sectional? Is that

14 time series? Is it cross sectional time series? What is

15 the nature of the data?

16   MR. PERRY: C, cross sectional and time series.

17 It begins with the -- I think it began with the 1985. It's

18 described in the paper in my appendix and goes --

19   MS. SIMMONS: Okay. So we are looking across

20 time, across several different states I presume.

21   MR. PERRY: That's correct.

22   MS. SIMMONS: All right.

23   COMMISSIONER DEASON: Let me ask another

24 question. Earlier I believe there was a representation

25 made by someone or suggested that perhaps if there is any

1 ascending or descending bias that if you took the results
2 and averaged them that you would eliminate that bias. You
3 disagreed with that.
4   MR. PERRY: Yes, sir.
5   COMMISSIONER DEASON: If you took those averages
6 of the raw data, it would indicate that there would be
7 approximately a 31 and a half to a 34% reduction in
8 penetration regardless of whether it was $2 or $20.
9   MR. PERRY: That's correct, sir.
10   COMMISSIONER DEASON: That on the surface doesn't
11 seem to make --   That would say it doesn't matter if you
12 would increase rates 2 or $20, you are going to get a
13 reduction in penetration of 31 and a half to 34%,
14 regardless of whether it's 2 or 20?
15   MR. PERRY: No, you're correct. I mean it
16 violates one of the basic principles I was taught, which is
17 the first law of demand, you know, that price goes up, you
18 know, client demand goes down.
19   That's true. That is also indicative of
20 something -- you know, I mean that may be indicative of
21 something that we worry about. Strategic behavior, it's
22 also known as a protest vote, and what happens in a protest
23 vote is you are just protesting the rate increase so, you
24 know, you don't really give meaningful price responses in a
25 sense. I think that --

1   MR. BECK: Commissioner --

2   MR. PERRY: Particularly that 23% number there

3 really shows you. That would be my concern.

4   MR. BECK: Commissiuner Deason, there is a

5 disagreement on whether those numbers are what they

6 represent to be. I think Sally Simmons already mentioned

7 that. I wouldn't take those numbers at face value.

8   MR. DUNKEL: Our analysis of the data said that

9 the responses are that 7% would drop off at a $2 increase,

10 not -- I don't know where he is getting these numbers, but

11 the data that came on our disk from the staff survey gives

12 7% dropping off at a $2 increase.

13   MS. CASWELL: Mr. Perry mentioned that we, you

14 know, we would certainly like to discuss it with the staff

15 and with any other party who would like to discuss the

16 numbers.

17   MR. OCHSHORN: Is this data --

18   MR. McNULTY: I just as far as -- Bill McNulty

19 with staff. As far as the price increase questions, where

20 you go from 20 to $2, which is the second row.

21   MR. PERRY: Right, descending. Right.

22   MR. McNULTY: When you looked at this data, it

23 sort of -- it was counterintuitive to economic theory. Did

24 you perceive the increment to be faulty or the results to

25 be faulty? Where do you perceive the problem to be when

1 you saw that data?

2   MR. PERRY: I guess the thing is, is that, you

3 know, generally what you're trying -- you know, when you do

4 these things, what you would really like to do is you would

5 like to do experiments in surveys where you do both rate

6 increases and rate decreases, and this is sort of what that

7 second part looks like in a way. But if I look at these

8 numbers, going down doesn't seem to make sense. It's a

9 good -- it's an idea where you would say, yes, I want --

10 you know, I want to look at starting point bias by going

11 down. But going from a $20 increase to a $10 increase just

12 doesn't make sense logically to the respondent.

13   MR. McNULTY: Right, because basically the

14 individual is in aggregate because we are talking about a

15 survey with a total number of people responding.

16   MR. PERRY: Right. Yeah.

17   MR. McNULTY: But you are finding that as the

18 price goes down, you have --

19   MR. PERRY: More people falling off the network.

20   MR. McNULTY: -- more people falling off, which

21 is counterintuitive to me.

22   MR. PERRY: Right.

23   MR. McNULTY: And as we mentioned, it's different

24 from the results that we were able to tabulate.

25   MR. PERRY: Okay. Yeah, we should check those

1 because I mean we have been going through it very

2 carefully, and I thought we did what Chris or Doctor

3 McCarty was, so --

4   MR. McNULTY: Well, perhaps if you are able to

5 share your work product with us.

6   MR. PERRY: Oh, no problem.

7   MR. McNULTY: And maybe we could look at that and

8 discuss it.

9   MR. PERRY: That would be great.

10   MR. OCHSHORN: The question I have about this

11 data and the possible discord, is this just the subset of

12 the respondents who are in the rate group in GTE's service

13 area that now pay $11.81?

14   MR. PERRY: Yes, sir.

15   MR. OCHSHORN: So this is --

16   MR. PERRY: For comparison purposes.

17   MR. OCHSHORN: So is this then just that subset

18 of the total number of people who were asked, or is this

19 a --

20   MR. PERRY: No, I'm sorry. No, no, nc, no. What

21 I did I think -- What I know is I know what the Tampa-St.

22 Pete rate is.

23   MR. OCHSHORN: Okay.

24   MR PERRY: And I know generally what our -- I

25 also know what the penetration is from current population

1　survey for Tampa-St. Pete.

2　　　　MR. OCHSHORN: So then is not a subset of the

3　total number of respondents?

4　　　　MR. PERRY: Right, they didn't get any questions.

5　I just used the econometric model to project.

6　　　　MR. OCHSHORN: Okay.

7　　　　MR. PERRY: And then I used what we saw from the

8　cross tabulations to project what penetration rates were.

9　　　　MR. OCHSHORN: All right. Thank you.

10　　　　MS. CASWELL: Don, could you -- because I think

11　you might not have understood the question. The second

12　part of the page, does that have, that's not Tampa St. Pete

13　specific, correct, the HTB data?

14　　　　MR. PERRY: No, no, the staff's numbers are --

15　yeah, I'm sorry. Yeah, that's right. The staff's, down

16　here on the second part of the page, staff's numbers are --

17　you know, essentially this is an analysis of the survey,

18　and down here below is what what we would predict to be the

19　change for HTB regardless -- you know, just for a $5

20　increase. That would be regardless of where it took place?

21　　　　COMMISSIONER JACOBS: Can I ask you a question?

22　　　　MR. PERRY: Yes, sir.

23　　　　COMMISSIONER JACOBS: In your table where you did

24　the high/low penetration across local rates --

25　　　　MR. PERRY: Yes, sir.

1   COMMISSIONER JACOBS: -- you had the various

2   ranges.

3   MR. PERRY: Yes, sir.

4   COMMISSIONER JACOBS: And I guess what I want to

5   determine is whether or not we are talking about apples and

6   oranges here because I can easily do that.

7   MR. PERRY: Do you want to continue with your

8   question or --

9   COMMISSIONER JACOBS: Yes.

10   MR. PERRY: Heres --

11   COMMISSIONER JACOBS: You had in the range of $9

12   to $12, you had a range of penetration rates there.

13   MR. PERRY: They range from 86 to 96%.

14   COMMISSIONER JACOBS: And then at 12 and 14 and

15   14 and 20?

16   MR. PERRY: Right.

17   COMMISSIONER JACOBS: Looking at that, you could

18   infer that the higher the rate the more inelastic, which

19   means the more someone is paying the more willingly are to

20   pay at that rate?

21   MR. PERRY: Well, I think if you did -- you know,

22   this is the reason that you do the econometric studies

23   where you try and include also -- like the Hausman, Tardiff

24   and Belinfante also, where you also look for the difference

25   in toll rates and you look for differences in incomes

1 between the different respondents. So what this is saying

2 is you look across all the states. Here is just a broad

3 picture of where penetration rates are, and it shows you

4 the rate; but the rate is only one part of the picture.

5 You should also look at what their toll rates are, whether

6 they have greater income or lower, and that is what

7 Hausman, Tardiff and Belinfante --

8   COMMISSIONER JACOBS: So we are talking about

9 apples and oranges then?

10   MR. PERRY: Yeah. Well, if you just simply look

11 at that chart, yes. Although I think it's valid to just

12 take a look at that chart and say, look at -- you know,

13 here are the predictions, for example, for a $2 increase,

14 74%.

15   COMMISSIONER JACOBS: Yeah.

16   MR. PERRY: 74% is well out of the balance for a

17 $2 increase. I mean we are talking about 87 being the

18 lowest observed. 87, 74, I mean that is too big a

19 difference to be due simply to differences in income and

20 toll.

21   COMMISSIONER JACOBS: Well, the thought occurs to

22 me if I look at this descending scale here, it could be

23 then that that narrow range of penetration -- differences

24 in penetration could indicate that somebody at $20 is more

25 willing to pay that and, therefore, would be less willing

1 to disconnect for that rate and then somebody at $10 -- you

2 follow me?

3   MR. PERRY: Yeah, I understand what you're

4 saying, and I guess that interpretation would violate my

5 intuition.

6   COMMISSIONER JACOBS: It violates mine too, but

7 when I look at this --

8   MR. PERRY: So I don't think that's what --

9   COMMISSIONER JACOBS: -- and I say wait a minute.

10   MR. PERRY: No, that's not -- I mean the fact

11 that the ranges are narrower, I don't think infers that. I

12 mean we don't know, these states may be more similar in

13 their toll rates, for example, or more similar in income.

14   COMMISSIONER JACOBS: Okay.

15   MR. PERRY: So I mean what we may have is 9 to 12

16 range. We may have a very high income state and a very low

17 income state.

18   COMMISSIONER JACOBS: I see. Now for the HTB

19 results here --

20   MR. PERRY: Yes, sir.

21   COMMISSIONER JACOBS: -- those percentages are

22 total subscribers in Florida?

23   MR. PERRY: Yes, sir, that would be --

24   COMMISSIONER JACOBS: For HTB?

25   MR. PERRY: Well, what this -- what that number

1 represents is it would say right now we currently are -- in

2 Tampa-St. Pete, for example, we are at 95% penetration,

3 okay?

4   COMMISSIONER JACOBS: Uh-huh.

5   MR. PERRY: And if rates were to go up by 2%, we

6 would see a two tenths of a percent change in penetration,

7 so 95 times .2 would tell you what the change would be,

8 okay?

9   COMMISSIONER JACOBS: I'm sorry, back up for me

10 again.

11   MR. PERRY: If I take the -- It says that you

12 would see a two tenths of a percent change, so you take the

13 current penetration rate, 95 --

14   COMMISSIONER JACOBS: Of the total state?

15   MR. PERRY: Right, or of total Tampa-St. Pete

16 right now.

17   COMMISSIONER JACOBS: Total Tampa-St. Pete, okay.

18   MR. PERRY: And you would multiply it by the

19 minus .2, and then you could get how much it would actually

20 decrease, okay?

21   COMMISSIONER JACOBS: Okay.

22   MR. PERRY: So that would be the way to do that.

23 Yes, ma'am.

24   COMMISSIONER CLARK: You used a term,

25 "calibrate." And what kind of calibration might you apply

1 to this kind of data?

2 MR. PERRY: Well, I think with the kind of data

3 that they are working with, what you are going to have do

4 is you are going to have to come up with a calibration

5 factor which says that based on, you know, studies we have

6 seen the correlation between stated at intent and actual

7 intent is .4, .5, .6, whatever that number is. And I think

8 that number is going to have to be derived by looking

9 probably at something like -- you know, it could be derived

10 by Hausman, Tardiff and Belinfante, or it could be derived

11 from looking at these actual penetration rates.

12 COMMISSIONER CLARK: Well, tell me about the HTB.

13 MR. PERRY: Yes.

14 COMMISSIONER CLARK: When you have it up here and

15 you responded to Commissioner Deason that this was based on

16 you talking to them after they disconnected, or this is.

17 MR. PERRY: No, no, no, no. No, that's the --

18 Sorry, that is the California affordability survey.

19 Hausman, Tardiff and Belinfante, is an econometric analysis

20 of what people actually did in the marketplace up until, I

21 think it's like 19, you know 1990s, 1993.

22 COMMISSIONER CLARK: It involved no survey at

23 all?

24 MR. PERRY: No, ma'am, it did not.

25 COMMISSIONER CLARK: Okay.

1   MR. PERRY: What it did is the census goes out

2 every year, and they sample households in five hundred

3 MSAs, and they determine whether or not -- you know, one of

4 the things they fill out is whether or not they've got a

5 phone or not. And then they find out what rate they are

6 paying and what rate -- you know, what rate they are paying

7 for basic service, what rate they are paying for toll and

8 the whole thing; so that is all factored into it. So what

9 we are trying to do is predict whether or not they had

10 service based on the prices they face.

11   COMMISSIONER CLARK: If you used the HTB as a

12 calibrating mechanism, how would you do that?

13   MR. PERRY: Well, I think what you could do

14 here -- I mean, for example, what you could do is you could

15 just run a correlation, a strict correlation analysis

16 between, say, the $2 figure and the 2%; and you would say,

17 How much would you have to adjust it to bring that into

18 alignment?

19   COMMISSIONER CLARK: What will actually happen.

20   MR. PERRY: That's right.

21   COMMISSIONER CLARK: Because you won't if you

22 believe -- if you think the HTB was accurate, you are not

23 going to get a drop in penetration rate to 74%, it's more

24 likely going to be around 94 point something?

25   MR. PERRY: That's correct.

1   COMMISSIONER CLARK: Eight?

2   MR. PERRY: Yes.

3   COMMISSIONER DEASON: Let me ask another

4 question.

5   MR. PERRY: Yes, sir.

6   COMMISSIONER DEASON: Obviously these rates do

7 not include the 3.50 SLC. This is --

8   MR. PERRY: That's correct.

9   COMMISSIONER DEASON: You don't consider that

10 part of the basic rate. Let me present to you that a lot

11 of people in this state consider 3.50 -- in fact, it's

12 required if you have telephone service, it's part of the

13 basic rate. They've got to pay it if they are going to

14 have a telephone, and that was instituted by the FCC. We

15 had a stepped increase over a number of years. Did anybody

16 do any study to see how that affected penetration rates in

17 this country, was, in fact, a local rate increase?

18   MR. PERRY: No, you know, the SLC charge -- the

19 changes in the SLC charges are accounted for in the

20 Hausman, Tardiff and Belinfante model. I mean it's part of

21 the rates. I'm only comparing the 11.81 here as a

22 benchmark, so I can also later compare this to penetrations

23 across state without having to add in the $3, you know,

24 3.50 SLC charge into everybody's rate from the FCC data.

25   COMMISSIONER DEASON: So you are saying the HTB

1   study took into account --

2   MR. PERRY: Yes. When they did their econometric

3   analysis, the bild included the SLC charge.

4   MS. CASWELL: Commissioner Deason, I'd point out

5   as well, I think Carl Danner, one of our witnesses coming

6   up in the next session next week, can also address that

7   issue. I think he has something about that in his

8   comments.

9   MS. SIMMONS: Mr. Perry, over here, I'm sorry.

10   MR. PERRY: That's okay.

11   MS. SIMMONS: Sally Simmons again. I had one

12 additional question on the HTB model.

13   MR. PERRY: Yes, ma'am.

14   MS. SIMMONS: The form of that model, does that

15 implicitly assume that the price elasticity is constant

16 across all prices, or does it implicitly assume that the

17 price elasticity varies depending on the price level?

18   MR. PERRY: My memory, and I'm pretty sure -- you

19 know, it's been a while since I looked; but given that Mark

20 and I ended up with state-specific elasticities, it had to

21 be of semi-logged form, so that meant that the price

22 elasticity varied at the price level.

23   MS. SIMMONS: Okay. I was just curious about

24 that. I know there was some questioning by Mr. Poucher

25 earlier, and I do have some concerns in terms of the range

1   of the price changes included in the model and were they

2   anything as extreme as what we are possibly looking at

3   here.

4   MR. PERRY: Yeah, you know, to follow up on that

5   question or to continue that way, you're right. I mean we

6   always worry with econometric models about, you know, being

7   able to project out a sample. But like I said, you know,

8   this includes an example in California I know for sure

9   where the rates went up by $10 or almost $10, so we do have

10   an increase there.

11   I'm not sure. I've heard that there was a rate

12   increase in Tennessee -- I have not followed up on this --

13   as a similar magnitude, so I don't know. If it occurred

14   during that time frame, it's embodied in that study. So

15   you are probably good up until the $10, and then the

16   question is, you know, how to sample 10 to 20.

17   MS. SIMMONS: Okay. Let me ask a question on

18   that. As far as the $10 increase, do you have any data

19   specific to that in terms of what the results were?

20   MR. PERRY: I'm going to -- both I and Mr. Danner

21   will have. I'm going to present it later here.

22   MS. SIMMONS: Okay.

23   MR. PERRY: Yeah, I'll show you what happened.

24   MS. SIMMONS: Thank you.

25   COMMISSIONER CLARK: Let me just ask a question

1 following up on what Sally said. The 1.7% that you have no

2 on the, when there is an increase of $20 --

3   MR. PERRY: Right.

4   COMMISSIONER CLARK: -- you have no data that

5 actually shows that?

6   MR. PERRY: Well, what we are saying is that if

7 we project what happened in the past out to a $20 increase,

8 this is what Hausman, Tardiff and Belinfante predict.

9   COMMISSIONER CLARK: All right. But the $2 and

10 $5 you have actual data?

11   MR. PERRY: Oh, we have -- yeah, I mean there are

12 places --

13   COMMISSIONER CLARK: And you have some for the

14 $10?

15   MR. PERRY: I know that there is at least one

16 observation.

17   COMMISSIONER CLARK: Okay.

18   MR. PERRY: Or more than one observation because

19 you'll have all the data from January '95 on in California.

20   MS. SIMMONS: Commissioner Clark, I should

21 mention though the fact that this is a cross sectional time

22 series type of model, you have data across time and across

23 entities; so some of the variation is between entities that

24 you are seeing in the model. It is not necessarily in the

25 same entity across time, if that makes --   Does that make

 1   any sense?

 2   COMMISSIONER CLARK: No.

 3   MR. PERRY: What they do -- Well, I can -- Let

 4   me try.

 5   COMMISSIONER CLARK: Do I need to know that right

 6   now?

 7   MR. PERRY: Maybe not. If you want to know, you

 8   can ask either of us later.

 9   MS. SIMMONS: Well, it may be relevant. I just

10   wanted you to understand that the price variation in the

11   model is just not across time. It could be looking at a

12   $10 rate, say, in one state compared to a $15 rate in

13   another state. That's all I wanted to make you aware of.

14   COMMISSIONER CLARK: Okay.

15   MR. DUNKEL: Very simple question: Was the HTB

16   sponsored by the telephone industry?

17   MR. PERRY: Not that I know of.

18   MR. DUNKEL: Thank you.

19   MR. PERRY: As a matter of fact, points of

20   Mr. Belinfante or Doctor Belinfante is from the FCC.

21   MR. OCHSHORN: A question I have about it is, was

22   the study published?

23   MR. PERRY: Yes, it was. It's published in the

24   American Economic Association.

25   MR. OCHSHORN: Do you have a cite for it?

1   MR. PERRY: If I don't -- There is not a cite

2   here, but I do have a cite, and we can get you --

3   MS. CASWELL: We'll get that to you, Ben,

4   probably by the end of the --

5   MR. OCHSHORN: Okay. Yeah, that would be great.

6   MR. PERRY: I don't know if I have a copy with

7   me, but --

8   MR. OCHSHORN: Well, I could look it up.

9   I just -- I'm interested in the substantive part, but I

10   understand others, it will blow their minds, so that's

11   fine.

12   MS. CASWELL: I think it's also cited in the

13   testimony, but I may be mistaken.

14   MR. PERRY: I think it is too.

15   MS. CASWELL: In any event, we'll get it to you.

16   MR. PERRY: No problem.

17   Okay. Where was I? Okay. The next thing I want

18   to do -- well, the next thing I want to to do is just

19   another reality check, more or less, is to say, okay, what

20   have we observed actually out there across the states in

21   terms of penetration, in terms of evaluating this. And

22   looking at the Florida PSC survey, what I was saying is

23   that if you use the raw results, at least the way we

24   calculate them, what we are seeing is that penetrations

25   would fall for a $2 increase to 74% or 52%, depending on

1 which one of these groups you deal with; and 63% for a $5

2 increase. And looking at different states that are in that

3 range, what we see is that in Hawaii, which is about a $2

4 increase, penetration rates are at 96%. In Minnesota and

5 Oregon -- Well, sorry, just go to Oregon, which is about

6 more than $5 higher, you see pentration in 96 to the 97%

7 range. So, you know, predicting 74 or 63% penetrations

8 just doesn't make sense to me. It doesn't seem to jive

9 with real world.

10   MS. CASWELL: Excuse me, Don.

11   MR. PERRY: We'd argue for calibration.

12   MS. CASWELL: Some of the people can't hear too

13 well. It might work better if you put your mike on your

14 other lapel since you're turning that way.

15   MR. PERRY: Okay. Or maybe I'll move it up to my

16 collar or something.

17   MS. CASWELL: Thanks.

18   MR. PERRY: And so I mean I think, you know, that

19 the data will have to be calibrated to be useful.

20   COMMISSIONER DEASON: Can you back up to the

21 previous side?

22   MR. PERRY: Certainly.

23   COMMISSIONER DEASON: You've got Hawaii,

24 Minnesota, Oregon, and you've got subscriberships at

25 various rate levels. Do you have any information that

1 tracks, for example, Hawaii over a number of years to see

2 what the effect on subscribership has been for an increase,

3 or are you just picking these rates and saying that this is

4 a $2 increase, this is a 5, and this is a 10, and these are

5 the result in subscriberships?

6   MR. PERRY: Well, that is what I have done in the

7 latter part; but, you know, the Hausman, Tardiff and

8 Belinfante model, for example, is one way of trying to get

9 at that. And another thing I'm going to talk about is what

10 we've, you know, what we've seen in California; and that is

11 a case where we did a flash cut.

12   COMMISSIONER DEASON: You would agree though that

13 there are many other variables and factors involved other

14 than just the rate? For example, the level of intrastate

15 toll rates, the toll free calling zone?

16   MR. PERRY: Certainly.

17   COMMISSIONER DEASON: All these factors would

18 affect what a subscriber -- how they value telephone

19 service. If, you know, a $20 rate, $20 per month rate, if

20 they've got an extensive local calling area and they've got

21 cheap intrastate toll rates, it's a bargain.

22   MR. PERRY: Oh, no, I don't disagree with you. I

23 mean all I'm looking for right now is to say is there

24 anything out there that tells me whether 74% is reasonable

25 or not and, you know, a $2 increase so it's 74%. And just

1   looking at this roughly, making some rough benchmark

2   comparisons, you know, I just don't believe that number

3   makes sense, and so it makes me, makes me concerned.

4   MR. DUNKEL: I would like to understand your

5   numbers up near the top. You have the 11.81, plus $2.

6   MR. PERRY: Right.

7   MR. DUNKEL: And you drop apparently from 95 to

8   74, so on the first line you are saying about 19% said they

9   would drop at a $2 increase?

10   MR. PERRY: 21 is it?

11   MR. DUNKEL: Or 21, okay. On the second line,

12   you are saying something like 40% or so said they would

13   drop at a $2 increase?

14   MR. PERRY: A $5 -- Oh, sorry, down below. Yeah

15   this is the difference between looking at the ascending

16   group and the descending group.

17   MR. DUNKEL: Okay. I understand.

18   MR. PERRY: Right.

19   MR. DUNKEL: Isn't it correct that if you add up

20   all of the responses in the survey that, in fact, 7% of the

21   people said they would drop at a $2 increase, not these

22   huge numbers you're coming up with?

23   MR. PERRY: That's not the numbers I've seen, no,

24   sir.

25   MR. DUNKEL: If you just add up the numbers on

1 the disk, isn't that what you get?

2   MR. PERRY: No, sir, that's not the numbers I've

3 seen. We've, you know --

4   MR. DUNKEL: We'll deal with that.

5   MR. PERRY: No, that's fine.

6   MR. DUNKEL: When we add up the numbers on our

7 disk 7% said they would drop at a $2 increase. I'll leave

8 it there.

9   MR. PERRY: Okay. Let's move on.   I think we've

10 really pretty much discussed this slide, so --

11   MR. DUNKEL: If you could go back, I have one

12 question on that.

13   MR. PERRY: Yes.

14   MR. DUNKEL: These rates are from the FCC survey

15 you mentioned?

16   MR. PERRY: Yes, they are.

17   MR. DUNKEL: Does the FCC report those rates

18 including the 3.50 SLC or excluding it?

19   MR. PERRY: No, they do not report -- at least

20 the ones I'm reporting here do not report the 3.50 SLC.

21   MR. DUNKEL: Second question: For many states

22 they report sample rates, a rate from one -- or perhaps

23 three different cities in the state, but they report the

24 penetration rates statewide. How did you handle the case

25 where you had rates from three different cities?

1   MR. PERRY: Well, I think what you do in that

2   case is that, you know, you do a weighted average based on

3   the population, or the number of lines.

4   MR. DUNKEL: So you took the population of each

5   city times the rate for that city?

6   MR. PERRY: And then divide by the total

7   population, yes, sir.

8   MR. DUNKEL: Okay. Thank you.

9   MR. REGAN: Mr. Perry, my name is Tom Regan. I

10 have a question for you about the --

11   MR. PERRY: Where are you?

12   MR. REGAN: The cross elasticity of toll you

13 talked about.

14   MR. PERRY: Yes, sir.

15   MR. REGAN: I think it was minus .02 or something

16 like that you said.

17   MR. PERRY: .026, yes.

18   MR. REGAN: Was there a number from the Hausman,

19 Tardiff and Belinfante study as well?

20   MR. PERRY: Yes, there is. I don't have it in

21 there, no. I just did the state specific, but we could

22 provide it if you're interested.

23   MR. REGAN: Okay. The idea with the cross

24 elasticity of toll is really that if you have reduced toll

25 rates that may have some impact on the basic exchange

12 | it for. I mean in Mark's and my case, what we did -- I
13 | mean for Florida it represents the average elasticity
14 | figure for all of Florida residents.

15 | MR. REGAN: Okay. So it's an average.

16 | MS. CASWELL: And, also, Mr. Regan, I think in
17 | Mr. Perry's testimony that HTB elasticity number is cited,
18 | in his comments, rather.

19 | MR. REGAN: Okay. But going back to an earlier
20 | question you answered, you said if there was no offsetting
21 | decreases to a residential basic exchange increase, the
22 | effect would be to price customers off of the network; do
23 | you recall that answer?

24 | MR. PERRY: I guess I wouldn't phrase it exactly
25 | that way, but what I would say is that there be a decrease

C & N REPORTERS   TALLAHASSEE, FLORIDA   (850)697-8314

314

1 | in penetration.

2 | MR. REGAN: Okay.

3 | MR. PERRY: Okay?

4 | MR. REGAN: Now let's say I'm a residential
5 | customer and I try to limit my toll. I'm a low income
6 | customer. I try to limit my toll to keep my total bills
7 | low, so I may have a much lower than average toll usage.
8 | That average toll elasticity would not apply to me. For
9 | example, maybe I use no toll.

10 | MR. PERRY: Well, okay, I'll tell you, first off
11 | in our billing analysis, what we have done, we have checked
12 | to see how many people in low income, according to our
13 | billing records, actually do not use toll, long dis --
14 | intraLATA toll --

15 | MR. REGAN: We have seen varying numbers.

16 | MR. PERRY: -- long distance. Okay. So it's
17 | about --

18 | MR. REGAN: Very small numbers to very large
19 | numbers in the last day or two.

20 | MR. PERRY: Okay. So I mean that is one
21 | question. In the case you cited, according to my analysis,
22 | you would be about 2% of the customers, okay? Sorry not
23 | just LATA, but LATA, vertical services and long distance,
24 | okay? But, okay, let's go ahead with your assumption that
25 | I don't use any toll. Do you use any vertical services?

C & N REPORTERS   TALLAHASSEE, FLORIDA   (850)697-8314

1 | pentration; is that right?

2 | MR. PERRY: Yes, sir.

3 | MR. REGAN: In the cross elasticity of toll that

4 | would be like an average elasticity over all residential

5 | customers; is that right?

6 | MR. PERRY: Well, it's not -- yeah, I guess. It

7 | depends on how you calculate it, but it could be the

8 | average elasticity at the average rate.

9 | MR. REGAN: But it would be an average elasticity

10 | across all residential customers?

11 | MR. PERRY: Across whatever you are calculating

12 | it for. I mean in Mark's and my case, what we did -- I

13 | mean for Florida it represents the average elasticity

14 | figure for all of Florida residents.

15 | MR. REGAN: Okay. So it's an average.

16 | MS. CASWELL: And, also, Mr. Regan, I think in

17 | Mr. Perry's testimony that HTB elasticity number is cited,

18 | in his comments, rather.

19 | MR. REGAN: Okay. But going back to an earlier

20 | question you answered, you said if there was no offsetting

21 | decreases to a residential basic exchange increase, the

22 | effect would be to price customers off of the network; do

23 | you recall that answer?

24 | MR. PERRY: I guess I wouldn't phrase it exactly

25 | that way, but what I would say is that there be a decrease

1 | in penetration.

2 | MR. REGAN: Okay.

3 | MR. PERRY: Okay?

4 | MR. REGAN: Now let's say I'm a residential

5 | customer and I try to limit my toll. I'm a low income

6 | customer. I try to limit my toll to keep my total bills

7 | low, so I may have a much lower than average toll usage.

8 | That average toll elasticity would not apply to me. For

9 | example, maybe I use no toll.

10 | MR. PERRY: Well, okay, I'll tell you, first off

11 | in our billing analysis, what we have done, we have checked

12 | to see how many people in low income, according to our

13 | billing records, actually do not use toll, long dis --

14 | intraLATA toll --

15 | MR. REGAN: We have seen varying numbers.

16 | MR. PERRY: -- long distance. Okay. So it's

17 | about --

18 | MR. REGAN: Very small numbers to very large

19 | numbers in the last day or two.

20 | MR. PERRY: Okay. So I mean that is one

21 | question. In the case you cited, according to my analysis,

22 | you would be about 2% of the customers, okay? Sorry not

23 | just LATA, but LATA, vertical services and long distance,

24 | okay? But, okay, let's go ahead with your assumption that

25 | I don't use any toll. Do you use any vertical services?

1 Do you use long distance? No? Yes?

2   MR. REGAN: Let's say I do what I can to keep my

3 bills low. I use less than average toll. Let's just say I

4 use less than average vertical services as well. Maybe I

5 don't have any vertical services, and maybe I limit my toll

6 just to keep my bill affordable. I'm a low income

7 customer. Let's say I don't use any toll, and I'm facing a

8 basic exchange rate increase. Let's say I'm not a Lifeline

9 customer but I'm a working poor person and I try to keep my

10 bills as low as possible just so I can keep my basic

11 service so I can make the calls I need to, and that's about

12 it. If my basic exchange rate increases, and despite the

13 fact that there may be toll decreases, that doesn't help me

14 any, does it? My toll elasticity applying to me is zero.

15 There is no cross elasticity of toll for me.

16   MR. PERRY: No, I agree. If you have no toll --

17   MR. REGAN: Or if I have less than average, my

18 toll elasticity is less than the average number that you

19 would show.

20   MR. PERRY: Perhaps. I mean that's not clear

21 that that's true, okay?

22   MR. REGAN: If the numbers are average and my

23 usage is less than average.

24   MR. PERRY: Well, what the estimate -- No, I

25 mean the thing is that you still have to empirically

1   establish that, okay? That essentially elasticity varies

2   by income, and I don't have any evidence to accept or

3   reject that at the moment, okay?

4   MR. REGAN: I would agree that if you are a

5   low-income customer you may try to limit your toll and make

6   less toll calls in order to keep your bills affordable.

7   MR. PERRY: It's a reasonable hypothesis, okay?

8   But we're -- I mean it's --

9   MR. REGAN: So what you're saying is really

10   agreeing with me?

11   MR. PERRY: No, I'm saying that that's a

12   reasonable hypothesis, and it's also reasonable that, you

13   know, you do -- you may make more toll calls, so I don't

14   know whether your response, price responsive is greater or

15   less than average. I have no empirical way of judging

16   that, okay?

17   MR. REGAN: That's fine. Thank you.

18   MR. PERRY: Okay. Needless to say, and as

19   anticipated by somebody who asked me a question a little

20   earlier, the question is, is that with concerns about these

21   things can we actually go out -- with concerns about

22   starting point bias, strategic behavior and limiting

23   options, can you go out and test whether or not these are

24   things you should be concerned about, and that was our

25   basic operating hypothesis when we decided to field our own

1 survey.

2   And to be mercifully short, what I'm going to do
3 is allow you to look through this quickly. I'm going to
4 summarize quickly the background of the survey. We had a
5 number of goals, including assessing the value of telephone
6 service, basically telephone affordability; but in addition
7 to that what we wanted to do is we also wanted to take a
8 look at the value of service that was being provided to
9 residents of telecommunication services, and we also wanted
10 to take a look at what importance they placed on the types
11 of calls they were making. And another goal that we had in
12 mind here too is we wanted to take a look at the Lifeline
13 program and see more or less how many people were eligible,
14 or reported that they were eligible, and how many people
15 were aware of eligibility criteria and just general
16 awareness and participation in the program.

17   So we ended up sampling 514 homes in the
18 GTE-Florida service territory. We used a telephone survey,
19 contacted people using random digit dialing, along the same
20 lines as the University of Florida, slash -- I should call,
21 I'm sorry, the PSC staff survey. The major, you know, the
22 major concerns were obviously what I expressed earlier,
23 that we had concerns about strategic behavior. And as a
24 consequence, one of the things that we did particularly is
25 we did not disclose the study's purpose to the respondent

1 -- or study sponsor, sorry, to the respondent. And in

2 contrast, what we did in terms of explaining the survey is

3 that we were interested in collecting information about

4 general utility expenditures; and like the staff survey, we

5 go on to ask information on that, but we framed it as

6 general expenditure patterns rather than focusing only on

7 local telephone rates. And then another thing that we did

8 too is we added -- rather than having three options, we

9 asked people a list of ten possible actions that they could

10 take; and then we used a likelihood scale to ask them how

11 likely they were to take these actions, so --

12   MR. BECK: Mr. Perry, the number of households

13 that participated, how does that compare to the staff

14 survey?

15   MR. PERRY: Well, I think the thing is -- let's

16 see, staff surveyed somewhere in the neighborhood of around

17 15 hundred households across the state of Florida. Within

18 our service territory, we're probably very comparable. My

19 guess is that, you know, we are at least a third of their

20 survey, so about five hundred.

21   MR. REGAN: Mr. Perry, Tom Regan again.

22   MR. PERRY: Yes, sir.

23   MR. REGAN: You said there were ten options that

24 you'd give the people you surveyed?

25   MR. PERRY: Yes, sir.

1   MR. REGAN: Did those ten options go in order?

2   MR. PERRY: No, they were randomized like the

3   staff's, so I mean what happens --

4   MR. REGAN: They were randomized?

5   MR. PERRY: You worry about item order bias, so

6   what we do is the ten were rotated, okay?

7   MR. REGAN: Okay.

8   MR. PERRY: And let's see, I think I've talked

9   about everything I want to pretty much here. The

10 likelihood scales, one of the reasons for using likelihood

11 scales is rather than forcing people into a binary choice

12 where they have to either do or don't do something, you can

13 ask them, one, they can take multiple actions; and two, how

14 likely they are. So they can say, I'm very likely to do

15 this or I'm likely -- you know, not at all likely to do

16 this, so that helps make the -- adds a little more realism

17 to their behavior and hopefully provides a better

18 correlation between stated intent and action.

19   Okay. Why don't we just skip this one and move

20 on to the next. Okay. Let's talk about some of the

21 results. This slide shows basically perceptions, what

22 people feel they are spending, and what this means is

23 just -- it's self-reported. They are asked on the phone,

24 How much do you think your local telephone bill is? And

25 what you can see is, is that for example, for local phone

1 service the median, which I think is a more reliable

2 indicator, is about $30 a month; and what that says is they

3 feel that they are spending $30 a month on local phone

4 service, which includes local calling, ECS and vertical

5 services. And this says that 50% of the people report a

6 $30 expenditure or less, and 50% are saying that they spend

7 $30 or more,

8   MR. DUNKEL: I'm sorry, are you saying $3 or 30.

9   MR. PERRY: 30. 30, as the graph up there

10 shows.

11   Okay. And this is -- I mean you can see what the

12 general distribution is there.

13   MR. DUNKEL: Could I go back to that graph for a

14 second?

15   MR. PERRY: Certainly.

16   MR. DUNKEL: For Internet you show $20 as the

17 average expenditure.

18   MR. PERRY: That's correct.

19   MR. DUNKEL: I've heard data that somewhere

20 around 15 to 20% of the people have Internet.

21   MR. PERRY: That's correct.

22   MR. DUNKEL: Therefore, I doubt that is the

23 average. Can you explain that?

24   MR. PERRY: Well, what I'm reporting is the --

25 I'm sorry, let me correct that. What I'm reporting is the

1 average expenditures of those who have the service, you're
2 correct.

3   MR. DUNKEL: So if the average expenditure of
4 those that have it is 20, and 10% have Internet, then the
5 true average is $2?

6   MR. PERRY: Yeah, actually I think that the
7 number is that about 20% have it, so $4.

8   MR. DUNKEL: So that your average is $4.

9   MR. PERRY: The average expenditure across all
10 people who have and don't have Internet service, yes. I
11 mean it depends on how you want to compute averages.

12   MR. DUNKEL: And if I look -- you also, on one
13 end you have cable TV and the other end you have satellite
14 TV. Could I take it that it's unlikely that you can just
15 add those two together? Again, some small percent have --
16 some percent have one and some percent have the other?

17   MR. PERRY: If you wanted to calculate the
18 average the way you are presenting it, yes, sir, that would
19 be the way you would do it.

20   MR. DUNKEL: Thank you.

21   MR. PERRY: Uh-huh.

22   COMMISSIONER CLARK: I don't understand those
23 questions, because I thought this was, you were just
24 asking --   This is self-reported.

25   MR. PERRY: Right.

1   COMMISSIONER CLARK: If you called me up, I would
2   tell you these things, and that's what you are reporting,
3   what people perceive they spend on these things, not how
4   many people have it.
5   MR. PERRY: That's right.
6   MS. CLARK: But what people perceive they --
7   MR. PERRY: That's correct, so I mean if you
8   have it, you know, basically if you have it. Now what we
9   are arguing about is what number you divide by and in the
10   denominator, okay?
11   MR. DUNKEL: If I might explain, if he called 10
12   people and two of them said that they spent $20 for
13   Internet and eight said they spent nothing for Internet, he
14   would put $20 as the answer up here.
15   COMMISSIONER CLARK: That's what I thought.
16   COMMISSIONER GARCIA: What do you mean by
17   optional phone?
18   MR. PERRY: Oh, I'm sorry, that should actually
19   say "optional phone services," we just didn't have enough
20   room in there. So that is custom calling features, such as
21   caller ID, call waiting, call hold.
22   COMMISSIONER CLARK: Let me ask a question. When
23   you asked that question, did people go back and say, oh, if
24   you are talking about -- How do you know that optional
25   features were not included in the $30?

1   MR. PERRY: Oh, well, what we --

2   COMMISSIONER CLARK: If you me my local rate I'll

3 probably tell you.

4   MR. PERRY: Right. I'm sorry. The question --

5 in the survey questionnaire we try and describe what local

6 service is.

7   COMMISSIONER CLARK: Okay.

8   MR. PERRY: Okay. And what that includes.

9   COMMISSIONER CLARK: All right.

10   MR. PERRY: So that's the way we deal with it.

11   MR. DUNKEL: Can you explain why they are

12 reporting $30 for local service if that does not include

13 vertical?

14   MR. PERRY: Well, the local service definition we

15 had was not just simple basic local service, okay? So if

16 you wanted to get at -- you know, if you wanted to get at

17 what the basic, what they think they spend in basic, we

18 could subtract off the optional, okay? It was just our

19 definition of local service.

20   MR. DUNKEL: I'm sorry, I got lost. Does the $30

21 figure include the optional or exclude the optional?

22   MR. PERRY: It includes the optional.

23   MR. DUNKEL: So you're showing the optional in

24 the $30 figure and also the optional in the $80 figure?

25   MR. PERRY: Because that is the way that we

1 defined local basic service for the -- or local phone

2 service for the service, yes.

3   COMMISSIONER DEASON: Does the local number also

4 include a second line?

5   MR. PERRY: No, second lines were identified

6 separately, I think. I mean I don't have an expenditure on

7 them, but it preferred to the primary line.

8   COMMISSIONER DEASON: Okay. And what about long

9 distance, was that just on the primary line or all long

10 distance if there was more than one line?

11   MR. PERRY: It would have been all long distance

12 if they had more than one line.

13   Okay. The next thing I want to talk about, or

14 one of the questions we asked people basically was, okay,

15 we know how -- we have a feeling for how much you think you

16 are spending on this. What is the value of service you

17 receive relative to the cost? And what we asked them to do

18 was to evaluate the relative value of service on a five

19 point scale with four being very good and five being

20 excellent; and the results I'm going to report here are the

21 percent of people who said that the service -- the value of

22 service they received was at least very good to excellent,

23 four or five on that scale.

24   Okay. And what you see is that, for example,

25 this point here, Internet service, 73% of the people who

1 are using Internet service -- or 73% of the people who have
2 Internet service report that the value relative to its cost
3 is very good to excellent. And telecommunications
4 services, related services, local phone, receives a 67%
5 rating; 67% for local distance. And similarly, if you
6 compare it across, what you see is generally the
7 telecommunications services receive the highest value of
8 service as a family relative to the other services tested
9 here. Okay, most of the other services are down in the 50
10 to 60% value of service range.

11   COMMISSIONER DEASON: Let me ask a question on
12 that slide.

13   MR. PERRY: Yeah. So along those line, I mean
14 another thing we are talking about in terms of elasticity
15 is what accounts for price elasticity being lower or
16 inelastic. And one of, you know, one of the things is
17 that, yes, it's a -- you know, there are not many things
18 that you can substitute away from, so it's a necessity;
19 that can be a reason. Another reason is it's a small part
20 of the budget. A third reason for low income elas -- or
21 low elasticities can also be that the value of service is
22 very high relative to its cost.

23   COMMISSIONER DEASON: So these percentages
24 indicate people that indicated that that particular
25 service, that they valued it highly in relation to its

1 price?

2   MR. PERRY: It's cost, yes, sir.

3   COMMISSIONER DEASON: It's a very good service in

4 relation to what they have to pay for it?

5   MR. PERRY: Yes, sir, that's correct.

6   COMMISSIONER DEASON: Okay. Now optional phone

7 service, that was basically vertical features?

8   MR. PERRY: Yes, sir.

9   COMMISSIONER DEASON: So that has an extremely

10 high rating. In fact, the second highest rating up there.

11   MR. PERRY: Right.

12   COMMISSIONER DEASON: So even though optional

13 phone services are priced way above cost, people still

14 think it's a great bargain.

15   MR. PERRY: Apparently so, sir. I mean what we

16 have is -- Yeah, let me stop there. You're right.

17   MR. DUNKEL: I have a few questions. First of

18 all, the blue line is percent penetration; is that correct.

19   MR. PERRY: Yes, that's correct.

20   MR. DUNKEL: For local phone service you are

21 showing what?

22   MR. PERRY: Well, I have truncated the graph at

23 90% in order to get the scale --

24   MR. DUNKEL: Well, for local phone service you

25 are not up to the top, so you are in the 80s somewhere?

1   MR. PERRY: Well, actually it's right here at the

2 truncation. The graph is truncated at 90% in order to

3 scale.

4   MR. DUNKEL: So that's a stealing problem? It

5 looks like energy goes to the top, but it looks local phone

6 service does not.

7   MR. PERRY: Oh, I'm sorry. Yeah, I'm looking

8 at -- Local phone service, yeah, you're right. I guess

9 the local phone service, because of the definition, and

10 there may be some customer confusion.

11   MR. DUNKEL: So you are looking at 80 something,

12 88 or so percent penetration?

13   MR. PERRY: Yes, sir, that's right.

14   MR. DUNKEL: Second question, was this a

15 telephone survey?

16   MR. PERRY: Yes, sir, it was

17   MR. DUNKEL: So how did you interview people who

18 don't have local phone service?

19   MR. PERRY: No, I think that's not -- I think,

20 one, you always have some confusion. Secondly, our

21 definition of local service said basic local phone service,

22 optional services, and local calling, ECS, so they may have

23 viewed the fact that they didn't have the latter two as not

24 having local phone service.

25   MR. DUNKEL: So the way it was worded you may

1 have confused the customers?

2   MR. PERRY: I may have confused the customers as

3 to what the definition of local phone service was.

4   MR. DUNKEL: One more question. On the page --

5   MR. PERRY: Or some of the customers, let me put

6 it that way, not the majority.

7   MR. DUNKEL: On the slide prior to this, you say

8 the local telecom services received the highest value

9 rating of all services. Is that your statement?

10   MR. PERRY: As a family of services, yes.

11   MR. DUNKEL: If I look here, the red line for

12 local service does not appear to be the highest. It looks

13 like Internet is higher. It looks like a few other

14 services are higher.

15   MR. PERRY: I said as a family of services.

16 These are all -- I mean to have long distance service, you

17 are going to have to have local phone service. To have

18 Internet service, unless you are going over to a cable TV

19 modem right now, you are going to have to be on the line.

20 So I'm talking about as a family of services they received

21 the highest rating.

22   MR. DUNKEL: So when you are saying local service

23 has the highest value rating of all services, that's not

24 what you're saying?

25   MR. PERRY: No, I said as a family of services

1 telecommunication services have the highest rating, and I'm

2 not sure but, you know, I mean between 67 and 70%, whether

3 that is a statistically significant difference, okay?

4   MR. DUNKEL: Thank you.

5   MR. BECK: Mr. Perry, how did you distinguish

6 between utility energy and water sewer?

7   MR. PERRY: We have a question basically which

8 asks them the value of service for electricity and gas

9 versus sewer and water.

10   MR. BECK: And your survey shows that premium

11 cable has a higher value than water and sewer service?

12   MR. PERRY: For those people who have -- This is

13 a self-selection problem in a sense, but for those people

14 who have premium cable services, they rated higher on

15 average than water and sewer were rated, yes, sir. For --

16 That's value of service relative to its cost, okay?

17   COMMISSIONER CLARK: The key, as I understood it

18 is cost, right?

19   COMMISSIONER DEASON: Not cost. It's price.

20   MR. PERRY: Sorry, I -- Yeah, you're right.

21 Price.

22   COMMISSIONER CLARK: Yeah, people think they are

23 paying too much for their energy maybe.

24   MR. PERRY: That's what that says.

25   COMMISSIONER CLARK: They value it, but they

1 still think it's priced too high.

2   MR. PERRY: Yeah.

3   COMMISSIONER CLARK: Whereas the cable TV they

4 may not think it's priced too high.

5   MR. PERRY: For those who are Direct TV, you

6 know, yeah, it's a subset.

7   MR. DUNKEL: Excuse me. Was that correct, or was

8 that the inverse? If you are higher up on the chart,

9 aren't the people happier with the price? Isn't that what

10 it's saying?

11   MR. PERRY: Yes, that's right.

12   MR. DUNKEL: Okay.

13   MR. PERRY: Yeah, they perceive the value that

14 they are getting relative to its price is perceived to be

15 higher?

16   MR. DUNKEL: So they are less happy with their

17 cable TV price than they are with their Internet price?

18   MR. PERRY: That seems to be true, yes.

19   Okay. I talked earlier about the willingness to

20 pay methodology and the three different times you'd choose.

21 We went with a, in order to remove, or to at least -- not

22 remove, but to be able to test starting point bias what we

23 did is we went to a take-it-or-leave-it approach. So we

24 sampled 514 customers and what we do is we give each one of

25 them a single price so that they -- you know, so that you

1 wouldn't have any starting point bias and you can minimize
2 strategic behavior; and this is all documented in Carson
3 and Mitchell as to why you do this.

4   As I said, we gave them ten options as to what
5 they could do, so we wanted to expand the list of options.
6 What we would do is say, Would you do this? And, you know,
7 is this an action you might take? And on a scale of one to
8 five from not at all likely to do this to very likely, what
9 would you do? And so it both identifies multiple -- it
10 allows them to do multiple things. It allows them to say
11 how likely they are to do it. And then we have a follow-up
12 question which said, okay, of those items which you said
13 you were very likely -- likely or very likely, which is the
14 most likely action of all of these that you are going to
15 take?

16   Okay. And what these results show is that we ask
17 people like would they reduce their extended calling
18 service, the amount of -- you know, the EAS calls they
19 make. 16.4% said they would do that. 30, slightly over
20 30% said that the action that they are very likely or
21 likely to take would be to shift their calling patterns to
22 take advantage of night/weekend discounts. 16, 17% said
23 that they would just simply pay the increase and not do any
24 adjust to their spending. 10, 11% said that they would
25 drop off their second line.

1   We also see things such as whether they would

2 reduce going to movies, reduce, you know, rental fees on

3 movies, reduce HBO, reduce long distance spending about

4 12%, and 10% said that they would reduce cellular usage.

5 15% said that they would reduce vertical services. And

6 then if you take a look, the number who said that they

7 would disconnect it shows here is eight and a half percent;

8 and that's eight and a half percent across all price, okay,

9 are saying that they'd very likely -- likely or very likely

10 to disconnect across any -- a rate increase from 2 to $20.

11   And when do you a take-it-or-leave-it approach,

12 the frequency analysis here can't really be used to just

13 say what they would do at different price points. We are

14 going to have to do something else. I'm going to do some

15 econometric modeling to get the price point analysis, but

16 that is just one of the things that you do -- you have to

17 do when you do a take-it-or-leave-it approach.

18   MS. SIMMONS: Mr. Perry.

19   MR. PERRY: I'm sorry, let me back up. I meant

20 to say out of this eight and a half percent, this also

21 allows these people to take any of these actions, so a

22 number of them said that they were likely to very likely to

23 take many of these actions; and what happened is that when

24 we asked the follow-up question: What is the action you are

25 most likely to take? 4.7% said across all price ranges

1 that they would disconnect, okay? I mean, so anywhere from

2 to $20 increase, and I'll break out the price increase

3 information.

4   MS. SIMMONS: Mr. Perry, just trying to confirm

5 then, that chart reflects all price points that were asked,

6 correct?

7   MR. PERRY: Yes, that's correct, all price

8 points, so this is aggregating everybody across. It's just

9 to give you a feel for the relative frequency of the

10 responses.

11   COMMISSIONER DEASON: So do you conclude from

12 that based upon the survey that if there were a $2 increase

13 in local rates that you would have a 4.7% disconnect?

14   MR. PERRY: No, sir, I don't.

15   COMMISSIONER DEASON: All right. How do you

16 interpret that?

17   MR. PERRY: What that says is that if the rates

18 went up by $20, 4.7% would go off the network?

19   COMMISSIONER DEASON: Oh, $20. I thought you

20 said --

21   MR. PERRY: If that's up to -- I mean what I'm

22 doing -- what I'm assuming is the people who said they

23 would go off at two went off. The people who went off at

24 five go off, when you add that all up, when you get to $20.

25 I can't tell about the lower prices until I do the

1   regression analysis, okay?

2   COMMISSIONER DEASON: Oh, okay. So then you

3   would --

4   MR. PERRY: And I'll present that --

5   COMMISSIONER DEASON: At $20 increase you would

6   expect 4.7% of the people to --

7   MR. PERRY: That is what the survey would say

8   without calibrating any results or doing anything beyond

9   that.

10   COMMISSIONER GARCIA: Non-Lifeline customers,

11 what is that asterisks?

12   MR. PERRY: I'm sorry, what it does is that is

13 4.7% of only the non-Lifeline customer. This reports the

14 results for excluding the non-Lifeline -- the people who

15 are participating in the Lifeline program, okay?

16   COMMISSIONER GARCIA: What percentage of the

17 survey were they?

18   MR. PERRY: Do you remember off the top of your

19 head? I think I've got a number here. 11% percent of

20 those eligible, so it's going to be less than that. 11% of

21 123 divided by 514, so I would have to figure out what that

22 number is, but it's going to be --

23   MR. POUCHER: Earl Poucher, Public Counsel again.

24   MR. PERRY: Yes, sir.

25   MR. POUCHER: Just to understand, 16.6% of those

1 responding said they would simply pay the increase and make
2 no other adjustments in their purchases and not disconnect;
3 is that correct?
4   MR. PERRY: That's not quite correct. That's
5 close. What this --
6   MR. POUCHER: Well, what does that say?
7   MR. PERRY: Okay. What this says is we allowed
8 them to take multiple actions, okay? So we said -- you
9 know, for example, you could have said that it would be
10 very likely that you would pay the increase and do nothing
11 else, and you might also say it might be very likely that
12 you reduce your cellular expenditures, okay? So that's
13 what -- I mean this is reporting just the relative
14 frequencies of what people said for the very likely,
15 allowing them to take more than one action, which is a
16 realistic -- more market realism, okay.
17   MR. POUCHER: So that is more than a hund·ed
18 percent up there?
19   MR. PERRY: That's right. What you are going to
20 do is turn around and look at -- If you want to look at
21 what is the action they are most likely to take, we could
22 do a distribution frequency on the follow-up question to
23 this, which is: What is the most likely action you would
24 have taken of all of these?
25   MR. POUCHER: But you've basically said that 16%

1 would simply pay the bill?

2 　　　　MR. PERRY: Would consider paying it, yeah.

3 　　　　MR. POUCHER: And that is 16% of all income

4 levels?

5 　　　　MR. PERRY: Yes, sir. That's correct.

6 　　　　MR. POUCHER: And you don't have a separate

7 number for 20 thousand and under?

8 　　　　MR. PERRY: I don't at the moment.

9 　　　　MR. POUCHER: Okay. Thank you.

10 　　　　MR. PERRY: Yes, sir.

11 　　　　MR. McNULTY: I have a question from staff here.

12 　　　　MR. PERRY: Yes. I'm sorry, Bill

13 　　　　MR. McNULTY: Yes. I guess my question here is

14 that we don't see anything here relating to the statistical

15 validity of these numbers here in terms of the percent

16 error that might exist given the population?

17 　　　　MR. PERRY: No, I haven't calculated it. I'm

18 sure as you can appreciate, we got the data somewhere after

19 Labor Day, and I was writing testimony the 24th and doing

20 the analysis on this, so I haven't calculated the standard

21 errors yet.

22 　　　　MR. McNULTY: Okay. With a sample size of 514 do

23 you know how many of those actually responded versus those

24 that --

25 　　　　MR. PERRY: Oh, that is 514 responses.

1   MR. McNULTY: 514 responses?

2   MR. PERRY: Yes, sir.

3   MR. McNULTY: Do you know if that sample size is

4   large enough to reflect the population within a certain

5   percent error in most cases given this dispersion?

6   MR. PERRY: Yeah, I mean --

7   MR. McNULTY: Because you have a lot of

8   dispersion here. That's one of the things --

9   MR. PERRY: It's been a long time since I've done

10 Cochran's calculation but, you know, it's -- I think the

11 accuracy is at least less than 5%. I mean 5% relative

12 precision, it's probably down in the neighborhood of three

13 to two, isn't it? That's my memory.

14   MR. McNULTY: Okay.

15   MR. PERRY: I mean I can do the calculation later

16 if you like, and we will.

17   MR. McNULTY: Yeah, I would be interested to see

18 it on this series.

19   MR. PERRY: Sure.

20   MR. McNULTY: Simply because you have dispersion

21 here, and you have a sample size that is less than a

22 thousand, and that gives me a little concern.

23   MR. PERRY: See, a general rule of thumb is, is

24 that for a lot of binary choices is that about four hundred

25 will do it. I mean Because going up on sample size doesn't

1   really increase your precision that much. You know, if you

2   go to the Cochran's calculation on it, it's like MPQ over T

3   square D squared.

4   MR. McNULTY: I'd be interested in pursuing it

5   later.

6   MR. PERRY: Sure. Yeah. No, that's fine we can

7   harass other people later on that.

8   Okay. One of the questions then to take a look

9   at after that is to see -- I wanted to focus on how many

10 folks said that the most likely action that they were going

11 was to disconnect by income category, and what you see here

12 is a report of the number of folks and the percentage that

13 would -- the most likely action they would take would be to

14 disconnect. And what the results show is that -- I should

15 have done this differently, I realize now -- is that .39 or

16 .4% say that they would disconnect that are in the under

17 10K group; and it peaks at about 20 to 30K and then sort of

18 goes up and down towards the end there.

19   The largest group that says they are going to

20 disconnect is in this group that refused to report their

21 income, and they show a disconnect percentage of about five

22 and a quarter. And I think what happened is that -- we are

23 going to talk a little bit later. One of the things we did

24 to determine eligibility for the Lifeline program was to

25 see if they were participating in one of six state or

1 federal programs, income assistance, energy assistance

2 programs. And we asked that, and then having asked for

3 income at the end, I think pretty much ended up with people

4 worrying that we were checking up on their eligibility for

5 one of these programs. So I think, if I remember -- I

6 can't remember the exact statistics on it, but a majority

7 of the people who refused to tell us what their income, or

8 state their income category, turned out to be -- a large

9 percentage of them turned out to be enrolled in one of the

10 six programs.

11   MS. SIMMONS: Mr. Perry.

12   MR. PERRY: Yes.

13   MS. SIMMONS: Just an observation here, because

14 you mentioned you had something like 514 was your total

15 sample size.

16   MR. PERRY: Yes.

17   MS. SIMMONS: I just wanted to comment. I know

18 you haven't done the calculations.

19   MR. PERRY: Right.

20   MS. SIMMONS: But when you subdivide the sample

21 based on these income categories, it's probably fair to say

22 that some of those --

23   MR. PERRY: Precision levels go down.

24   MS. SIMMONS: Yeah some of those estimates you

25 have there for a particular income level could have very

1 large error bars around them.

2   MR. PERRY: That's true.

3   MR. BECK: Mr. Perry, over here.

4   MR. PERRY: Yes, sir.

5   MR. BECK: I understood that the staff survey did

6 an over sample to ensure that the demographics of the total

7 sample matched that of the state to the best that they

8 could. Is that your understanding too?

9   MR. PERRY: No, that is not correct. That is

10 not, I think, a correct statement of it.

11   MR. BECK: Okay. Could you --

12   MR. PERRY: What it amounts to, the reason you do

13 oversamples -- If you just do a random sample, the random

14 sample will be representative of the state; but if you

15 really want to explore an issue like low income, what you

16 are going to do is you are going oversample those people in

17 proportion to the number of people who are in the state.

18 So let's say that you had 10% of the people in your state

19 are low income and you really need to ask questions about

20 low-income people, what you you will do is you will ensure

21 that you collect 20% of your respondents in the survey as

22 low income, okay? I mean obviously the population -- the

23 sample has 20%. The population has 10. They have been

24 oversampled, but they are not representative of the -- I

25 mean you just can't take the numbers unweighted and say

1 that they are representative of the state. They over

2 represent low income. You have to apply what are called

3 sample to population weights to the frequency analysis to

4 make it representative of the state.

5   MR. BECK: And that's your understanding of what

6 the staff oversample did?

7   MR. PERRY: Yes, that is my understanding.

8   COMMISSIONER DEASON: Excuse me --

9   MR. POUCHER: Earl Poucher, Public Counsel, let

10 me ask another question.

11   COMMISSIONER DEASON: Just a second, Earl.

12   MR. POUCHER: Oh, go ahead.

13   COMMISSIONER DEASON: I'm just wondering about

14 the court reporter. We've been going for two hours without

15 a break. Do you --

16   (NEGATIVE INDICATIONS)

17   COMMISSIONER DEASON: You're okay?

18   (COURT REPORTER NODDED HEAD AFFIRMATIVELY)

19   COMMISSIONER DEASON: Okay. I'm sorry, Earl. Go

20 ahead.

21   MR. POUCHER: I hate charts that don't add up to

22 a hundred percent.

23   MR. PERRY: Sorry, sir, I can't hear you.

24   MR. POUCHER: I hate to look at charts that don't

25 add up to a hundred percent, but is the 5% part of that

1 group that said they are most likely to disconnect?

2   MR. PERRY: Yes, sir, that's right.

3   MR. POUCHER: That adds -- It looks to me like

4 that adds up to about eight and a half percent.

5   MR. PERRY: And if you remember, sir, what I said

6 earlier, on the previous chart when we -- You have the

7 eight and a half percent on disconnect from the previous

8 slide.

9   MR. POUCHER: Well, that said very likely. You

10 said about --

11   MR. PERRY: Likely, very likely.

12   MR. POUCHER: -- 7% was most likely.

13   MR. PERRY: That was -- and then the follow-up

14 question of those who were not on Lifeline what percentage

15 would disconnect, and that's the 5% number.

16   MR. POUCHER: But you don't know whether the five

17 and a half percent is on Lifeline or not because they

18 didn't tell you?

19   MR. PERRY: That's correct, sir.

20   MR. POUCHER: Okay.

21   MR. DUNKEL: What were the choices they give

22 likely, is it most likely, very likely? List all those

23 choices they were given.

24   MR. PERRY: The choices ranged from not at all

25 likely, and then four I happen to remember in particular is

1 very like -- or is likely, and five is very likely.

2   MR. DUNKEL: So there were five choices?

3   MR. PERRY: Yes, there were, a five-point scale.

4   MR. PERRY: Okay. Since I compared -- I mean one

5 of the reality checks you want to do is to do your best to

6 compare your results against what the -- you know, what you

7 observed in the marketplace or at least close, data from

8 similar or related sources. And what we had to do in order

9 to -- as I explained earlier, what we had to do in order to

10 be able to analyze what people would do at different price

11 points. Most of the respondents received -- well, all of

12 the respondents received only a single price point, and I

13 need to be able to extrapolate what their behavior is going

14 to be at higher or lower rates based on what they did; and

15 the way that you do this -- again, it's written up in

16 Carson and Mitchell if you are interested in it; there is a

17 whole body of literature on this -- is that you estimate a

18 probability model; and the particular approach I took was

19 to estimate a linear probability model. And that allows me

20 then to tell what people would do in the aggregate.

21   And using the data, what I have here is you can

22 see that at $2, what our linear probability predicts is

23 that a $2 increase would result in a six tenths of a

24 percent decrease in penetration. And when you work all the

25 way up to a $20 increase, it predicts a 6% decrease in

1   penetration, if the only thing you did was to raise basic
2   local service, if there is no offsetting rate rebalancing
3   effects.

4   And what I've done here also is compare it to the
5   Hausman, Tardiff and Belinfante model and what its
6   predictions would be. And sort of my interpretation of
7   this is that these numbers represent pretty much an upper
8   bound on the number of disconnects if only local rates
9   change, okay? It represents what I would characterize as a
10   worst-case scenario, and I mean the question is why is it a
11   worst-case scenario? Well, part of the reason it's a
12   worst-case scenario is that we are only assuming that the
13   local basic service rate goes up. That is the only thing
14   that is going to move towards cost, that there are no
15   offsetting rate rebalancing designs.

16   The other part of it is, is in -- The other
17   part of this is that in the survey it's not very easy in
18   these types of designs to look at what people would do
19   under other circumstances, I mean if we have offsetting
20   rate changes, you have to go to a much more complex and
21   expensive design, and it takes a lot longer to field it.
22   So that's what we are capturing here, is just this monadic
23   design. Most people under these circumstances tend to
24   believe monadic designs tend to overstate price
25   responsiveness.

1   MR. BECK: Mr. Perry.

2   MR. PERRY: Yes.

3   MR. BECK: I'm sorry. In the previous charts I

4   thought when you added up the various income categories

5   that you came up with disconnects over 8%.

6   MR. PERRY: That is 8% for -- yes, that's

7   correct, 8% for that.

8   MR. BECK: Could you reconcile that with the 6%

9   number on $20 there?

10   MR. PERRY: Yes, I can. What the model is

11   predicting, what this is, as you know, is that a general

12   linear -- a general model like this is going to predict

13   what people, if I --   What we do is we really end up

14   estimating a model which says people are going to connect

15   or disconnect and what the probability of doing that is,

16   okay? And so in any regression-based model, you are going

17   to have a model's predictions, and it may be different from

18   the frequency tabulations that you see there, okay?

19   MR. BECK: So the model says 6% but the results

20   of the survey were over 8%.

21   MR. PERRY: The result -- the responses from the

22   survey, which have an error associated with them as well,

23   okay, predict 8%. As a matter of fact, I mean because it's

24   not a census you do not have a precise estimate of what the

25   number of disconnects are. There is an uncertainty

1 associated with that.

2   MS. SIMMONS: Mr. Perry.

3   MR. PERRY: Yes.

4   MS. SIMMONS: Sally Simmons again from staff. I

5 guess it's fair to say that you have five different price

6 points up there, so you have slightly over a hundred

7 customers in each one of those?

8   MR. PERRY: No, no, this is -- Sorry, let me

9 move away from you here. We're getting some feedback.

10   What this is doing is it is predicting what the

11 responses of all of the customers would be.

12   MR. PERRY: Now we only tested -- we tested 5,

13 10, 15 and 20, so there is a hundred in each of the price

14 points, okay?

15   MS. SIMMONS: Okay. I guess my --

16   MR. PERRY: And I extrapolated behavior to two,

17 okay?

18   MS. SIMMONS: All right. Okay.

19   MR. PERRY: And we predicting on the basis of a

20 sample of 514 what their behavior would be if they were

21 asked those questions.

22   MS. SIMMONS: Okay. My only concern is that

23 you're saying you actually asked four price points?

24   MR. PERRY: Right.

25   MS. SIMMONS: All right. So you've got something

1 like that 125 that were asked each of those five price

2 point questions roughly?

3   MR. PERRY: That's correct.

4   MS. SIMMONS: And the only comment I wanted to

5 make is that there could be significant error around those

6 numbers.

7   MR. PERRY: I don't know if I'd characterize it

8 as significant. There is error. I mean there is -- you

9 know, there are precision -- There is a confidence

10 interval, if you like, let's talk about it that way.

11   MS. SIMMONS: Right. I Just wanted to point out

12 to the commissioners --

13   MR. PERRY: Sure.

14   MS. SIMMONS: -- there might not be adequate

15 number of customers sampled in each one of those

16 categories.

17   MR. PERRY: Right, and I mean this prediction

18 might or might not include that 8%, you know, that we

19 looked at, right.

20   MR. McNULTY: One other question from staff is,

21 I'm just wondering about the disconnect choice in terms of

22 primacy and recency effects of how it was presented to the

23 respondents. Was that structured such that it was offered

24 as an option in a different pattern than for, across

25 respondents?

1   MR. PERRY: No. No, I mean basically what

2 happens is that the list -- we ask them, would you take --

3 For example, do you think that in response to rate increase

4 you would change your ECS calling? And then how likely

5 would you be to do that? And then you get down: Do you

6 think you would discontinue phone service? And how

7 likely or very -- you know, on a scale of one to five how

8 would you rate likelihood of that action, and those things

9 are all randomized.

10   MR. McNULTY: So they were randomized?

11   MR. PERRY: No, the order is randomized so that

12 -- you know, sometimes ECS is presented first, sometimes

13 something else is presented first because, otherwise, you

14 have item order bias.

15   MR. McNULTY: Okay.

16   MR. PERRY: Okay.

17   MR. REGAN: Mr. Perry, Tom Regan.

18   MR. PERRY: Sorry. Thank you for raising your.

19   MR. REGAN: I wanted to focus on the $2 increase

20 number that you have for GTE, that negative .6%. If I

21 projected that out, that percentage of that estimate out to

22 the number of residential lines in Florida of, let's say,

23 GTE, Sprint, BellSouth, there is probably about six million

24 or so lines. If you projected that estimate out, you would

25 come up with about 36 thousand respondents that say they

1   would disconnect at a $2 increase.

2   MR. PERRY: Subject to check. You know, I mean

3   your number sounds about right. I suspect that --

4   MR. REGAN: But you would multiply the negative

5   .6% by the six million, and that's how you woul d--

6   MR. PERRY: No, no, you multiply the .95 -- the

7   current level of penetration by the point -- by the 9.6.

8   MR. REGAN: Okay.

9   MR. PERRY: So I mean it's not going to be quite

10   .6; it will be something less than that.

11   MR. REGAN: Okay.

12   MR. PERRY: Okay, to get the actual percentage

13   decrease in lines. That's where I thought the disconnect

14   might be.

15   MR. DUNKEL: One additional question: Did I hear

16   you say that the number you show for the $2 is nothing you

17   got from the survey, that's something you calculated in

18   some manner?

19   MR. PERRY: Yeah, what I said is, is that in

20   order to move -- since we, you know, since we asked each

21   individual only a single price question rather than the

22   iterative bid design, okay, what you -- what we ended up

23   doing is I have to extrapolate what they would have done at

24   $2 because I never asked the question.

25   MR. DUNKEL: So on the survey results itself, the

1 $5 is the lowest price change you asked?

2   MR. PERRY: That's correct, sir.

3   MR. DUNKEL: And so on the actual survey, the

4 lowest percent drop you got was the one and a half percent

5 would drop?

6   MR. PERRY: Well, these do not -- of course, this

7 is a regression based model, so they would not necessarily

8 correspond directly to the frequency tabulations, okay?

9   MR. DUNKEL: You lost me there. Are you saying

10 that at $5 question, it's not true one and a half percent

11 of the people said they were most likely to drop?

12   MR. PERRY: No, that's not what this says.

13   MR. DUNKEL: That's not what this says?

14   MR. PERRY: No, that's not what this says. What

15 this says is it predicts that if all 514 people were asked

16 the question, one and a half percent would disconnect.

17   MR. DUNKEL: All right. Of those that were asked

18 the $5 question --

19   MR. PERRY: I don't know that answer.

20   MR. DUNKEL: -- what percent said they were

21 likely to --

22   MR. PERRY: I don't have that answer right at the

23 moment.

24   MR. DUNKEL: I see. But it may be different than

25 the one and a half percent.

1   MR. PERRY: It could be. It could be the same.
2 I don't know.

3   Yes, sir.

4   MR. FRANK: Mr. Perry, one of your three major
5 conclusions in all of the work you have done is that the
6 PSC survey is biased because of strategic behavior, and my
7 question earlier was did you do an independent survey that
8 would objectively measure and prove that conclusion? Isn't
9 it true --   The only way I know that you can do that would
10 be to issue the same -- administer the same survey under
11 separate or generic cover and compare the results;
12 otherwise, you are comparing apples to oranges. Did you
13 actually do an independent survey that objectively,
14 empirically shows strategic behavior bias? And if you did
15 not, can you point to anything in the work you did that
16 will show that?

17   MR. PERRY: Well, let me answer that question. I
18 think so, because the thing is that the strategic behavior
19 comes in not only because of the preamble. You know, it's
20 stating who the sponsor of the survey was as well. But
21 strategic behavior is also observed in starting point bias,
22 so you would have to modify both of those, okay?

23   MR. FRANK: Did you do that?

24   MR. PERRY: We did that, and we did one more
25 step. You're right. I mean we to -- we expanded the list

1 of options.

2 MR. FRANK: Did you do it and holding the other

3 components constant?

4 MR. PERRY: No, I did not hold just -- I did not

5 use their limited three choices because I thought the

6 fourth choice option was unrealistic.

7 MR. FRANK: How can you conclude that strategic

8 behavior biased the PSC survey?

9 MR. PERRY: Well, I think we can conclude -- if I

10 want to go back to the slide which shows the bit about

11 descending, for example, let's do -- There are two things:

12 One is do you think the 23% -- is there any evidence out

13 there that says 23% of the people are going to disconnect

14 at $2? And most reasonable people would conclude, based on

15 the evidence we have seen, that that is just far too large

16 a number, a $2 increase, okay? So I think that is evidence

17 of strategic behavior right there.

18 The fact that if you compared the extremes of

19 those two numbers, the 23 at $2, a 12% at $20 disconnect,

20 suggests that a number of people were registering protest

21 votes at $2. I mean, otherwise, how do you explain the

22 difference between 20 and 12, okay? Or 23 and 12%

23 difference.

24 And then if you move in a direction of

25 descending, how do you explain people increase disconnects

1   at lower rates when they said they said they wouldn't

2   disconnect at 20? They were either confused, or it's

3   strategic behavior. So I think there is evidence there.

4   There is evidence that if you drop from the preamble and

5   add a little more realism that, you know, you get what look

6   to me to be more reasonable results.

7   MR. FRANK: But you didn't do anything where you

8   held the other components constant?

9   MR. PERRY: No, I didn't do a test retest.

10   MR. FRANK: Okay. Thank you.

11   MR. PERRY: But, yeah.

12   MR. DUNKEL: Is there another possibility, is

13 that the data as you analyzed it is not what's actually on

14 the staff disk? Is that another possibility?

15   MR. PERRY: No, I don't think -- Well, I hope

16 that's not that.

17   MR. DUNKEL: Take a look at it.

18   MR. PERRY: I think that we have the same data.

19 What I said is that you have to be very careful about

20 analyzing the data because there are multiple -- you

21 basically have to analyze six different questions to get

22 the response to one price increase for the ascending group,

23 okay?

24   MR. DUNKEL: I understand that. That's what we

25 did, and at 2%, 7% said they would drop off.

```
 1          MR. PERRY:  Well, we have a difference in opinion
 2   on that.  I mean we can --
 3          MR. DUNKEL:  It should be a difference in math.
 4          MR. PERRY:  I would be more than willing to
 5   compare codes and iron these things out.
 6          MS. SIMMONS:  Mr. Perry.
 7          MR. PERRY:  Yes.
 8          MS. SIMMONS:  I just want to confirm one thing.
 9          MR. PERRY:  Yes.
10          MS. SIMMONS:  On the GTE-Florida lineup there,
11   what you did then, you took the -- you had sample
12   information for 5, 10, 15 and 20.  You've generated a model
13   from that.
14          MR. PERRY:  That's correct.
15          MS. SIMMONS:  And those values that are listed up
16   there in terms of those percents are the model estimates.
17          MR. PERRY:  Predictions, that's correct.
18          MS. SIMMONS:  Okay.  I just want everyone aware
19   that those are not --  that is not a synopsis of what the
20   respondents said, say, at $10.
21          MR. PERRY:  That's correct.
22          MS. SIMMONS:  That is what the model which you
23   constructed from those data points estimates, correct?
24          MR. PERRY:  You're right, that's correct.
25          MR. DUNKEL:  Let me follow up on that.  Back on
```

1   the staff data you gave, is what -- Did you also make a
2   model there and what you are giving is not the survey
3   result summaries, but it's something that comes out of a
4   model you created?

5   MR. PERRY: No, I haven't had a chance to do that
6   yet.

7   MR. DUNKEL: Okay.

8   MR. PERRY: But I do intend to, yeah.

9   Okay. Again, one of the, another sort of
10 calibration point on this is to take a look at what
11 actually happened in California, which is a place that I
12 was involved on the other -- We are going to have a
13 couple of people talking about this. I was involved
14 representing GTE on the IRD side in California's
15 implementation rate design; and what happened there is that
16 in GTE's service territory rates went from 9.75 to 17.25,
17 and it was a flash cut on 1, January, 1995.

18   So pre IRD, which is pre January of '95,
19 penetration rates were at 94.8%, and a year later they were
20 at 95%. And looking at them now they still seem to be
21 hovering around 95%. That says that -- I would hate to
22 say that that means a .2 percent increase there. That is
23 statistically insignificant, but you can see that there has
24 been no drop off or no real change in penetration rates
25 with almost a doubling of the rate; and so this is my other

1 real-world check on my model.

2   MR. DUNKEL: What is the course of the

3 penetration rates?

4   MR. PERRY: The source of the penetration rates

5 is the CPS data.

6   MR. DUNKEL: Is the what?

7   MR. PERRY: CPS.

8   MR. DUNKEL: Census?

9   MR. PERRY: Current Population Survey.

10   MR. DUNKEL: Not the FCC penetration data?

11   MR. PERRY: No, we are using the most recent

12 estimates from the Current Population Survey, which the FCC

13 uses in the aggregate at the year's end. This was March

14 '97 -- or March '98.

15   MR. DUNKEL: I'm sorry, it's March of?

16   MR. PERRY: I think it's March '97 or '98, I

17 can't remember at the moment. March '97, I believe, and

18 March '96.

19   MR. DUNKEL: A survey based on one month?

20   MR. PERRY: What they do is -- well, the --   I

21 mean if you want to take a look at the -- This gives you

22 the most current --   I guess whether you look at it at the

23 end of the year or whether you look at it at one month, I

24 mean what the tradeoff is whether you want to aggregate

25 everything or whether you want to get a current snapshot;

1   so one year later, this is what is --

2   MR. DUNKEL: Are these the annual averages, or

3   are these the average over, as determined in only one

4   month?

5   MR. PERRY: At the moment I'm not sure. I think

6   it's the annual, but I'm not -- I couldn't say with

7   absolute confidence.

8   MR. DUNKEL: Could you provide us the supporting

9   data for this?

10   MR. PERRY: I certainly can.

11   MR. DUNKEL: Thank you.

12   MS. MARSH: Don, can I cut in just a second? I

13 think a lot of people are wanting a break. I don't know if

14 you want one or not. This has gone for pretty long. Does

15 anybody want one.

16   MR. PERRY: Yeah. Right. I think that would be

17 great.

18   MS. MARSH: Okay.

19   MR. PERRY: I thought I was almost at the end,

20 but --

21   MS. MARSH: It's hard to tell because there are a

22 lot of questions.

23   MR. PERRY: Sure.

24   MS. MARSH: So if everybody wants to take one,

25 we'll do 15 minutes.

1   (BRIEF RECESS TAKEN)

2   MS. MARSH: Re are ready to start back.

3   MR. PERRY: Okay.   Let me hopefully wrap this up

4   today, so what we'll do is I'm going to talk -- the two

5   remaining topics I want to talk about are the analysis, or

6   what the survey shows on the importance and use of various

7   types of telephone calls, and also some of the analysis

8   we've done on Lifeline awareness and eligibility, so --

9   Back up for a second.   We might as well talk about

10 this.

11   What we did is we looked at -- we asked

12 respondents basically how they were using their phones, and

13 we also asked them how important the various types of use

14 were to them, and we used, again, a five-point scale where

15 one represents not very important, and five represents very

16 important.

17   Okay.   And here is, basically, just a chart which

18 shows the types of calls they made, or the relative

19 importance to these people of making these types of calls;

20 and what you see, for example --   What was surprising, I

21 think a lot of us tend to focus on the idea that emergency

22 calls --   And you have to weight these things by how often

23 they make them, but you would have thought that things like

24 emergency calls, medical calls, would be very, very

25 important, and they are relatively; but a surprising

1 finding was, is that 70% of the people said that -- or
2 rated social calls as very important to them, and I guess,
3 being an economist, that surprised me. So, but I think
4 this is an interesting, just basically interesting finding
5 here. And you can see also the doctor -- calls to the
6 doctor, 46% of the people gave those calls very .mportant
7 to them. But it's real obvious, I guess, that the calls,
8 that the social calls are part of, you know, social
9 networking and keeping in touch, and communication is
10 obviously very important.

11   MR. OCHSHORN: Question, the social calls
12 includes calling family members.

13   MR. PERRY: Exactly.

14   MR. OCHSHORN: Like mom and so on.

15   MR. PERRY: That's right. That whole social
16 network is really more important than I would have thought.
17 You know, it's very, very impressive.

18   MR. OCHSHORN: Well, mothers of Florida will be
19 happy to see these results.

20   MR. PERRY: That's right.

21   Okay. Also, what I want to do now is turn
22 towards Lifeline, the Lifeline program and the eligibility
23 and awareness of folks about Lifeline in general. One of
24 the findings in the California FRC study was, is that a
25 number of people who did not have phone service and who

1 would have been eligible for low-income programs were
2 basically misinformed or unaware of eligibility criteria,
3 and so we wanted to explore that issue here. And even
4 though, you know, a little earlier we talked about we've
5 made progress, it looks like, from using Life -- of having
6 Lifeline and Link-Up program -- Link-Up America programs
7 out there. Penetrations in the under 20K group have
8 increased over time, and -- but obviously they are still
9 lower, and there is still work to do. And so an obvious
10 question is to ask people are they eligible for the program
11 and are they aware they are eligible, and if they are not,
12 you know, what we obviously have to do is work on
13 increasing awareness.

14   So continuing on to the next slide here. What we
15 found out is that in this case we asked people if they were
16 participating in any one or more of the six programs which
17 determine eligibility for Lifeline, and we used the statute
18 to determine what those programs were. And then if they
19 said that they were participating in those programs, then
20 we wanted to know if they were participating -- if they
21 were aware that they were eligible for Lifeline and whether
22 they were participating in the program or not. Back up.
23 We asked them whether they were participating in the
24 Lifeline program, given that they had answered one of these
25 six -- at least one of these six questions with ES. And if

1 they said that they were aware of the program and they

2 were -- or that they were participating, we just stopped

3 there; that is all we needed to know. But if they had said

4 that they weren't participating in the program and they had

5 been eligible, we wanted to explore that. Was it because

6 they were aware of what the criteria were, or they weren't

7 aware of what the criteria were. They were choosing not to

8 participate or they just didn't know they could.

9   And so what these results show is that of the

10 entire population we surveyed, 36% of the population is

11 currently enrolled in one of the six federal or state

12 programs that would qualify them for eligibility. And then

13 if you take a look at just that group, what we see is that

14 11 -- get these things right here -- 11% were eligible and

15 aware, eligible for the program, aware and chose not to

16 participate. Get these, it's the end of the day here, and

17 I'm running down. So 11% were eligible and participating,

18 sorry, you're right. 20% are eligible, aware and didn't

19 participate. And the big number is 69%, is the group of

20 people who are eligible but unaware that they are eligible

21 and are not participating.

22   Sir.

23   MR. BECK: Mr. Perry, is this part of your phone

24 survey results?

25   MR. PERRY: Yes, it is.

1   MR. BECK: So these results exclude those who
2 don't have a phone?

3   MR. PERRY: Yes, your correct.

4   MR. BECK: Wouldn't that in this case be a
5 significant exclusion.

6   MR. PERRY: Well, I guess -- what I'm after here
7 is not a precise estimate. I'm interested in knowing
8 whether people who are eligible for Lifeline programs are
9 aware or not aware of the program, and of those that I can
10 survey is that about 70% aren't aware of the program; and
11 that says that, you know, we should take action to approve
12 awareness. Those who don't have phone service, are they
13 more or less likely to be aware of their eligible? I don't
14 know. Probably less likely, but it still argues for the
15 same policy conclusion.

16   Okay. So my last slide -- I'm sure everybody is
17 happy about that at this point -- is that, is the
18 conclusions -- My conclusions after all of this are that
19 generally what we have seen, based on a number of surveys
20 is that subscribership is generally insensitive to the
21 price of local phone service. Is the current rate
22 affordable in terms of if you just analyze it only on the
23 grounds of penetration? It seems to be currently
24 affordable. And so I mean it represents a lower bound on
25 what affordability is, for sure. Telephone service we see

1 has a high perceived value relative to its cost.

2   And what we find too is that in general, if rates

3 do increase, households are more likely to take actions

4 other than dis, you know, disconnecting the phone. And in

5 terms of the Lifeline program, I think, you know, this

6 demonstrates that there is a need to continue to push

7 awareness, do what we can to push awareness of eligility of

8 Lifeline for enrolling people. That seems to be a big

9 problem in why people who are eligible aren't on the

10 program. And that is not the mitigate the efforts of what

11 has been done because I mean, obviously, that penetration

12 has improved in low incomes, but there is also room for

13 continued improvement.

14   And finally, you know, as I mean as we talk

15 about, this study has focused only on a single price

16 increase, the rate increase of moving the local basic

17 service. And more realistically, you know, it seems that

18 if we are going to take the step of making this arena ready

19 for competition, the idea is to move all prices towards

20 cost, which mean some move up and some move down. And as

21 we have seen from the Hausman, Tardiff and Belinfante

22 study, what that means is that there are some tradeoffs

23 being made, that the effects of rate increases in the local

24 arena can be offset by reductions in toll and access rates.

25   So that concludes any presentation. Oh I'm

1 sorry, I need to make one correction.

2   Earlier there was a question brought up about

3 oversampling on income and Doctor McCarty's response, and

4 with the discussion here, I realized that I had

5 misinterpreted McCarty's, Doctor McCarty's answer.

6   What Doctor McCarty was saying is that the reason

7 that they oversampled low income is because what we observe

8 frequently is that when you do sampling is that you may get

9 a lower response rate from low-income folks than you get

10 from the population in general. So what they did is they

11 oversampled to bring it up to look like the population, so

12 I think your point was correct there.

13   MR. PASCHALL: Ed Paschall, AARP.

14   MR. PERRY: Yes, sir.

15   MR. PASCHALL: I have a question for you here.

16 At one time was THIS survey conducted?

17   MR. PERRY: I'm sorry?

18   MR. PASCHALL: When was this survey conducted?

19   MR. PERRY: This survey was conducted after Labor

20 Day, and roughly -- It started --

21   MR. PASCHALL: After Labor Day?

22   MR. PERRY: Yes, sir.

23   MR. PASCHALL: I see. The question that I'm

24 asking here is you are bringing up a number of points here,

25 and if this survey was conducted after Labor Day, how were

1   MR. PASCHALL: Then how can you give figures that

2   indicate what those people -- or why those people who don't

3   have tell phones, why they don't have them?

4   MR. PERRY: My reference to that, I think, if I'm

5   correct, is that you're referring to the California -- It

6   was my discussion of the California affordability survey,

7   which did survey people who did not have phones.

8   MR. PASCHALL: I see.

9   MR. PERRY: Okay. We didn't do anything like

10   that in Florida.

11   MR. PASCHALL: Well, it was I little bit curious

12   to me because before the survey that you said was biased

13   that was run by the University of Florida --

14   MR. PERRY: It has potential for some bias,

15   that's correct.

16   MR. PASCHALL: -- before that survey was run, all

17   of those questions were presented right here in the Public

18   Service Commission. All of the representatives of all of

19   the companies, as well as myself, were here, sa/ all of

20   those questions. The process was explained to us and

21   everything else, and there was no question.

22   MR. PERRY: I don't think that is quite true,

23   sir. I know that I was involved on the tele -- I was

24   involved on a telephone link-up on that, and I gave

25   specific comments along these lines, sir.

1   MR. PASCHALL: Pardon?

2   MR. PERRY: I mean I gave specific comments along

3   these lines. I suggested a take-it-or-leave-it approach.

4   I expanded -- I also discussed expanding the list of

5   options, and I also discussed using a likelihood scale. As

6   a matter of fact I think I presented -- I mean I'm not sure

7   it was presented here; it was available. There was a

8   mock-up survey which sort of illustrated these ideas which

9   was presented, so I took the opportunity to discuss my

10 concerns with staff at that time.

11   MR. PASCHALL: Was your company also the one that

12 ran the survey that was presented to the legislature

13 earlier in the year?

14   MR. PERRY: I'm not sure what survey you are

15 referring to, so --

16   MR. PASCHALL: Pardon?

17   MR. PERRY: I'm unaware of what survey you are

18 referring to.

19   MR. PASCHALL: Okay. I just wondered. Very nice

20 looking presentation you made there.

21   MR. PERRY: Thank you, sir.

22   MR. DUNKEL: I have one question. Referring back

23 to your California experience, I understand your company

24 had an increase right at the end of '94. Is it correct

25 there were other companies in California also had

1 increases?

2   MR. PERRY: Yes, sir.

3   MR. DUNKEL: Either at that time or within, you

4 know, a few months either way?

5   MR. PERRY: Actually, we were both mandated by

6 the commission.

7   MR. DUNKEL: Okay.

8   MR. PERRY: Both Pac Bell and GTE were mandated

9 by the commission to raise their residential rates.

10   MR. DUNKEL: And were the independents also, even

11 if not at that time within a few months of it?

12   MR. PERRY: I'm less sure about that because the

13 implementation rate design I know was aimed at the major

14 LECs. Mr. Danner could certainly answer those questions

15 better than I can.

16   MR. DUNKEL: All right. And your penetration

17 date is a from the FCC report?

18   MR. PERRY: Yes, sir, it is.

19   MR. DUNKEL: Is the correct, according to the FCC

20 report that California penetration in 1993 was 95.8%?

21   MR. PERRY: I assume subject to check that's

22 correct.

23   MR. DUNKEL: And in '97, it's 94.3%. It's gone

24 down one and a half percent?

25   MR. PERRY: If your numbers are from those

1 tables, that's probably correct; but in the year pre/post,

2 those numbers are as I reported them.

3   MR. DUNKEL: So you are looking at a very

4 short-term effect, not -- You're not saying it doesn't go

5 down over time?

6   MR. PERRY: Well, as a matter of fact, if you

7 go -- Well, if you go one more year out, at the time that

8 we did this the data weren't available; but if you go one

9 more year out beyond that, in ninety -- one year, so it

10 would be '96, '97, and what we see from '98, pentration

11 rates are still stable at 95, which is higher than they

12 were in '94.

13   MR. DUNKEL: Well, in '97 it's 94.3%. Are you

14 saying in '98 it's back up again.

15   MR. PERRY: My memory of 3/98 is it's a little

16 higher than that, like --

17   MR. DUNKEL: Okay. And '98 we don't have annual

18 data yet, do we?

19   MR. PERRY: Right, that's correct.

20   MR. DUNKEL: So the annual data we have from

21 before the increase to the most recent after the increase

22 has gone down one and a half percent in California?

23   MR. PERRY: Within the -- and that's within the

24 bounds of the sampling area, so that says it's a wash.

25   MR. DUNKEL: So you say that doesn't matter. If

1 the --

2   MR. PERRY: No, what I'm saying is, is that there

3 is not a statistically significant change in penetration.

4   MR. DUNKEL: So the penetration as measured has

5 gone down one and a half percent, but we can discount that

6 because --

7   MR. PERRY: Well, you are talking about -- No,

8 no, wait a minute now. We are arguing about more or less

9 whether you want to go from '93 -- We see -- What you're

10 telling me is, if I understand everything correctly, in '93

11 penetration was a little higher than it was in '94; and in

12 '94 is a little lower, slightly lower ninety -- sorry, '95

13 I know is lower than '96 after the IRD. So '93 and '94

14 must have been lower than '95.

15   MR. DUNKEL: Actually not. '94 was two tenths or

16 three tenths of a percent higher than '95.

17   MR. PERRY: Okay. So it's fluctuating a little

18 bit.

19   MR. DUNKEL: Contrary to the information here,

20 you're showing it -- if these two numbers are supposed to

21 be '94 and '95, that is not consistent with the FCC data,

22 even for '94 and '95. They show it going down slightly.

23 You show it going up slightly.

24   MR. PERRY: Yeah, I think this is from the CPS

25 and -- Well, I mean actually I know it's from the CPS.

1 And, you know, I mean the thing is that these are based on
2 samples, okay? So there is a level of precision, which I
3 think in their case is in the neighborhood of around --
4 it's something less than 2%, okay?

5   MR. DUNKEL: So we should disregard --

6   MR. PERRY: So you get variation because of
7 sampling.

8   MR. DUNKEL: So if it's one and a half percent
9 decline in penetration, we should disregard that because --

10   MR. PERRY: What I'm saying is, is that we can't
11 be sure whether it is an actual decline or whether it is a
12 statistical anomaly and there is no change.

13   MR. DUNKEL: Thank you.

14   MR. POUCHER: Earl Poucher. Go ahead,
15 Commissioner.

16   COMMISSIONER CLARK: I've got a question with
17 respect to trying to make a judgment as to Florida's
18 penetration rates being lower because there were people who
19 have vacation homes or have second homes and choose not to
20 have phones in there. Is there any way we can find data on
21 that?

22   MR. PERRY: The problem with -- you know, I mean
23 the problem with getting actual penetration -- I mean we
24 can get estimates of the number of people who are snow
25 birds. I think, if I remember, there used to be a special

1 code for snow bird rates, okay? So you can get an estimate
2 of the number of lines. The problem is getting the
3 denominator right, the number of households, because, you
4 know, we only know people who are connected to the system,
5 not the number of households.

6   COMMISSIONER CLARK: Well, I tihnk --

7   MR. PERRY: But you could get an estimate. I
8 mean you could make some estimates on that I would think.

9   COMMISSIONER CLARK: But they -- is it GTE's
10 experience that they keep their phones, they just go on a
11 different rate?

12   MR. PERRY: The last time I was here about six
13 years ago, there was a separate rate; and what has happened
14 in the intervening years, I'm not sure. Not any more?

15   MS. CASWELL: We can find that out. We were
16 discussing it last night.

17   MR. PERRY: I mean that is how I would think
18 about going and estimating if that rate still exists.

19   COMMISSIONER CLARK: Do you have any explanation
20 why our penetration rate should be lower when our rates are
21 lower?

22   MR. PERRY: No, I mean it reflects -- you know,
23 the thing is that the penetration reflects a number of
24 different things like we talked about -- I think when
25 Commissioner Deason was talking about you might have lower

1 interstate rates or -- you know, and in addition to that it
2 reflects differences in income too. Some states, you know,
3 have higher average income than other states. I come from
4 Seattle. We've got Microsoft and, you know, Seattle has
5 very high rates for houses and has high, correspondingly
6 high income and I expect our penetration rates are
7 correspondingly higher too. So you try to make those
8 adjustments econometrically like Hausman.

9   COMMISSIONER CLARK: Okay.

10   MR. POUCHER: Mr. Perry, Earl Poucher from Public
11 Counsel again. You concluded your white paper with the
12 statement that -- on page 37 -- that the monthly recurring
13 charge is not a primary reason for non-subscribership. You
14 also included data in the report that said that the real
15 price of local telephone service had gone down about 40%;
16 isn't that correct?

17   MR. PERRY: That sounds perhaps correct. You
18 know, I mean I know that the inflation rate has gone up by
19 46%, and we have inflated by two.

20   MR. POUCHER: And you also had in there the fact
21 that subscribership in the low-income categories in the
22 past 10 years had risen substantially.

23   MR. PERRY: Yes, sir.

24   MR. POUCHER: About 10% for the lowest one as
25 remember, something like that.

1   MR. PERRY: I thought it was more in the

2   neighborhood of 45; but, yes, sir.

3   MR. POUCHER: But you don't see any connection

4   with the fact that the real prices going down,

5   subscribership among low income is going up, but you don't

6   think that has any effect on the penetration rate?

7   MR. PERRY: Well, you know, sir, that is not

8   entirely true. I guess, you know, what the Hausman,

9   Tardiff and Belinfante model does is the price variable for

10   basic service is done in real terms, so that is accounted

11   for in that elasticity figure. So I mean I can model the

12   effect of what the decrease in real rates are and what its

13   effect on penetration is. I haven't done that exercise,

14   but it would be possible to do it.

15   MR. POUCHER: But if the penetration rate of

16   those low-income customers rose during the past 10 years

17   due to perceived or real changes in the price, which were

18   reduced, wouldn't that say that if you go forward and

19   increase the price that your penetration would go down?

20   MR. PERRY: Well, I think that -- The question

21   is, you know, if you do an across-the-board increase with

22   no relief for low-income groups, then that -- and that's

23   the only thing you do, is raise the price of basic service,

24   that's a possibility, strong possibility. But the problem

25   is, is that most of -- I mean most economists would say

1 what you would do is you would have a targeted subsidy,

2 that there are groups -- If there are needy groups that

3 require assistance, what you do is you target that group so

4 that what you are doing is they receive a rate which is

5 subsidized, and everybody else receives a rate which is

6 higher, you know, closer to cost; and as a consequence, the

7 size of the universal service fund is smaller than it would

8 be if you are subsidized. Essentially the social costs are

9 smaller rather than subsidizing everybody at the minimum

10 affordable rate.

11   MR. POUCHER: Okay.

12   MR. PERRY: So I mean I would really take the

13 argument to a policy level.

14   MR. POUCHER: You used on page 19 Wyoming as an

15 example to drive home the point that the monthly recurring

16 charge is not the primary barrier, and you say --

17   MR. PERRY: Among other things, I would say the

18 econo -- I mean I would tend to rely more on the Hausman,

19 Tardiff and Belinfante model results.

20   MR. POUCHER: Well, I just have a problem with

21 page 19. Wouldn't you describe Wyoming as a place with

22 really severe weather and severe terrain and extremely low

23 density? Aren't they one of the lowest population density

24 states in union?

25   MR. PERRY: You may be right on density.

1 Weather, boy, the last week I've been here, I'm not so sure
2 I'd agree with that.

3   MR. POUCHER: Well, you haven't spent much time
4 in Wyoming in the wintertime, obviously.

5   MR. PERRY: Actually, I have been there, yes,
6 sir.

7   MR. POUCHER: Wouldn't the terrain and the
8 density of Wyoming where they don't have pay telephones and
9 a convenience store around the corner be a lot different
10 than downtown St. Petersburg where so many pay telephones
11 are located? Wouldn't that cause people to be required to
12 have telephone service whether -- it doesn't matter how
13 much it cost because of the alternatives?

14   MR. PERRY: Well, I think that is a viable
15 hypoethsis, but I think the thing is that -- you know, I
16 mean that is not solely what I'm relying on here. I mean
17 it's just one of --

18   MR. POUCHER: But you did rely on Wyoming?

19   MR. PERRY: It's one of the sources I relied on,
20 yes, sir, among others.

21   MR. POUCHER: Thank you.

22   COMMISSIONER GARCIA: Let me just ask you, and
23 that's just to me, but it occurs to me that the two first
24 conclusions go against each other. If you are using the
25 term "insensitive," are you talking about inelastic?

1   MR. PERRY: Yes, sir.

2   COMMISSIONER GARCIA: Well, if it's inelastic,

3 that conclusion of affordability is almost, to my thinking

4 and you correct me -- I'm not an economist or a

5 statistician, so I'm sure you'll correct me -- but it

6 almost seems to me that if the concept of affordability to

7 a service that's inelastic, of course you are going to have

8 high penetration rates because it's not elastic. Everybody

9 gets water because they need water. Everybody gets

10 electricity because they need water. Everybody gets phone

11 service because they need phone service. It's inelastic,

12 and so the high penetration rate is a given because it's

13 insensitive to price. And so that, followed by your second

14 saying, current rates are affordable based on high

15 penetration almost seems --   Let me simplify it because

16 I'm giving you my thought, and it's a stream and forgive

17 me.

18   MR. PERRY: No, no, that's fine. Please.

19   COMMISSIONER GARCIA: If something is inflexible

20 or inelastic, then clearly it's going to have high

21 penetration, regardless of affordability.

22   MR. PERRY: Well, I think --   Yeah, and the

23 question which you need to --   I really tend to link two

24 and three a little bit together, okay?

25   COMMISSIONER GARCIA: Okay.

1   MR. PERRY: So let's take a look at the evidence.

2 I mean econometrically what we do is we see that demand is

3 inelastic, okay? It's relatively non-price sensitive.

4   COMMISSIONER GARCIA: Right.

5   MR. PERRY: Now as we were discussing earlier,

6 there are lots of reason demand can be inelastic. It may

7 be a small part of your budget. You know, it changes price

8 by two hundred percent even and you don't notice. You

9 know, the price of a cereal box goes up by that. So, you

10 know, you don't respond much because it's not a big part of

11 your household budget.

12   Another reason is, is that it could be an

13 essential service which, you know, is a concern we all

14 have. And then the third part of this is the results from

15 the value of service is that relative to its cost,

16 telephone service is considered to be a high value of

17 service relative to its price, and --

18   COMMISSIONER GARCIA: I understand.

19   MR. PERRY: -- that would make people -- I mean

20 what that also --

21   COMMISSIONER: I understand the value concept.

22 That I do understand, as I perceive value, and I can

23 understand three; but where I have a problem with where you

24 are taking this, and your second point, is that current

25 rates are affordable based on high penetration.

1   MR. PERRY: Oh, I'm sorry, maybe I should have,

2 you know, done a plus sign with three there and wrapped

3 this altogether.

4   COMMISSIONER CLARK: Yeah, I think what he is

5 saying is that you can't conclude that it has --

6   MR. PERRY: That they are affordable simply

7 because of high penetration.

8   COMMISSIONER CLARK: Right.

9   MR. PERRY: Right. And what I'm saying -- I

10 guess what I'm saying is I should have been more careful

11 about the way I worded my slide and say based on -- And I

12 mean I think just a number of --

13   COMMISSIONER GARCIA: Because I mean you could

14 draw a conclusion and, say, well, based on some of the

15 other statistics --

16   MR. PERRY: Sure.

17   COMMISSIONER GARCIA: -- the presenters have

18 given us where in southern states it's much higher; and

19 using your thinking, you could say, where phone rates are

20 higher, penetration is higher. And, you know, or the more

21 expensive a phone is, the higher penetration it will have;

22 and those are obviously not what we would draw from those.

23   MR. PERRY: Right. No, I --

24   COMMISSIONER GARCIA: I mean I think you made a

25 wonderful -- and I want to say this. I don't know if it

1 will please your clients, but I think the fact of its
2 inelasticity is a very important issue for this Commission
3 because -- and I'm glad you addressed it head on, which
4 many of the other presenters have not done I think in such
5 an honest manner. I agree with you. I think it's not
6 inelastic service, it's an essential service. So that
7 said, I just have a problem with this, and I guess you
8 clarified it in saying that perhaps you had to add a little
9 bit more or mix it in with two.

10   MR. PERRY: Well, I think after this I'm going to
11 go correct that slide, okay, to make sure that the point is
12 supported rather than just type penetration, right.

13   Yes, sir.

14   COMMISSIONER JACOBS: Another point that I
15 think -- since we are giving out accolades, I think another
16 point that was made very clear is the last one; and I think
17 it's important to understand that the value, perceived
18 value has a lot to do with the other services that are in
19 the bundle, and so to conclude exclusively that perceived
20 value of local service versus price is high needs to be,
21 that caveat needs to be very strong and I think very direct
22 because -- I think you're exactly right -- it has a lot to
23 do with the other elements in that bundle of goods and what
24 happens to the prices of those. We heard a lot of that in
25 public testimony from customers who make low toll calls.

1   COMMISSIONER GARCIA: Let me ask you another

2   question. This is a little bit more hypothetical, maybe

3   not along the lines of where you have gone, but because I

4   think you have discussed frankly the inelasticiability of

5   local rates, I'm sorry, of local -- of the need for phone

6   service, and I think you addressed that directly, and going

7   back to Commissioner Jacobs' last point. Do you think that

8   if we were as a Commission to issue to the legislature what

9   we thought that should be done, similar to I think Sprint,

10   where they presented a straw man which I'm sure you've

11   looked at to some degree, do you think we should also say

12   to the legislature that any toll access rate reduction

13   should be tied directly to those who are impacted by rate

14   increases of local service? Do you think we should say to

15   the legislature, well, if you are going to do this, I mean

16   if the point is to rebalance rates, then any access rate

17   reduction should correspondingly be addressed to

18   residential users of service?

19   MR. PERRY: I have to admit I'm --

20   COMMISSIONER GARCIA: So that that conclusion

21   will stand. I mean because --

22   MR. PERRY: Right. Yeah, I know I think

23   there's -- you know, it's hard --   I mean I'm obviously

24   not a policy, I'm a techno wonk, you know, so that's my

25   role in life.

1   COMMISSIONER GARCIA: Right. But I think that

2 there is a problem with that when you understand

3 implementation. I think what you said there is true, and

4 it's important.

5   MR. PERRY: Right. Yeah.

6   COMMISSIONER GARCIA; But if we don't hold to

7 that, if we have access reductions that are directed

8 towards business, then your conclusion doesn't work.

9   MR. PERRY: That's right.

10   COMMISSIONER GARCIA: And if I wanted to make

11 that conclusion work, if we were going to do any

12 rebalancing or the legislature -- we're not going to do any

13 rebalancing, but the legislature decides to do some

14 rebalancing, then do you think it would be important to

15 sort of keep it to that group, to segregate it?

16   MR. PERRY: The only problem I have is, you know,

17 I guess from -- thinking about it from a company

18 perspective, I don't know. How would you pass on access

19 rate reductions only to residential customers? I mean

20 could it be done? I don't know. And I think there are

21 other issues, you know, and this is a focus only on the

22 residential side. On the bus. side, I believe rates would

23 likely come down to get nearer to cost, and so what do we

24 do with them? You know, it's a reasonably complex design.

25 I would hate to answer in about 30 seconds that.

1   COMMISSIONER GARCIA: That's fine.

2   MR. PERRY: Okay.

3   MR. DOWDS: When California commission required

4   Pac Bell and GTE-California to change their local rates, am

5   I correct they also mandated toll and access reductions?

6   MR. PERRY: Yes, that's correct, the toll

7   reductions were in the neighborhood of about 30 to 40%.

8   MR. DOWDS: Do you have any order of magnitude of

9   what the before and after access and/or toll rates were for

10 GTE or Pac Bell?

11   MR. PERRY: Other than just what I said, no, not

12 at the moment. You know, we are in the process of

13 analyzing that data today. It will be a while.

14   MS. MARSH: Thank you, Don.

15   The next speaker is Ben Ochshorn, and he is

16 ready. We are just going to take a minute to pin the mike

17 on him and we'll continue.

18   Any time you're ready, Ben.

19   MR. OCHSHORN: I have to confess, I don't know

20 how to operate a VCR, so this is way beyond me. My name is

21 Benjamin Ochshorn. I'm an attorney at Florida Legal

22 Services in our Tallahassee office. We represent

23 low-income people, and we have some very brief comments.

24   What we would like to do is outline what we

25 believe should be in the Commission's report to the

1   legislature, particularly the conclusions, and why we
2   believe these conclusions should be made. I'll try to be
3   cognizant of the limited nature of this report. It's
4   unlike most reports the PSC makes to the legislature where
5   you are given a blank slate. You refer the report to
6   whatever department might write it, and it's pretty much
7   requesting the expertise of the Commission on a particular
8   subject. In this case, the legislature limited how you
9   would get the information, the time you would have to get
10   it, and also what factors you could even consider in making
11   conclusions as to a fair and reasonable rate. So it's more
12   a theoretical study than one that asks for the full range
13   of your expertise.

14   We believe one of your conclusions should be that
15   most of the cost of basic local telecommunications service
16   is within the range of local loop costs or local exchange
17   costs that can be allocated only according to policy. I
18   mean it's not like you have different parts of the
19   equipment of the phone companies and one part of the
20   equipment can provide one service and one the other. For
21   example, if I went out and bought a few switches, I
22   couldn't offer call waiting. I'd have to have the use of
23   the loop and so on with the other services. That, I think,
24   is one of the really fundamental conclusions you can draw,
25   is that how you set -- How you determine how to apportion

1   that cost is very much a policy issue. It's not a factual
2   one.

3   The other point to make there, and this just
4   reiterates what you've heard before, is that because of
5   this, you really can't say that one service subsidizes the
6   other. The only way you can say that is if you first make
7   the policy decision to allocate costs in a certain way of
8   these loop costs, and then from there compare that with
9   rates. We believe that these loop costs are within what
10 the legislature described as the joint and common costs and
11 the Commission should identify these costs as such.

12   Currently, these costs are evaluated according to
13 a value of service methodology. The legislature used this
14 term. It's a term of art. It refers to the way that phone
15 rates have been set, not just in Florida, but across the
16 country, and when the legislature uses such a term, we
17 believe that's the information that the legislature wants.
18 It wants to know, if you use the value of service
19 methodology, what would be your conclusions as to fair and
20 reasonable rates. And what that would show, we believe, is
21 pretty much the rates we have now because, if you followed
22 their methodology, the information that you've been getting
23 so far doesn't seem to indicate that costs have changed all
24 that much over the last few years.

25   You've not made determinations as to costs. You

1 haven't gone through the process where that's done, and so
2 you can't represent to the legislature that -- anything in
3 specific as far as what these costs are, but the
4 information we've gotten so far is that -- does not suggest
5 that there has an a substantial change in the cost of
6 providing telecommunications services since whenever it was
7 that these rates were made.

8   The last point relating to cost is that the way
9 that rates have been set in Florida, not just for
10 telecommunication services but for all services, has been
11 based on actual costs. It hasn't been based on these
12 computer models of, you know, a hypothetical
13 telecommunications company that is operating efficiently or
14 whatever; and we think it's very much a policy issue for
15 rates to be set on something other than actual costs. We
16 are not necessarily opposing it, but it's a different way
17 of doing it.

18   We think that these models are very appropriate
19 for the uses that you've used them for so far, such as
20 determining how much one company should pay another either
21 for components of a network or for the high cost universal
22 service fund. In fact, the costs that are included there
23 might be a realistic way of measuring how much, say,
24 BellSouth should pay these small companies. But it's a
25 very different question where you are talking about

1　people's actual rates, and in those cases, we believe that
2　people's -- if you are going to use costs in determining
3　somebody's rates, they need to be the actual cost of the
4　service. We think that the currently policy that we have
5　used in this state and everywhere else in setting rates is
6　a reasonable one.

7　　　We, as you may expect, believe that the
8　allocation that the local exchange companies have proposed
9　of these local loop costs is an unreasonable one. The
10　reasons that we think that they are are the following: In
11　the first place, they are contrary to the way that these
12　costs have been allocated, both within this state and
13　throughout the bulk of the country. We think that's a
14　factor in determining whether proposed allocation is
15　reasonable.

16　　　Second, we do believe that it would substantially
17　impede universal service. The numbers that you got back
18　from your survey of how many people said they would
19　disconnect for rate increases, those are huge numbers, and
20　the Commission has to respond to those numbers we believe.

21　　　I can tell you that before I knew about those
22　numbers I prepared in the comments an explanation of why
23　among low-income customers there would be a substantial
24　drop off in subscribership due to raises in the phone rates
25　because that has been my experience as a legal services

1 attorney who has spoken with hundreds of people about their
2 income and their expenses and all that. The reason for
3 that is that if you're poor, you don't have savings.
4 You're lucky if you're able to even meet your current
5 expenses. Because of that, you have to apportion how you
6 or what bills you are going to pay and what services you
7 are going to pay based on a very different standard than if
8 you have more money. A lot of expenses, like rent,
9 utilities, food, clothing for children, things like that,
10 you really are inalterable to a large extent. You have to
11 pay those. And there are some ways to pay lower costs
12 through subsidies or whatever, but those are parts of the
13 household budget that most people feel you really can't
14 affect.

15   Phone service, on the other hand, is a one -- is
16 a service that is used intermittently. When it's most
17 important, like in an emergency or when you have to contact
18 your family, it probably is the most important service that
19 you pay for, and it's the most basic one; but because the
20 time at which it's that case is intermittent, the way that
21 a household would look at the expense in my experience is
22 right now we have to meet these other expenses, and phone
23 service is not ranked up there in terms of immediacy at
24 this point. It's part of the nature of phone service.
25   But the effect on households of not having

1   telephone service in this society are devastating, and the
2   effects of not having phone service become even more
3   devastating over time. We've created pretty much our whole
4   modern society in this country based on having access to a
5   phone. It's the main reason move away from their
6   neighborhoods and parents and so on is they feel they'll be
7   able to contact with them through the telephone. Before
8   there was telephone service, people lived in local
9   neighborhoods, they stayed with their families there, they
10   took jobs there. And Mr. Perry's survey showed the most
11   important reason people feel that they have local phone
12   service is for what they term "social, and that refers to
13   what I'm talking about. So especially in emergencies and
14   also in other circumstances, it would really have a really
15   bad effect on a lot of people on limited income if they
16   couldn't have phone service. And we think the effect of
17   raising these rates will mean that a lot of people --

18   MS. MARSH: We need to move you.

19   MR. OCHSHORN: Another reason we think that the
20   proposed allocation is unreasonable is that what it would
21   do would be an unfair monopolistic practice because the
22   companies would raise rates on people, mainly non low
23   income, for whom the elasticity probably is of a
24   monopolistic nature and in order to get more revenue from
25   these people and to ward off their competitors by offering

1 lowering rates elsewhere, therefore, even if you use a

2 revenue neutrality measure, still have the effect of

3 preventing competition in the telecommunications market.

4   Also, the measured right now has very little

5 public support. I've reviewed the responses that the

6 Commission has received to the little blurb that went out

7 in people's bills or from the Commission itself on

8 responding to the hearings here, and you as commissioners

9 have been to the public hearings as well. And at least in

10 what I've seen, there has been almost no public support for

11 this proposal to reallocate rates, and public perception is

12 also an important factor in the way the Commission

13 determines whether something is fair and reasonable.

14   We don't think that the rebalancing is necessary

15 for any competitive reasons. As we indicated yesterday,

16 the law already provides that if any of these phone

17 companies face any substantial change in circumstances that

18 they believe justifies higher basic rates, they are able to

19 petition the Commission to request that. We think that's a

20 sufficient remedy in case there are any competitive

21 pressures in the future that might require rates to be

22 readjusted.

23   We don't think there is any pressures now. We

24 think if you look at rates in other states you'll see that

25 they are set in pretty much the same way Florida's are.

1   The local southeastern states have higher residential

2   rates, but as we indicate in our comment, and your staff

3   can follow up with research for the sources we cite, they

4   also seem to have much higher business rates and much

5   higher rural populations and smaller populations than

6   Florida.

7   We have cost advantages in this state that lead

8   to our phone rates being lower than the phone rates of the

9   surrounding states, and unless for a very good reason, this

10   state should not give up its cost advantages to increase

11   people's rates. It would be a different situation if in

12   many other states rates were being calculated on a

13   different way, and in Florida the basic rates were much

14   lower than the rates elsewhere and we were providing a much

15   bigger amount of the local costs to other services in other

16   states, and that would put Florida at a competitive

17   disadvantage for encouraging competition in our local

18   markets, with companies would go to more favorable states.

19   But the information I have been able to obtain indicates

20   that rates are about the same in other states as they are

21   here after you take into accounts what you can infer as far

22   as differences in costs. The Commission, obviously, has

23   not been in a position where it can compare the costs here

24   to costs in other states, and it's important to indicate

25   that to the legislature because one of the items that the

1 legislature wants information on is a comparison of how
2 rates are set in Florida with how rates are set in other
3 states.

4   To respond just very briefly to some of the other
5 arguments that you've heard in this proceeding so far. One
6 seems to us to have been that many customers can afford
7 higher phone rates than they are paying now and that that
8 should be a reason to raise rates. We don't believe that's
9 a reason, and I think most Floridians share the same view
10 that we do.

11   Another conclusion that I think comes from the
12 information you've received so far is that the current
13 structure that is in place for rate caps for a few more
14 years and then just a gradual increase in rates after that
15 appears at this point to be necessary for the continuation
16 of universal service to the extent it is today. In the
17 previous presentation you've heard a lot of different
18 numbers bandied about as far as surveys of what people said
19 they would do if there was a rate increase, and even the
20 lowest of those numbers, I believe it was 7% who said they
21 would disconnect for a $2 increase, is still a very, very,
22 large number. And it's fine and good to take into
23 consideration econometric studies from other states from
24 other times and everything like, but in Florida we need to
25 respond first and foremost to what our telephone customers

1 are telling us about the effect that rate increases would
2 have.

3   That pretty much concludes my remarks. I can
4 tell you that in our final comment we'll try to get
5 information related to some of the other assertions that
6 have been made here so you'll have that, and we'll spell
7 out in more detail what we believe your conclusions should
8 be in your report. I don't think that the record supports
9 a specific recommendation that rates should go up by a
10 certain amount or anything like that, and in light of the
11 procedure that has been set up here, we don't think that
12 that type of recommendation would be supportable by the
13 information that you have. Thank you.

14   COMMISSIONER GARCIA: Mr. Ochshorn, should we
15 recommend a process to the legislature? If we go through
16 this and we find that perhaps there is some subsidy there
17 to the basic service and we make that determination, do you
18 think we should recommend a process to the legislature on
19 how to rebalance rates? And to follow up that question,
20 should the process -- if we recommend a process, do you
21 think the process should be handled here, or do you think
22 the process -- or the legislature should just go ahead and
23 do it?

24   MR. OCHSHORN: To answer the second part first, I
25 think the process should definitely be here at the

1 Commission. Issues like this are not addressed well at the

2 legislature. That's why the legislature created the

3 Commission to address these issues.

4   To address your first question, the phone

5 companies are arguing basically for a very substantial

6 change in public policy, and I think that the Commission

7 needs to report on that and describe how it's a change in

8 policy and the information that you've gotten as far as

9 what the effects are. If the legislature chooses to change

10 policies we have as far as allocation of local loop costs

11 and commitment to universal service versus commitment to

12 other things, those are we think policy issues for the

13 legislature to make. And we think it would be appropriate

14 for the Commission to indicate that if the legislature

15 chose to make those policy changes, some process about how

16 that could occur. I would add that this report is

17 probably, at least in our view, the most appropriate place

18 for the Commission to make those kinds of process

19 recommendations. Thank you.

20   MS. MARSH: Thank you, Ben.

21   That concludes the comments for the day. Does

22 anyone have anything to add or anything else that needs to

23 be addressed at the moment?

24   (NO RESPONSE)

25   MS. MARSH: We'll conclude then, and we'll see

1   you all next Thursday at 8:30.

2   (WHEREUPON, THE HEARING WAS CONCLUDED)

3

4

5   *   *   *   *

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1   CERTIFICATE

2

STATE OF FLORIDA   )
3   COUNTY OF LEON   )

4

5   I, NANCY S. METZKE, Certified Shorthand Reporter
and Registered Professional Reporter, certify that I was
6   authorized to and did stenographically report the foregoing
proceedings and that the transcript is a true and complete
7   record of my stenographic notes.

8   DATED this 10th day of October, 1998.

9

10   _____
                               NANCY S. METZKE, CCR, RPR

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

$

$10 273:19 281:3,14,17 288:9, 12,20,23 293:11 298:1 304:9,9, 15,18 306:12 354:20
$11.81 294:13
$12 240:11 277:15 296:12
$15 306:12
$18 289:1
$2 266:2 268:5,9 272:8,17,25 273:8,9,15 275:13 277:16 279: 19 291:8 292:9,12,20 297:13, 17 301:16 305:9 307:25 308:3 309:4,25 310:5,9,13,21 311:7 321:5 333:12 343:22,23 348:19 349:1,16,24 352:14,16,19,21 392:21
$20 240:15 268:6,7 272:20,21, 24 273:7,10,15 280:19,25 281: 3,12 284:14 286:11 288:9,17 291:8,12 293:11 297:24 305:2, 7 309:19,19 320:16 322:12,14 332:10 333:2,18,19,24 334:5 343:25 345:9 352:19
$3 302:23 320:8
$30 320:2,3,6,7 322:25 323:12, 20,24
$4 321:7,8
$5 266:3,23 284:14 295:19 305:10 308:1,6 310:14 350:1, 10,18
$80 323:24
$9 296:11

&

& 234:22

'

'93 370:9,10,13
'94 367:24 369:12 370:11,12, 13,15,21,22
'95 305:19 355:18 370:12,14, 16,21,22
'96 356:18 369:10 370:13
'97 241:3 356:14,16,17 368:23 369:10,13
'98 356:14,16 369:10,14,17

*

* 395:5,5,5,5

/

/ 234:24

0

01 244:25 248:13 256:15 260:6
02 312:15
026 247:12 312:17

1

1 355:17
1.7% 286:10 305:1
10 242:6 272:21 278:9 304:16 309:4 322:11 331:24 340:23 346:13 354:12 373:22 374:16
10% 252:19,20 278:9 321:4 332:4 340:18 373:24
10K 338:17
11 361:14
11% 331:24 334:19,20 361:14, 17
11.81 302:21 310:5
12 240:14 245:3 273:22 296:14 298:15 352:22
12% 239:8 268:8 273:10,16 332:4 352:19,22
123 334:21
125 347:1
14 240:14 296:14,15
148 234:18
15 240:15 278:9 318:17 320:20

346:13 354:12 357:25
15% 332:5
16 331:22
16% 335:25 336:3
16.4% 331:19
16.6% 334:25
17% 331:22
17.25 355:16
19 253:25 300:21 375:14,21
19% 310:8
1980s 266:5,8
1985 244:15 290:17
1987 238:8 239:5
1990s 254:1 300:21
1993 243:14 300:21 368:20
1995 244:2 289:2 355:17
1997 239:5
1998 234:14
1st 289:2

2

2 234:14 269:6 272:21 273:7 291:12,14 299:7,19 332:10 355:22
2% 239:4 264:19 284:15 287:6 299:5 301:16 314:22 353:25 371:4
20 245:4 272:21 273:15,21 281:17 288:14 291:14 292:20 296:15 304:16 321:4 336:7 338:17 346:13 352:22 353:2 354:12
20% 320:20 321:7 340:21,23 361:18
20K 237:22 238:8 360:7
21 310:10,11
23 352:19,22
23% 268:5 273:8 275:13 292:2 352:12,13
24th 336:19
25% 261:22
250 237:2
27 240:4
28 240:4 244:10
29 268:2

3

3.50 239:23,25 240:1 302:7,11, 24 311:18,20
3/£8 369:15
30 320:8,9,9 331:19 382:25 383:7
30% 331:20
3093 234:23
30K 338:17
31 291:7,13
33% 287:3
34% 291:7,13
35% 286:14 287:8,13
36 348:25
36% 361:10
37 373:12
39 338:15
39% 262:5

4

4 245:3 300:7
4% 284:13 338:16
4.7% 332:25 333:13,18 334:6, 13
40 245:4
40% 276:10 286:6 310:12 373: 15 383:7
42% 239:6
44% 277:19
45 374:2
45% 268:9
46% 359:6 373:19

5

5 272:21 300:7 309:4 346:12 354:12

5% 253:12 337:11,11 341:25 342:15
50 325:9
50% 320:5,6
514 317:17 330:24 334:21 336: 22,25 337:1 339:14 346:20 350:15
52% 307:25
54% 268:6

6

6 300:7 349:10
6% 343:25 345:8,19 348:20 349:5
60% 276:10 325:10
63% 308:1,7
67 329:2
67% 325:4,5
69% 361:19

7

7 245:7,20
7% 292:9,12 310:20 311:7 342: 12 353:25 392:20
70% 329:2 359:1 362:10
73% 324:25 325:1
74 297:18 308:7 310:8
74% 277:18,22 297:16 301:23 307:25 309:24,25

8

8% 345:5,6,7,20,23 347:18
80 327:11
80% 238:8
80s 326:25
84% 238:8
850)697-8314 234:24
850)697-8715 234:24
86 277:21 296:13
86.1% 240:13
87 240:14 297:17,18
88 327:12
89 238:9
8:30 234:15 395:1

9

9 240:11 289:1 298:15
9% 273:19
9.6 349:7
9.75 355:16
90% 326:23 327:2
91 240:15
92 238:9
93.3 237:16
94 301:24
94.1 237:17
94.3% 368:23 369:13
94.8% 355:19
95 299:7,13 310:7 349:6 369: 11
95% 277:15 299:2 355:20,21
95.8% 368:20
96 308:6
96% 277:21 296:13 308:4
97% 240:13,16 308:6
98% 240:14

A

a.m 234:15
AARP 268:22 364:13
ability 262:18
able 241:21,22,23 244:8 293: 24 294:4 304:7 330:22 343:10, 13 365:1 388:4 389:7 390:18 391:19
about 235:21 236:21 237:6,7, 16 240:4,24 243:15 245:7,11, 18,20 247:22 253:9,9 256:4 257:2 259:8 261:25 264:9,19 265:1 268:3 269:20 270:16 271:6 274:15 275:5 276:16 277:5,15,15,21,21 278:8 279:3,

---

17 283:13,17,22 284:5,12,12 286:14 287:3,8 289:9 290:4,8, 11 291:21 293:14 294:10 296:5 297:8,17 300:12 303:7,23 304: 6 306:21 308:3,5 309:9 310:8 312:10,13 314:17,22 315:11 316:20,21,24 317:23 318:3,20 319:5,9,20 320:2 321:7 322:9, 24 324:8,13 325:14 328:20 330:19 332:3 333:25 337:24 338:17,21 340:19 341:13 342: 4,10 347:10,21 348:23,25 349: 3 352:10 353:19 355:13 358:5, 9 359:23 360:4 362:10,17 363: 15 364:2 368:12 370:7,8 372: 12,18,24,25 373:15,24 376:25 379:11 382:17,25 383:7 386:25 387:21 388:1 389:13 391:20 392:18 393:1 394:15
above 277:13 326:13
absolute 238:20,21 252:16 357:7
absolutely 274:1
accept 316:2
access 248:5 250:23 258:14 363:24 381:12,16 382:7,18 383:5,9 389:4
accolades 380:15
according 314:12,21 368:19 384:17 385:12
account 249:15 285:6 303:1
accounted 257:10 302:19 374:10
accounts 325:15 391:21
accuracy 337:11
accurate 301:22
acknowledge 278:1
across 240:9,12,21 241:20,24 255:15 290:19,20 295:24 297:2 302:23 303:16 305:22,22,25 306:11 307:20 313:10,11 318: 17 321:9 325:6 332:8,10,25 333:8 347:24 385:15
across-the-board 374:21
action 262:15,16,17 270:9 319:18 331:7,14,20 332:24 335:15,21,23 338:10,13 348:8 362:11
actions 276:3 280:20 318:9,11 319:13 332:21,23 335:8 363:3
actual 284:20 286:7 300:6,11 305:10 349:12 350:3 371:11,23 386:11,15 387:1,3
actually 235:24 245:13 249:6 262:5,14 263:10 265:18,20 270:12,13 271:22 275:10 276: 3,18 277:1 284:25 286:25 287: 14 299:19 300:20 301:19 305:5 307:20 314:13 316:21 321:6 322:18 327:1 336:23 346:23 351:13 353:13 355:11 368:5 370:15,25 376:5
add 258:1 302:23 310:19,25 311:4 321:15 333:24 341:21,25 353:5 380:8 394:16,22
added 318:8 345:4
addition 263:4 266:16 273:13 275:15 282:17 317:6 373:1
additional 266:25 273:19 303: 12 349:15
address 242:2 256:11 303:6 394:3,4
addressed 263:4 380:3 381:6, 17 394:1,23
adds 319:16 342:3,4
adequate 347:14
adjust 270:1,2 286:8 301:17 331:24
adjusted 238:18,23
adjustments 278:5,21 335:2 373:8
administer 351:10
admit 381:19

advantage 331:22
advantages 391:7,10
Advocates 261:10
affect 245:14 309:18 388:14
affected 302:16
affects 243:4
AFFIRMATIVELY 341:18
afford 261:22 265:15 392:6
affordability 235:17,20,22
236:21 260:17 264:10 300:18
317:6 362:25 366:6 377:3,6,21
affordable 315:6 316:6 362:
22,24 375:10 377:14 378:25
379:6
after 274:5,6 300:16 336:18
338:9 362:6,18 364:19,21,25
369:21 370:13 380:10 383:9
391:21 392:14
afterwards 270:13
again 235:1 244:23 254:14
263:14 280:25 303:11 318:21
321:15 334:23 343:15 346:4
355:9 358:14 369:14 373:11
against 343:6 376:24
age 243:3
agency 270:24
aggregate 293:14 343:20 356:
13,24
aggregating 333:8
ago 372:13
agree 274:21 309:12 315:16
316:4 376:2 380:5
agreeing 316:10
ahead 264:20 268:14 270:25
314:24 341:12 371:14 393:22
ahold 237:9 260:21
aimed 368:13
Alexendar 241:6
alignment 301:18
allocate 385:7
allocated 384:17 387:12
allocation 387:8,14 389:20
394:10
allow 317:3
allowed 335:7
allowing 335:15
allows 331:10,10 332:21 343:
19
almost 250:1 252:6 304:9 355:
25 357:19 377:3,6,15 390:10
along 238:3 267:11 317:19
325:13 366:25 367:2 381:3
already 292:6 390:16
alternatives 376:13
although 277:25 297:11
altogether 379:3
always 276:12,12,13 279:25
304:6 327:20
amazingly 260:25
America 238:10 360:6
American 243:14 306:24
among 374:5 375:17 376:20
387:23
amount 249:6 254:17,21 331:
18 391:15 393:10
amounts 279:18 340:12
analyses 282:20
analysis 241:18 255:19 264:2
272:4 278:21 282:18 286:3
290:7,7,8 292:8 295:17 300:19
301:15 303:3 314:11,21 332:
12,15 334:1 336:20 341:3 358:
5,7
analyze 272:6 282:24 343:10
353:21 362:22
analyzed 353:13
analyzing 282:15 353:20 383:
13
and/or 383:9
annual 357:2,6 369:17,20
annually 237:22
anomaly 371:12
Another 253:2 262:20 265:22

270:14 283:23 290:23 302:3
306:13 307:19 309:9 317:11
318:7 325:14,19 341:10 353:
12,14 355:9 378:12 380:14,15
381:1 386:20 389:19 392:11
answer 265:13,14 290:8 313:
23 322:14 350:19,22 351:17
364:5 368:14 382:25 393:24
answered 282:3 313:20 360:
24
answering 287:17
anticipated 316:19
anybody 302:15 357:15
anyone 394:22
anything 248:16 304:2 309:24
334:8 336:14 351:15 353:7
366:9 386:2 393:10 394:22,22
anyway 250:11 255:21 264:7
271:13 272:16
anywhere 333:1
apart 284:11
apparently 263:11 282:20
283:8 310:7 326:15
appeal 281:24
appear 328:12
appears 392:15
appendix 290:18
apples 296:5 297:9 351:12
apply 299:25 314:8 341:2
applying 315:14
apportion 384:25 388:5
appreciate 241:13 336:18
approach 265:22,24,24 267:9,
19 283:18,21 330:23 332:11,17
343:18 367:3
appropriate 386:18 394:13,17
approve 362:11
approximately 239:4,6,8 247:
11 261:21 289:1 291:7
area 238:12 259:9 263:3 264:
6,16 277:14 294:13 309:20
369:24
areas 236:11 264:13
aren't 330:9 362:10 363:9 375:
23
arena 363:18,24
argue 308:11
argues 362:14
arguing 322:9 370:8 394:5
argument 375:13
arguments 392:5
around 235:21 236:7,25 277:4
278:2 283:25 301:24 318:16
320:20 335:20 340:1 347:5
355:21 365:8,14 371:3 376:9
art 385:14
ascending 274:17 277:13 279:
13 280:7 286:13 291:1 310:15
353:22
ask 262:14 266:22,24 279:19,
19,21 281:5,13 286:18 290:11,
23 295:21 302:3 304:17,25
306:8 318:5,10 319:13 322:22
325:11 331:16 340:19 341:10
348:2 360:10 376:22 381:1
asked 269:23 270:3 272:21
274:15 276:7 279:15 280:6,7,
10,23,24 281:8,12 294:18 316:
19 318:9 319:23 322:23 324:
14,17 332:24 333:5 339:2,2
346:21,23 347:1 349:20,24
350:1,15,17 358:11,13 360:15,
23
asking 262:15 265:1 321:24
364:24
asks 329:8 384:12
assertions 393:5
assessing 240:23 317:5
assistance 339:1,1 375:3
associated 266:13,14 345:22
346:1
Association 243:15 306:24
assume 253:20 281:2 282:4

303:15,16 368:21
assuming 333:22 344:12
assumption 251:14 253:24
259:13 314:24
asterisks 334:11
attempted 242:2
attention 249:18 253:6,14
attorney 285:17 383:21 388:1
attributable 238:9
audience 235:8
automatically 289:20
available 243:20 367:7 369:8
average 237:15,17,23 286:13
312:2 313:4,8,8,9,13,15 314:7,
8 315:3,4,17,18,22,23 316:15
320:17,23 321:1,3,5,8,9,18
329:15 357:3 373:3
averaged 291:2
averages 291:5 321:11 357:2
avoid 271:14
aware 263:9 306:13 317:15
354:18 360:11,21 361:1,6,7,15,
15,18 362:9,9,10,13
awareness 262:21 263:9 317:
16 358:8 359:23 360:13 362:12
363:7,7
away 325:18 346:9 389:5

B

back 245:23 283:24 285:11
290:5,6 299:9 308:20 311:11
313:19 320:13 322:23 332:19
352:10 354:25 358:2,9 360:22
367:22 369:14 381:7 387:17
background 317:4
bad 389:15
baffled 274:1
bailiwick 255:21
balance 297:16
band 240:10
bandied 392:18
bands 240:10 242:12
barely 285:13
bargain 309:21 326:14
barrier 375:16
bars 340:1
based 242:25 246:4 259:17
274:25 282:17 284:15,19,20,21
287:5 288:7 300:5,15 301:10
312:2 333:12 339:21 343:14
350:7 352:14 356:19 362:19
371:1 377:14 378:25 379:11,14
386:11,11 388:7 389:4
basic 234:7 238:25 239:21
242:4,7,14 243:23 244:17 245:
5,5 246:5,7 248:22 249:16 250:
2,24 251:2,8 252:5 256:14 257:
8,9,13,21 258:2,11 259:10 260:
5,14 262:12 275:4 277:14 285:
5,6 291:16 301:7 302:10,13
312:25 313:21 315:8,10,12
316:25 323:15,17,17 324:1
327:21 344:1,13 363:16 374:
10,23 384:15 388:19 390:18
391:13 393:17
basically 242:6 243:13 249:22
259:22,25 261:16 265:7 267:5
283:25 284:7 285:21 286:6
287:22 293:13 317:6 319:21
322:8 324:14 326:7 329:7 335:
25 348:1 353:21 358:12,17
359:4 360:2 394:5
basis 240:22 346:19
bear 235:19
became 266:5
because 236:22 240:4 244:7
247:8 248:8 249:25 251:10,19
252:12 253:7 255:24 257:23
261:4 262:6 263:8 269:5,8 271:
1,23 272:6,7 282:24 290:3 293:
13,14 294:1 295:10 296:6 301:
21 305:18 321:23 323:25 327:9

337:7,20,25 339:13 342:17
345:23 348:13 349:24 351:6,
18,19 352:5 353:20 357:21
361:5 363:11 364:7 366:12
368:12 370:6 371:6,9,18 372:3
376:13 377:8,9,10,11,12,15
378:10 379:7,13 380:3,22 381:
3,21 385:4,21 387:25 388:5,19
389:21 391:25
BECK 253:18,20 254:2,11,15,
21 255:1,12 274:7,9,12,15,22
292:1,4 318:12 329:5,10 340:3,
5,11 341:5 345:1,3,8,19 361:23
362:1,4
become 263:9 389:2
BEFORE 234:2 236:3 243:14
251:5 257:19 269:21 275:5
281:4 290:2 366:12,16 369:21
383:9 385:4 387:21 389:7
began 290:17
begin 236:8 264:8
beginning 236:7 244:15 365:
11
begins 290:17
behalf 235:13 268:25
behavior 264:4 265:10,16 266:
16 267:7,16 269:7 270:17 271:
5,6,14,22 273:4 279:18,25 281:
25 284:2,16 286:7 291:21 316:
22 317:23 319:17 331:2 343:13
346:16,20 351:6,14,18,21 352:
8,17 353:3
believe 239:25 258:8 261:11
282:18 290:24 301:22 310:2
344:24 356:17 382:22 383:25
384:2,14 385:9,17,20 387:1,7,
16,20 390:18 392:8,20 393:7
believed 245:6
Belinfante 243:13,17 254:5
256:11 259:21 284:4,6,11,18
296:24 297:7 300:10,19 302:20
305:8 306:20,20 309:8 312:19
344:5 363:21 374:9 375:19
Belinfante's 241:6
Bell 261:3,13 368:8 383:4,10
BellSouth 235:15 348:23 386:
24
below 255:9 295:18 310:14
Ben 246:11 307:3 383:15,18
394:20
benchmark 302:22 310:1
benefit 254:23 255:6,7
Benjamin 383:21
best 271:15 340:7 343:5
better 238:2 244:1 308:13 319:
17 368:15
Betty 234:17
between 236:5 237:2 240:13,
14,15 244:6 245:3 254:12,18
256:13,15 257:11 260:8 261:2,
9 270:11 274:16,23 276:17
278:1,4,9 285:16,17 286:7 297:
1 300:6 301:16 305:23 310:15
319:18 3:9 2,6 352:22
beyond :43:6 334:8 369:9
383:20
bias 266:10,11,18 267:7,16
272:25 273:4 283:1 291:1,2
293:10 316:22 319:5 330:22
331:1 348:14 351:14,21 366:14
biased 269:11 351:6 352:8
366:12
biases 235:23 274:18
bid 281:9 349:22
bidding 265:23,24 266:17,19
267:9
bids 266:13,14
big 268:25 297:18 361:19 363:
8 378:10
bigger 391:15
bild 303:3
bill 242:22,25 248:23 249:11,
12,19 261:25 262:7,12,19 292

confidence 347:9 357:7
confirm 333:4 354:8
confused 328:1,2 353:2
confusion 281:24 327:10,20
connect 345:14
connected 372:4
connection 374:3
consequence 266:18 317:24 375:6
consider 236:19 302:9,11 336:2 384:10
considerable 240:21
considerably 243:22
consideration 392:23
considerations 248:1
considered 378:16
consistent 370:21
constant 238:22 303:15 352:3 353:8
constitutes 253:4,12
constructed 354:23
consultant 274:12
consumers 249:14
contact 238:2 365:3 388:17 389:7
contacted 317:19 365:14
continuation 392:15
continue 266:4 275:20 277:18 296:7 304:5 363:6 383:17
continued 238:12 363:13
continuing 360:14
Contrary 370:19 387:11
contrast 239:5 248:19 261:11 273:9 318:2
contributed 237:2
contribution 244:6
control 241:22,23 262:2,7,18, 19
convenience 376:9
coordinating 237:25
copy 307:6
corner 376:9
Corporation 237:6 260:18 261:9
correct 241:5 246:6,9,14 247:1 250:7 252:3 258:15 263:12, 20,23 277:25 279:12 280:9,12 285:1,19 290:10,21 291:9,15 295:13 301:25 302:8 310:19 320:18,21,25 322:7 326:5,18, 19 330:7 333:7 335:3,4 336:5 340:9,10 342:19 345:7 347:3 350:2 354:14,17,21,23,24 362:3 364:12 366:5,15 367:24 368:19,22 369:1,19 373:16,17 377:4,5 380:11 383:5,6
correction 364:1
correctly 244:24 272:11 370:10
correlation 286:7,9,25 287:1 300:6 301:15,15 319:18
correlations 270:11 276:9
correspond 350:8
correspondingly 373:5,7 381:17
cost 248:2,4 251:3 253:7 255:9,10 258:23,25 259:1,7 261:2 262:1,6 324:17 325:2,22 326:2, 13 329:16,18,19 344:14 363:1, 20 375:6 376:13 378:15 382:23 384:15 385:1 386:5,8,21 387:3 391:7,10
costs 251:1 375:8 384:16,17 385:7,8,9,10,11,12,23,25 386: 3,11,15,22 387:2,9,12 388:11 391:15,22,23,24 394:10
couldn't 357:6 384:22 389:16
Counsel 285:9,15 334:23 341:9 373:11
counterintuitive 292:23 293:21
country 240:9,22 263:8 302:17 385:16 387:13 389:4

couple 282:16 355:13
course 255:16 259:16 350:6 356:2 377:7
court 235:8 341:14,18
cover 351:11
covered 237:12
CPS 244:15 284:17 356:5,7 370:24,25
created 355:4 389:3 394:2
criteria 263:1 317:15 360:2 361:6,7
cross 242:17 245:21 247:8 256:2,9 290:13,14,16 295:8 305:21 312:12,23 313:3 315:15
curious 303:23 366:11
current 237:18 241:2 243:19, 20 269:25 277:21 284:23 294:25 299:13 349:7 356:9,12,22, 25 362:21 377:14 378:24 388:4 392:12
currently 237:16 240:11 277:13,15 299:1 361:11 362:23 385:12 387:4
custom 239:22 322:20
customer 281:24 289:17,19 314:5,6 315:7,9 316:5 327:10 334:13
customers 250:22 255:13 256:20 258:9,12,19 259:6,12 284:22 285:23 286:19 287:14 313:5,10,22 314:22 328:1,2,5 330:24 334:10 346:7,11 347:15 374:16 380:25 382:19 387:23 392:6,25
cut 289:4 309:11 355:17 357:12

D

dab 260:11
Danner 303:5 304:20 368:14
data 236:1,12 240:25 241:2 243:19,21 244:14,15 269:5,13 272:4,6,9 275:1,1 277:5,6 278:17,21 287:6 288:1,10,13 290:5, 7,15 291:6 292:8,11,17,22 293:1 294:11 295:13 300:1,2 302:24 304:18 305:4,10,19,22 308:19 320:19 336:18 343:7,21 353:13,18,20 354:23 355:1 356:5,10 357:9 369:8,18,20 370:21 371:20 373:14 383:13
database 282:24 288:18 289:6
DATE 234:14 368:17
David 268:21
day 289:3 314:19 336:19 361:16 364:20,21,25 394:21
deal 276:22 308:1 311:4 323:10
dealing 270:20
DEASON 238:15,17,20 239:14,17,23 245:8,11 256:1,4,7 278:23,25 279:4,6 280:1,4,10, 13,15,21 281:11,16,21 284:19, 24 285:2 290:23 291:5,10 292:4 300:15 302:3,6,9,25 303:4 308:20,23 309:12,17 324:3,8 325:11,23 326:3,6,9,12 329:19 333:11,15,19 334:2,5 341:8,11, 13,17,19 372:25
decade 238:6
decide 271:4
decided 279:16 316:25
decides 382:13
decision 242:23 385:7
decline 371:9,11
decrease 248:17 251:14 253:22 254:22 255:15 284:8,13,15 299:20 313:25 343:24,25 349:13 374:12
decreased 254:12
decreases 293:6 313:21 315:13

decreasing 284:9
defined 324:1
definitely 393:25
definition 252:15 323:14,19 327:9,21 328:3
degree 381:11
demand 236:16 242:3,6,14 245:2,18 249:22,23 252:15 253:11 291:17,18 378:2,6
demanded 252:18
demographic 243:7
demographics 340:6
demonstrates 363:6
denominator 322:10 372:3
density 375:23,23,25 376:8
department 384:6
depend 251:1 287:18
depending 249:7 303:17 307:25
depends 250:5 251:24 287:18, 25 288:1 313:7 321:11
deposition 274:9
derived 300:8,9,10
descend 282:4
descending 274:17 278:13,25 279:14 280:4,7,11 286:14 288:15 291:1 292:21 297:22 310:16 352:11,25
describe 275:19,23 323:5 375:21 394:7
described 290:18 385:10
description 275:20
design 248:14 261:8,13 344:21,23 349:22 355:15 368:13 382:24
designs 344:15,18,24
despite 315:12
detail 393:7
determinant 243:4 261:20 262:18
determination 261:20 393:17
determinations 385:25
determine 296:5 301:3 338:24 360:17,18 384:25
determined 357:3
determines 390:13
determining 262:13 386:20 387:2,14
devastating 389:1,3
developed 266:20
dialing 317:19
didn't 253:14 256:24 265:19 273:20 281:4,8 295:4 322:19 327:23 342:18 353:7,9 361:8, 18 366:9
difference 244:6 257:11 274:16 276:17 278:1,4,9 285:17 286:16 287:3 296:24 297:19 310:15 329:3 352:22,23 354:1,3
differences 236:5 241:24,24, 25 285:15 288:23 296:25 297:19,23 373:2 391:22
different 236:10 240:10 241:19,22 244:20 268:4 269:13 271:9,19,21 288:11 290:20 293:23 297:1 308:2 311:23,25 330:20 332:13 343:10 345:17 346:5 347:24 350:24 353:21 372:11,24 376:9 384:18 386:16,25 388:7 391:11,13 392:17
differently 283:9 338:15
difficult 237:8
digit 317:19
Direct 330:5 380:21
directed 382:7
direction 352:24
directly 257:25 350:8 381:6,13
dis 314:13 363:4
disadvantage 391:17
disagree 309:22
disagreed 291:3
disagreement 274:23 292:5

disclose 270:25 271:5,12,13 317:25
disclosed 269:9
disconnect 268:6,8,9 273:9, 10,16,20,21,22 275:13 279:16, 23 280:22 281:5,8,12,14,17,17 286:19 287:6,9,14 298:1 332:7, 10 333:1,13 335:2 338:11,14, 16,20,21 342:1,7,15 345:15 347:21 349:1,13 350:16 352:13,19 353:2 387:19 392:21
disconnected 273:18 279:21 280:25 281:7 300:16
disconnecting 279:24 363:4
disconnection 282:6
disconnects 243:4 286:8 344:8 345:5,25 352:25
discontinue 269:25 348:6
discord 294:11
discount 370:5
discounts 331:22
discuss 283:10 292:14,15 294:8 367:9
discussed 258:4 260:18 311:10 357:4,5 381:4
discussing 235:16 372:16 378:5
discussion 236:9 282:14 364:4 366:6
disk 292:11 311:1,7 353:14
dispersion 337:5,8,20
disregard 371:5,9
distance 245:6,12 246:1,2,3 249:17 253:22 314:16,23 315:1 324:9,10,11 325:5 328:16 332:3
distinguish 329:5
distinguishable 237:19
distribution 320:12 335:22
divide 312:6 322:9
divided 279:10 334:21
Division 261:10
Doctor 270:22 274:25 290:6 294:2 306:20 359:5,6 364:3,5,6
documented 331:2
Does 239:14,17,23 245:13 281:9 288:6 289:17 295:12 303:14,16 305:25 311:17 315:14 318:13 323:12,20 324:3 327:6 328:12 334:12 335:6 357:14 374:9 386:4 394:21
doesn't 239:19 253:7 257:25 277:23 278:10 279:5,6 281:23 291:10,11 293:8,12 308:8,8 315:13 337:25 369:4,25 376:12 382:8 385:23
doing 235:6 244:4 250:11 254:8 263:11 264:11 270:7,23 271:3 283:20 333:22 334:8 336:19 345:15 346:10 349:23 375:4 386:17
dollar 240:5
dollars 237:3 238:22,23 261:2,2
Don 235:12,14 295:10 308:10 357:12 383:14
done 236:17 238:1 243:14 244:7 255:19 260:17 261:7 267:3 272:4,11 282:18 309:6 314:11 337:9 338:15 339:18 344:4 349:23 351:5 358:8 363:11 374:10,13 379:2 380:4 381:9 382:20 386:1
doubling 355:25
doubt 320:22
DOWDS 383:3,8
down 238:2 249:17 254:6,7 255:17 268:8 272:16,24 277:19 282:6,6 291:18 293:8,11,18 295:15,18 310:14 325:9 337:12 338:18 339:23 348:5 361:17 363:20 368:24 369:5,22 370:5, 22 373:15 374:4,19 382:23

386:9 391:13,16 392:2,24
Florida's 290:4 371:17 390:25
Floridians 270:19 392:9
fluctuate 246:4
fluctuating 370:17
fly 250:11
focus 249:15 271:17 338:9
348:19 358:21 382:21
focused 363:15
focusing 243:18 247:23 318:6
folks 260:21 267:2 275:13
276:1 278:18 338:10,12 359:23
364:9
follow 298:2 304:4 354:25
391:3 393:19
follow-up 331:11 332:24 335:
22 342:13
followed 304:12 377:13 385:
21
following 251:18 305:1 387:10
food 388:9
force 270:9
forced 248:9 269:23 270:8
271:23
forcing 319:11
forecasting 259:24
foremost 392:25
forget 281:3
forgive 252:1 377:16
form 303:14,21
former 245:16
forward 374:18
found 242:13,16 243:4 261:18
263:13 266:9,17 270:6 360:15
four 236:10 273:25 284:12,13
324:19,23 337:24 342:25 346:
23
fourth 352:6
frame 304:14
framed 318:5
FRANK 268:21,21,24 269:2,
15,18 273:23,25 274:3 351:4,
23 352:2,7 353:7,10
frankly 381:4
FRC 359:24
free 309:15
frequencies 335:14
frequency 284:9 332:12 333:9
335:22 341:3 345:18 350:8
frequently 364:8
Friday 234:14
front 260:3
full 241:11 246:24 384:12
fund 375:7 386:22
fundamental 384:24
funded 261:3,4 271:8
funds 255:14
future 390:21

G

gain 267:1
gamut 246:24
GARCIA 245:23,25 246:7 247:
18 248:7,24 251:5,8,16,18,23,
25 252:9,12,21 253:17 257:4,
19,22 322:16 334:10,16 376:22
377:2,19,25 378:4,18 379:13,
17,24 381:1,20 382:1,6,10 383:
1 393:14
gas 329:8
gave 285:23 331:4 355:1 359:
6 366:24 367:2
general 239:1 248:2 250:6
317:15 318:4,6 320:12 337:23
345:11,12 359:23 363:2 364:10
general's 285:17
generally 235:25 237:14 242:3
245:1,2 247:22 264:6 272:14
275:25 276:1 289:14 293:3
294:24 325:6 362:19,20
generated 283:2 354:12
generic 351:11

gets 257:24 270:8 377:9,9,10
getting 249:25 250:4 276:21
292:10 330:14 346:9 371:23
372:2 385:22
give 237:13 244:25 265:25
266:24 291:24 318:24 330:24
333:9 342:21 366:1 391:10
given 267:5 268:4 269:24 272:
23 273:8 279:11 303:19 336:16
337:5 342:23 360:24 377:12
379:18 384:5
gives 240:22 243:25 292:11
337:22 356:21
giving 355:2 377:16 380:15
glad 380:3
goal 317:11
goals 317:5
goes 243:11 258:17 287:20
290:18 291:17,18 293:18 301:1
327:5 338:18 344:13 378:9
Good 235:14 264:12,14 270:
11 276:6 293:9 304:15 324:19,
22 325:3 326:3 391:9 392:22
goods 276:8,11 380:23
got 257:2 268:8 281:6,6,8 282:
14 283:4 301:4 302:13 308:23,
24 309:20,20 323:20 334:19
336:18 346:25 349:17 350:4
365:8 371:16 373:4 387:17
gotten 386:4 394:8
gradual 392:14
graph 239:2 320:9,13 326:22
327:2
great 294:9 307:5 326:14
greater 250:25 297:6 316:14
greatest 263:22
greens 270:2
grounds 362:23
group 237:22 238:9 261:24
262:5 272:8,19 273:14 274:17
277:13 278:13 279:10 280:4
294:12 310:16,16 338:17,19,20
342:1 353:22 360:7 361:13,19
375:3 382:15
groups 237:21,24 238:5,7
272:18 308:1 374:22 375:2,2
grown 239:7,8
growth 239:1
GTE 235:15 239:3 261:4,12
274:9 348:20,23 355:14 368:8
383:10
GTE's 294:12 355:16 372:9
GTE-California 383:4
GTE-Florida 317:18 354:10
guess 246:21 250:15 255:12
258:22 261:1 275:4 278:8 293:
2 296:4 298:4 313:6,24 318:19
327:8 336:13 346:5,15 356:22
359:2,7 362:6 374:8 379:10
380:7 382:17
guys 283:11

H

half 240:5 253:5 261:2 272:23
279:10,10,14 291:7,13 332:7,8,
20 342:4,7,17 350:4,10,16,25
368:24 369:22 370:5 371:8
hand 388:15
handle 311:24
handled 283:4 393:21
happen 248:16 250:18 253:5
264:21 267:22 301:19 342:25
happened 238:4 264:18 273:
19 279:9 280:17,23 284:25
285:2 304:23 305:7 332:23
338:22 355:11,15 372:13
happening 249:11 250:21
264:2
happens 266:22 286:8,25 291:
22 319:3 348:2 380:24
happier 330:9
happy 287:15 330:16 359:19

362:17
harass 338:7
hard 250:16 260:20,20 357:21
381:23
hate 341:21,24 355:21 382:25
Hausman 243:13,17 244:3,7,
13 247:16 254:4 256:11 257:10
259:21 284:4,5,11,17 296:23
297:7 300:10,19 302:20 305:8
309:7 312:18 344:5 363:21
373:8 374:8 375:18
having 246:3 267:14 271:17
274:25 281:19 302:23 318:8
327:24 339:2 360:5 388:25
389:2,4
Hawaii 308:3,23 309:1
HBO 332:3
head 334:19 341:18 380:3
hear 235:9 285:13 308:12 341:
23 349:15
heard 256:8 304:11 320:19
380:24 385:4 392:5,17
HEARING 395:2
hearings 390:8,9
heavy 266:12
held 353:8
Hello 282:11
help 246:12 270:18 315:13
helps 319:16
here 235:6,15 238:1,2 240:7,7
241:14 242:21 245:22 249:4
250:14 253:24 256:15,24 257:
3,6,8,17,24 259:19 261:21 262:
10 264:18,23,23 268:25 272:5
273:3,14,25 275:20 278:8,15
282:15 285:22 287:25 295:16,
18 296:6 297:2,13,22 298:19
300:14 301:14 302:21 303:9
304:21 307:2 311:20 317:12
319:9 322:14 324:20,25 325:9
327:1 328:11 332:7,12 334:19
336:11,13,14,15 337:8,21 338:
11 339:13 340:3 343:21 344:4,
22 346:9 358:17 359:5 360:3,
14 361:14,16 362:6 364:4,15,
24,24 365:1 366:17,19 367:7
370:19 372:12 376:1,16 390:8
391:21,23 393:6,11,21,25
Heres 296:10
Hi 282:12
high 261:25 262:1,7 263:5
266:14,14 298:16 325:22 326:
10 330:1,4 363:1 373:5,5,6
377:8,12,14,20 378:16,25 379:
7 380:20 386:21
high/low 295:24
higher 240:13 249:13 296:18
308:6 328:13,14 329:11,14
330:8,15 343:14 369:11,16
370:11,16 373:3,7 375:6 379:
18,20,20,21 390:18 391:1,4,5
392:7
highest 325:7 326:10 328:8,
12,21,23 329:1
highly 263:6 325:25
historical 284:22 287:6
historically 243:25 284:20
history 243:11
hold 268:15,18 322:21 352:4
382:6
holding 352:2
home 245:15 375:15
homes 317:17 371:19,19
honest 380:5
hope 271:20 353:15
hopefully 236:6 319:17 358:3
hours 341:14
house 243:3
household 247:2 378:11 388:
13,21
households 301:2 318:12,17
363:3 372:3,5 388:25
houses 373:5

hovering 355:21
how 236:4 237:3 239:10 245:
18,19 260:22 265:7,12 267:20
270:19 276:8 270:16 286:2
287:25 299:19 301:12,17 302:
16 304:16 309:18 311:24 313:7
314:12 317:13,14 318:10,13
319:13,24 321:11 322:3,24
324:15,15 327:17 329:5 331:11
333:15 336:23 338:9 347:22
348:4,6,7 349:5 352:7,21,25
358:12,13,22 364:25 366:1
372:17 376:12 382:18 383:20
384:8,25,25,25 386:20,23 387:
18 388:5 392:1,2 393:19 394:7,
15
HTB 284:19 285:18 288:6 290:
11 295:13,19 298:18,24 300:12
301:11,22 302:25 303:12 306:
15 313:17
huge 285:17 286:15 310:22
387:19
hundred 237:3 244:16 301:2
318:17,20 335:17 337:24 341:
22,25 346:6,13 378:8
hundreds 388:1
hypoethsis 376:15
hypothesis 316:7,12,25
hypothetical 381:2 386:12

I

I'd 236:8,8,15,19 237:10 241:
13 264:8 281:2 288:12 303:4
338:4 347:7 376:2 384:22
ID 322:21
idea 242:21,22 264:12 272:25
279:22 293:9 312:23 358:21
363:19
ideas 367:8
identified 254:9 324:5
identifies 331:9
identify 269:4,15 385:11
ignorance 252:1
illogical 275:6
illustrated 367:8
imagine 237:8
immediacy 388:23
immigrant 263:6
impact 312:25
impacted 381:13
impede 387:17
implementation 355:15 368:
13 382:3
implication 247:21 248:6
implications 247:15,16
implicitly 303:15,16
importance 317:10 358:6,19
important 261:19 262:12,13,
18 287:13 290:3 358:13,15,16,
25 359:2,6,10,16 380:2,17 382:
4,14 388:17,18 389:11 390:12
391:24
impressive 359:17
imprimatur 269:12
improved 238:5 363:12
improvement 238:11,13 363:
13
inalterable 388:10
include 239:15,17 296:23 302:
7 323:12,21 324:4 347:18
included 289:5 303:3 304:1
322:25 373:14 386:22
includes 304:8 320:4 323:8,22
359:12
including 311:18 317:5
income 236:15 237:21,24 238:
5,7,17,19 239:1,7,8 241:24
243:5,8 285:7 287:20 289:19
297:6,19 298:13,16,17 314:5,
12 315:6 316:2 325:20 336:3
338:11,21 339:1,3,7,8,21,25
340:15,19,22 341:2 345:4 364:

needy 375:2
negative 260:2,4 341:16 348: 20 349:4
neighborhood 245:6 318:16 337:12 371:3 374:2 383:7
neighborhoods 389:6,9
neither 260:10
nervous 235:25
net 258:18
network 248:19 249:8 258:19 259:12 261:21 293:19 313:22 333:18 359:16 386:21
networking 359:9
networks 249:6
neutral 255:13
neutrality 390:2
never 236:3 267:8 271:11,13 280:24 349:24
new 263:6 270:7 276:7,10
next 267:23 271:18 275:9 281: 8,9 303:6,6 307:17,18 319:20 324:13 360:14 383:15 395:1
nice 367:19
night 372:16
night/weekend 331:22
ninety 369:9 370:12
NODDED 341:18
Nominal 238:21 239:8
non 389:22
Non-Lifeline 334:10,13,14
non-price 378:3
non-subscribers 246:18
non-subscribership 373:13
nonrecurring 242:20 260:14
normal 243:7 253:13
nothing 248:14 265:13 322:13 335:10 349:16
notice 378:8
Now 235:23 237:10 238:14,24 241:17 243:2,9 244:2 245:21 247:15 249:9 250:21 251:4 258:23 260:16 261:24 263:25 270:15,21 271:25,25 277:8 278:17 281:1 283:25 287:11 294:13 298:18 299:1,16 309:23 314:4 322:8 326:6 328:19 338: 15 346:12 355:20 359:21 370:8 378:5 385:21 388:22 390:4,23 392:7
number 243:3 250:22 262:2,3, 7,22,24 266:8,18 269:5,6 281:3 286:9 287:18 292:2 293:15 294:18 295:3 298:25 300:7,8 302:15 309:1 310:2 312:3,18 313:17 315:18 317:5 318:12 321:7 322:9 324:3 332:6,22 334:19,22 336:7 338:12 340:17 342:15 344:8 345:9,25 347:15 348:20,22 349:3,16 352:16,20 359:25 361:19 362:19 364:24 371:24 372:2,3,5,23 379:12 392:22
numbers 250:17 260:2 272: 13,14 273:11 274:4 275:7 277: 10 282:4,7,19,21 284:10 288:4 292:5,7,10,16 293:8 295:14,16 310:5,22,23,25 311:2,6 314:15, 18,19 315:22 336:15 340:25 344:7 352:19 368:25 369:2 370:20 387:17,19,20,22 392: 18,20

O

objective 269:5,13
objectively 351:8,13
obligation 270:25 271:2
observation 305:16,18 339:13
observe 364:7
observed 253:24 275:11 284: 2,15 297:18 307:20 343:7 351: 21
obtain 391:19

obtaining 244:4
obvious 359:7 360:9
Obviously 238:12 242:20 263: 3 278:14 282:22 286:3 302:6 317:22 340:22 359:10 360:8,12 363:11 376:4 379:22 381:23 391:22
occur 394:16
occurred 235:24 304:13
occurs 297:21 376:23
OCHSHORN 246:11,11,15,19, 21,24 247:4 249:20 250:10,13 267:24 268:1,12,14,17,19 272: 2 275:4,15,18,22 276:15,20,24 277:25 278:6,12 279:9,13 292: 17 294:10,15,17,23 295:2,6,9 306:21,25 307:5,8 359:11,14, 18 383:15,19,21 389:19 393: 14,24
Ochshorn's 251:19
October 234:14
odds 263:1
off 237:14 241:14 248:18,25 249:6,8 250:16 251:5,12 258:3, 9,12,19 259:12 261:21 273:15 280:18,18 286:1 290:2 292:9, 12 293:19,20 313:22 314:10 323:18 331:25 333:18,23,23, 23,24 334:18 353:25 355:24 387:24 389:25
offer 384:22
offered 347:23
offering 389:25
OFFICE 234:23 285:8,14 383: 22
offset 248:21 251:15 253:21 258:8,17 273:1 274:18 363:24
offsetting 247:24 248:5,8 255: 23 258:6 287:19 313:20 344:2, 15,19
often 276:8 358:22
Oh 238:16 251:7 257:1,5,16 268:17 272:2 274:2 281:21 294:6 305:11 309:22 310:14 322:18,23 323:1 327:7 333:19 334:2 336:25 341:12 363:25 365:24 379:1
Okay 235:12 240:1 241:10,17 245:19 246:15,19,20 247:3,4,6 248:16,19 249:3 250:10,21 251:2,4 252:14,16 253:17 254: 2 255:11,20 256:23 257:12,16, 18,22 259:19 263:25 266:1,2 268:17,17,19 269:15,18,19 272:2 273:17 274:6,22 275:8, 18,22 276:4,11,15 277:11,15 278:12,13 279:25 280:13,15, 17,21 281:1,4,5,22 282:10 283: 24 284:22 285:2 290:19 293:25 294:23 295:6 298:14 299:17, 20,21 300:25 303:10,23 304 17,22 305:17 306:14 307:5,17, 17,19 308:15 310:11,17 311:9 312:8,23 313:15,19 314:2,3,10, 16,20,22,24,24 315:21 316:1,3, 7,16,18 319:6,7,19,20 320:11 322:10 323:7,8,15,18 324:8,13, 14,24 325:9 326:6 329:3,16 330:12,19 331:12,16 332:8 333:1 334:1,2,15 335:7,8,12,16 336:9,22 337:14 338:8 340:11, 22 341:17,19 342:20 343:4 344:9 345:16,18,23 346:14,15, 18,22 348:15,16 349:8,11,12, 22 350:8 351:22 352:16,22 353:10 354:18 355:7,9 357:18 358:3,17 359:21 362:16 366:9 367:19 368:7 369:17 370:17 371:2,4 372:1 373:9 375:11 377:24,25 378:3 380:11 383:2 once 243:1,6
One 237:25 239:2,13 240:6 241:8 243:5,19 247:25 249:3

252:7,16 257:24 258:4 260:17, 23 262:10 263:22 265:2 267:17 268:12,24 270:3 275:6 277:9 280:5 283:3 289:3 291:16 297: 4 301:3 303:5,11 305:15,18 306:12 308:1 309:8 311:11,22 314:20 317:24 319:10,13,19 321:12,16 324:10,12,14 325: 16,16 327:20 328:4 330:24 331:7 332:16 335:15 337:8 338:8,23,25 339:5,9 343:4 346: 7 347:15,20 348:7 349:15 350: 4,10,16,25 351:4,24 352:12 353:22 354:8 355:9 356:19,23 357:1,3,14,15,24 358:15 359 23 360:16,24,25 361:11 364:1, 16 367:11,22 368:24 369:7,8,9, 22 370:5 371:8 373:24 375:23 376:17,19 380:16 384:12,14, 19,20,20,24 385:5 386:20 387: 6,9 388:15,19 391:25 392:5
one-to-one 287:1
ones 251:11 256:12 282:21 311:20
only 235:3,21 247:23 249:4,15 258:7 262:12 264:19 273:18 281:3 282:1 286:6 287:6 297:4 302:21 318:6 334:13 343:12 344:1,8,12,13 346:12,22 347:4 349:21 351:9,19 357:3 362:22 363:15 365:11,12,22 372:4 374:23 382:16,19,21 384:17 385:6
open-ended 265:3,6,6,16,17 283:21
operate 383:20
operating 250:14 253:13 316: 25 386:13
opinion 274:25 275:5 354:1
opportunity 367:9
opposed 246:1 283:21 285:18
opposing 386:16
option 249:9 347:24 352:6
optional 239:22 322:17,19,24 323:18,21,21,22,23,24 326:6, 12 327:22
options 242:20 269:24 270:4 282:1 283:19 316:23 318:8,23 319:1 331:4,5 352:1 367:5
orange-ish 239:3
oranges 296:6 297:9 351:12
order 244:16 268:7 271:14 275:7 279:14,14 282:25,25 283:1 316:6 319:1,5 326:23 327:2 330:21 343:8,9 348:11, 14 349:20 383:8 389:24
Oregon 308:5,5,24
other 237:24 239:14,17 242 15,15 244:10 249:23 250:3 258:14,18 261:12 270:1,2 274: 19 275:24 276:20,21 279:14 282:5 289:17 292:15 308:14 309:13,13 321:13,16 325:8,9 328:13 335:2 338:7 344:16,16, 19 347:20 352:2 353:8 355:12, 25 363:4 367:25 373:3 375:17 376:24 379:15 380:4,18,23 382:21 383:11 384:20,23 38:> 3,6 386:15 388:15,22 389:14 390:24 391:12,15,15,20,24 392:2,4,23,24 393:5 394:12
others 262:2 307:10 376:20
otherwise 348:13 351:12 352: 21
out 236:6 242:9 243:5 244:21, 22 247:18,24 261:17,24 262:3, 20 264:2 267:3 268:3,7 272:8 273:14 275:6 278:20 280:23 281:6,6 285:5 297:16 301:1,4,5 303:4 304:7 305:7 307:20 309: 24 316:21,23 332:20 333:2 334:21 339:8,9 347:11 348:21, 21,24 352:12 354:5 355:3 360:

7,15 369:7,9 372:15 380:15 384:21 390:6 393:7
outcome 269:7
outline 383:24
outright 283:5
outside 240:1,2,2 277:22,23
over 237:10 238:5,18 239:7,8 264:19 273:25 278:9 302:15 303:9 309:1 313:4 328:18 331: 19 338:2 340:3,6 341:1 345:5, 20 346:6 357:3 360:8 369:5 385:24 389:3
overpriced 259:1
oversample 340:16 341:6
oversampled 340:24 364:7,11
oversamples 340:13
oversampling 364:3
overstate 344:24
own 259:24 316:25
oxygen 252:21,22

P

Pac 261:3,13 368:8 383:4,10
page 268:2 295:12,16 328:4 373:12 375:14,21
paid 290:7,9
paper 276:4 290:18 373:11
Pardon 365:17 367:1,16
parents 389:6
part 250:24 251:4 252:1 271: 18 272:17 279:24 280:14 281:8 289:20 293:7 295:12,16 297:4 302:10,12,20 307:9 309:7 325: 19 341:25 344:11,16,17 359:8 361:23 378:7,10,14 384:19 388:24 393:24
participate 361:8,16,19
participated 318:13
participating 334:15 338:25 360:16,19,20,22,23 361:2,4,17, 21
participation 317:16
particular 236:21,25 242:16 243:9 255:20 256:10 325:24 339:25 342:25 343:18 384:7
particularly 263:5 265:11,18 292:2 317:24 384:1
particulars 289:15
parts 384:18 388:12
party 292:15
PASCHALL 364:13,13,15,18, 21,23 365:7,14,17,19,21,24 366:1,8,11,16 367:1,11,16,19
pass 277:24 382:18
passport 263:1
past 243:25 253:25 254:3 264: 18 270:6 278:10 305:7 3/3:22 374:16
pattern 347:24
patterns 318:6 331:21
pay 243:1 245:19 253:6,14 265:1,2,8,13 266:12,14 269:25 270:2 294:13 296:20 297:25 302:13 326:4 330:20 331:23 335:1,10 336:1 376:8,10 386: 20,24 388:6,7,11,11,19
paying 249:18 255:2 265:14 296:19 301:6,6,7 329:23 336:2 392:7
peaks 338:17
Pearle 243:21
penetration 236:17 237:16,20 240:9,12,20,21 241:19 242:9, 12 247:13 248:17 250:21 254: 10 256:13 262:14 263:9 277:16 284:8,14 291:8,15 294:25 295: 8,24 296:12 297:3,23,24 299:2, 6,13 300:11 301:23 302:16 307:21 308:4 311:24 314:1 326:18 327:12 343:24 344:1 349:7 355:19,24 356:3,4,10 362:23 363:11 368:16,20 370:

proposal 390:11
proposals 255:20
proposed 387:8,14 389:20
prospective 235:22
protest 291:22,22 352:20
protesting 291:23
prove 351:8
provide 312:22 357:8 384:20
provided 317:8
provides 319:17 390:16
providing 386:6 391:14
PS 264:9
PSC 269:4,8,12 307:22 317:21 351:6 352:8 384:4
PUBLIC 234:2 261:10 270:18, 24 271:1,7 285:8,14 334:23 341:9 366:17 373:10 380:25 390:5,9,10,11 394:6
publication 241:6
publicly 271:8
published 258:23 306:22,23
purchase 242:23 248:9 251:11
purchases 335:2
pure 276:25
purpose 267:21 317:25
purposes 259:24 294:16
pursuing 338:4
push 363:6,7
put 308:13 322:14 328:5 391:16
putting 250:17 272:7

Q

qualify 361:12
quantity 252:18
quarter 338:22
question 235:20 246:21 247:9, 17 251:19,22 255:8 263:12 265:3,6,7,9,17,17 266:22 268: 18,24 269:11 271:18 272:9 275:5 279:15 280:25 281:7,9 282:2 287:17 288:5 290:11,24 294:10 295:11,21 296:8 302:4 303:12 304:5,16,17,25 306:15, 21 311:12,21 312:10 313:20 314:21 316:19,20 322:22,23 323:4 325:11 327:14 328:4 329:7 331:12 332:24 335:22 336:11,13 341:10 342:14 344: 10 347:20 349:15,21,24 350: 10,16,18 351:7,17 359:11 360: 10 364:2,15,23 365:6 366:21 367:22 371:16 374:20 377:23 381:2 386:25 393:19 394:4
questioning 303:24
questionnaire 267:12 323:5
questions 256:17 261:14 265: 1 266:25 268:10 280:7,8,11,24 283:2 286:19 290:8 292:19 295:4 321:23 324:14 326:17 338:8 340:19 346:21 347:2 353:21 357:22 360:25 366:17, 20 368:14
quick 268:24 272:12 277:9
quickly 244:12 317:3,4
quite 243:12 258:21 284:10,10 335:4 349:9 366:22

R

R1 239:3
raise 240:19,19,19 248:3,12, 13 249:4,9 250:20 251:19 258: 13 259:10 277:16 344:1 368:9 374:23 389:22 392:8
raised 255:10 258:10
raises 387:24
raising 250:23 258:6 348:18 389:17
ran 367:12
random 317:19 340:13,13
randomized 319:2,4 348:9,10, 11

range 240:11,15 242:10 258: 10 273:7 276:10 277:21,22,23, 23 278:5,5 296:11,12,13 297: 23 298:16 303:25 308:3,7 325: 10 384:12,16
ranged 342:24
ranges 240:14,15 241:19 296: 2 298:11 332:25
ranging 272:19
ranked 388:23
rate 239:4 242:19,20 247:13 248:1,3,14 249:24 250:19,24 251:14 254:23,25,25 255:2,20 256:20 257:8,9 272:20,20 273: 15 277:14 278:1,6 287:19 291: 23 293:5,6 294:12,22 296:18, 20 297:4,4 298:1 299:13 301:5, 6,6,7,23 302:10,13,17,24 304: 11 306:12,12 308:25 309:14, 19,19 311:22 312:5 313:8 315: 8,12 323:2 332:10 344:2,13,15, 20 348:3,8 355:15,25 362:21 363:16,23 364:9 368:13 372: 11,13,18,20 373:18 374:6,15 375:4,5,10 377:12 381:12,13, 16 382:19 384:11 387:19 392: 13,19 393:1
rated 329:14,15 359:2
Ratepayer 261:10
rates 234:7 236:17 238:25 240:9,21 241:7,8,25 248:4,5, 15,16,22,24 249:5,10,10,17 250:3,20,23 254:6,7,12,16 255: 7,9,16,23 256:24 258:5,6,14, 24,25 259:10,11 261:23 264:19 265:15 266:1,3,23 277:16 279: 11 280:19 281:2 285:6 289:1 291:12 295:8,24 296:12,25 297:3,5 298:13 299:5 300:11 302:6,16,21 304:9 308:4 309:3, 15,21 311:14,17,22,24,25 312: 25 318:7 333:13,17 343:14 344:8 353:1 355:16,19,24 356: 3,4 363:2,24 368:9 369:11 371: 18 372:1,20 373:1,5,6 374:12 377:8,14 378:25 379:19 381:5, 16 382:22 383:4,9 385:9,15,20, 21 386:7,9,15 387:1,3,5,24 389:17,22 390:1,11,18,21,24 391:2,4,8,8,11,12,13,14,20 392:2,2,7,8,14 393:9,19
rather 262:15 313:18 318:6,8 319:11 349:21 375:9 380:12
rating 325:5 326:10,10 328:9, 21,23 329:1
rational 265:14
raw 278:17 288:4 291:6 307: 23
RE 234:11 358:2
react 271:21
reacting 271:19
reaction 274:16
readjusted 390:22
ready 235:1,10 358:2 363:18 383:16,18
real 236:9 238:23 239:7 264:3 266:5 275:11 277:8 308:9 355: 24 359:7 373:14 374:4,10,12, 17
real-world 356:1
realism 319:16 335:16 353:5
realistic 240:22 335:16 386:23
realistically 363:17
reality 277:24 307:19 343:5
realize 250:4 338:15
realized 364:4
reallocate 390:11
really 235:5 236:5 249:18 253: 6,14 257:8 259:20 260:19,20, 22 264:12,14 266:5,19 270:10 287:13,16,21 291:24 292:3 293:4 311:10 312:24 316:9 332:12 338:1 340:15,19 345:13

359:16 375:12,22 377:23 384: 24 385:5 388:10,13 389:14,14
reason 243:18 256:23 257:5 267:2 283:18,20 296:22 325: 19,19,20 340:12 344:11 364:6 373:13 378:6,12 388:2 389:5, 11,19 391:9 392:8,9
reasonable 265:20 309:24 316:7,12,12 352:14 353:6 384: 11 385:20 387:6,15 390:13
reasonably 242:11 382:24
reasoning 250:9
reasons 270:23 319:10 365:2 387:10 390:15
rebalance 381:16 393:19
rebalanced 249:25
rebalancing 248:1,3 249:24 344:2,15 382:12,13,14 390:14
recall 313:23
receive 324:17 325:7 375:4
received 272:8,19 324:22 328: 8,20 343:11,12 390:6 392:12
receives 325:4 375:5
recency 347:22
recent 356:11 369:21
RECESS 358:1
recognize 249:17
recommend 267:8 393:15,18, 20
recommendation 267:5 393: 9,12
recommendations 267:17 394:19
reconcile 345:8
record 393:8
records 314:13
recurring 242:25 244:23 247: 14 249:16 262:13 373:12 375: 15
red 239:3 270:18 328:11
reduce 259:10 331:17 332:2,2, 3,3,4,5 335:12
reduced 312:24 374:18
reduction 254:24,25 255:2,6,7 258:18 291:7,13 381:12,17
reductions 363:24 382:7,19 383:5,7
reestimate 259:22
reestimated 243:16 244:2
refer 384:5
reference 241:11 366:4
referring 274:4 366:5 367:15, 18,22
refers 385:14 389:12
reflect 253:2 272:14 337:4
reflects 333:5 372:22,23 373:2
refused 338:20 339:7
REGAN 312:9,9,12,15,18,23 313:3,9,15,16,19 314:2,4, 5,18 315:2,17,22 316:4,9,17 318:21, 21,23 319:1,4,7 348:17,17,19 349:4,8,11
regardless 251:11 258:14 285:15 291:8,14 295:19,20 377:21
registering 352:20
regression 334:1 350:7
regression-based 345:16
regularly 235:6
regulated 259:5
reiterates 385:4
reject 316:3
related 247:10 325:4 343:8 393:5
relating 336:14 386:8
relation 325:25 326:4
relative 256:2 258:25 259:1 324:17,18 325:2,8,22 329:16 330:14 333:9 335:13 337:11 358:18 363:1 378:15,17
relatively 242:5,7 246:9 252: 25 358:25 378:3
relevant 306:9

reliable 320:1
relied 376:19
relief 374:22
rely 375:18 376:18
relying 376:16
remain 248:24 263:7
remaining 248:23,23 358:5
remarks 393:3
remedy 390:20
remember 244:24 260:25 263: 17 277:20 334:18 339:5,6 342: 5,25 356:17 371:25 373:25
remembrance 261:1
remove 271:15 330:21,22
Renita 267:23
rent 388:8
rental 332:2
report 257:25 311:17,19,20, 22,23 320:5 324:20 325:2 338: 12,20 368:17,20 373:14 383:25 384:3,5 393:8 394:7,16
REPORTED 234:20 317:14 369:2
reporter 235:8 341:14,18
REPORTERS 234:22
reporting 253:23,24 311:20 320:24,25 322:2 323:12 335:13
reports 278:17 334:13 384:4
represent 239:13 240:3 268: 22 292:6 341:2 344:7 383:22 386:2
representation 290:24
representative 246:22 265:11 340:14,24 341:1,4
representatives 366:18
represented 244:11
representing 235:15 355:14
represents 243:19 270:23 299:1 313:13 344:9 358:15,15 362:24
request 390:19
requesting 384:7
require 253:2 375:3 390:21
required 302:12 376:11 383:3
Research 237:6 260:18 261:9 270:7 271:10,11 276:5 282:14, 18 391:3
residen 254:19
residential 236:16 243:24 248: 4,13,22 249:5,10 250:20,22 253:21,22 254:6,11,13,15,17, 18,22,23 255:1,3,7,13,14,16,17 256:20 258:6,10,11,12,14,17, 18,19,24 259:10,11 277:14,16 288:7,17 313:4,10,21 314:4 348:22 368:9 381:18 382:19,22 391:1
residents 313:14 317:9
resource 266:6
resources 266:7
respect 247:7 371:17
respond 378:10 387:20 392:4, 25
responded 280:6 300:15 336: 23
respondent 293:12 317:25 318:1
respondents 269:7,23 273:8 294:12 295:3 297:1 340:21 343:11,12 347:23,25 348:25 354:20 358:12
responding 293:15 335:1 390: 8
response 266:20,24 270:8,18 271:6 272:10 274:18,20 316:14 348:3 353:22 364:3,9 394:24
responses 267:1 269:8 282:17 283:2 284:10 285:16,23,23 286:4 291:24 292:9 310:20 333:10 336:25 337:1 345:21 346:11 390:5
responsive 245:4 316:14
responsiveness 260:12 344:

25

restate 365:6
restricted 242:11
result 244:21 258:9 259:11 285:3 309:5 343:23 345:21 355:3
results 244:22 252:20 262:4 265:19 272:3 275:2 277:17 281:20 282:15 284:16,20,22 288:2,5 291:1 292:24 293:24 298:19 304:19 307:23 319:21 324:20 331:16 334:8,14 338:14 343:6 345:19 349:25 351:11 353:6 359:19 361:9,24 362:1 375:19 378:14
retest 353:9
retrospective 235:21 236:20 262:16 264:2 277:6
revealed 276:18 277:5
revenue 250:6 251:10,20,21 255:13 389:24 390:2
revenues 248:10 250:25 251:1
reversed 268:7
review 243:10,12
reviewed 390:5
Richard 267:3
rid 279:23
right 238:21 245:17 247:1 251: 21,23 256:6 257:19 258:23 270:15,21 275:17 276:23 277:8 279:8 282:8 285:4 286:15,20 287:11,12 290:22 292:21,21 293:13,16,22 295:4,9,15 296: 16 299:1,15,16 301:20 304:5 305:3,9 306:5 309:23 310:6,18 313:1,5 321:25 322:5 323:4,9 326:11,16 327:1,8,13 328:19 329:18,20 330:11 333:15 335: 19 339:19 342:2 346:18,24,25 347:11,17,19 349:3 350:17,22 351:25 352:17 354:24 357:16 359:15,20 361:14,18 366:17 367:24 368:16 369:19 372:3 375:25 378:4 379:8,9,23 380: 12,22 381:22 382:1,5,9 388:22 390:4
risen 373:22
road 238:2
Robert 267:4
role 290:5 381:25
Room 234:18 238:12 322:20 363:12
rose 374:16
rotate 283:1
rotated 319:6
rough 310:1
roughly 289:22 310:1 347:2 364:20
row 292:20
RPR 234:20
rule 250:7 337:23
run 301:15 366:13,16
running 361:17
rural 391:5

S

said 244:13 259:20 260:24 261:16,21,22,24 262:5,5,5,11 263:19 264:4 268:5,9 271:17 273:8,19,21 276:8 277:17 281: 12 285:25 286:19 292:8 304:7 305:1 310:8,12,21 311:7 312: 16 313:20 318:23 322:12,13 324:21 327:21 328:15,25 331: 4,12,12,19,20,22,24 332:4,5,6, 22,25 333:20,22 335:1,8,9,14, 25 338:10 342:1,5,9,10 349:19 350:11,20 353:1,1,19,25 354: 20 359:1 360:19 361:1,3 366: 12 373:14 380:7 382:3 383:11 387:18 392:18,20
Sally 282:11,12 292:6 303:11

305:1 346:4
same 239:9 248:10,23,25 249: 12 260:12 305:25 317:19 351: 1,10,10 353:18 362:15 390:25 391:20 392:9
sample 246:22 272:18,23 275: 6 280:5 284:22 301:2 304:7,16 311:22 336:22 337:3,21,25 339:15,20 340:6,7,13,14,23 341:3 346:20 354:11
sampled 246:18 330:24 347: 15 365:11,12,22
samples 371:2
sampling 237:18 247:2 269:3, 11 317:17 364:8 369:24 371:7
satellite 321:13
savings 388:3
saw 242:10 267:11 277:21 293:1 295:7 366:19
say 242:6 250:15 252:8 253:4 254:14 256:8 257:17 263:17 265:7,12 266:1,2 267:5 268:5 270:11,21 273:16,17,20 275:2, 23 276:13,17 280:19 281:1 282:7 286:24 287:5,8 289:17 291:11 293:9 297:12 298:9 299:1 301:16,16 306:12 307:19 309:23 313:25 314:4 315:2,3,7, 8 316:18 319:14 322:19,23 328:7 331:6,10 332:13,20 334: 7 335:6,11 338:16 339:21 340: 18,25 346:5 348:22,25 349:16 354:20 355:22 357:6 369:25 374:18,25 375:16,17 379:11, 14,19,25 381:11,14 385:5,6 386:23
saying 245:12 248:11,12 249: 2,14 253:1 254:20 255:22 262: 1 268:8 281:11 285:21,24 286: 1,18,22 287:24,25 297:1 298:4 302:25 305:6 307:22 309:3 310:8,12 316:9,11 320:6,8 328: 22,24 330:10 332:9 346:23 350:9 364:6 365:23 369:4,14 370:2 371:10 377:14 379:5,9, 10 380:8
says 248:21 252:15 260:10 271:18 277:13 286:6 289:19 299:11 300:5 320:2,5 329:24 333:17 335:7 338:19 345:14,19 350:12,13,14,15 352:13 355:21 362:11 369:24
scale 297:22 318:10 324:19,23 326:23 331:7 343:3 348:7 358: 14 367:5
scales 319:10,11
scenario 344:10,11,12
Seattle 373:4,4
second 245:22 249:4,9 251:4 272:17,23 292:20 293:7 295: 11,16 310:11 311:21 320:14 324:4,5 326:10 327:14 331:25 341:11 357:12 358:9 371:19 377:13 378:24 387:16 393:24
Secondly 327:20
seconds 382:25
sectional 290:13,14,16 305:21
see 236:5 237:14,20,21 238:8, 11 239:2 240:8,11,20 242:8,10, 22 247:7 255:22 260:5,6 262: 17 263:6,16 264:21 269:19 270:15,18 272:16 273:7 274:4 275:12 277:7 279:17 284:8 298:18 299:6,12 302:16 308:3, 6 309:1 314:12 317:13 318:16 319:8,25 320:11 324:24 325:6 332:1 336:14 337:17,23 338:9, 11,25 343:22 345:18 350:24 355:23 358:20 359:5,19 361:13 362:25 364:23 365:24 366:8 369:10 370:9 374:3 378:2 390: 24 394:25
seeing 240:16 284:1 305:24

307:24
seek 269:7
seem 273:11,12 291:11 293:8 308:8 355:20 385:23 391:4
seemed 275:6
seems 255:14 265:20 330:18 362:23 363:8,17 377:6,15 392: 6
seen 235:19 237:11 239:5 240:7 243:24 256:15 262:11 263:5 264:18 272:5 277:7 278: 10 284:17 300:6 309:10 310:23 311:3 314:15 352:15 362:19 363:21 390:10
segregate 382:15
selected 280:5
self-certified 289:16
self-reported 319:23 321:24
self-selection 329:13
semi-logged 303:21
send 259:6
sense 236:6 273:12 279:5,6 281:23 291:25 293:8,12 306:1 308:8 310:3 329:13
sensitive 242:15,17,18,19 247:13 260:8,9 378:3
separate 274:3 336:6 351:11 372:13
separately 283:4 324:6
sequence 265:25
series 241:19 243:10 290:14, 14,16 305:22 337:18
seriously 298:5
serve 244:10
SERVICE 234:2 235:17 236: 14,21 238:25 239:21 242:4,4,8, 14 243:24 244:17 245:5,13,18 246:1,5,7,25 247:9,10 248:8,9, 13,15 249:22 250:2,6,24 251:9 253:15 256:12,14 257:9,20 258:2 260:6,15 261:11,17,19, 23 262:24 263:2,10 265:2,8 269:25 270:19,20 271:2 288:7 289:1 294:12 301:7,10 302:12 309:19 315:11 317:6,8,18 318: 18 320:1,4 321:1,10 323:6,12, 14,15,19 324:1,2,2,16,18,21, 22,25 325:1,2,8,10,21,25 326: 3,7,20,24 327:6,8,9,18,21,21, 24 328:3,12,16,17,18,22 329:8, 11,16 331:18 344:2,13 348:6 355:16 359:25 362:12,21,25 363:17 366:18 373:15 374:10, 23 375:7 376:12 377:7,11,11 378:13,15,16,17 380:6,6,20 381:6,14,18 384:15,20 385:5, 13,18 386:22 387:4,17 388:15, 16,18,23,24 389:1,2,8,12,16 392:16 393:17 394:11
services 239:22 241:25 242: 19 246:12 247:3,7 248:20 249: 23 256:2,3,12 276:7,11 314:23, 25 315:4,5 317:9 320:5 322:19 325:4,4,7,8,9 326:13 327:22 328:8,9,10,14,15,20,23,25 329: 1,14 332:5 380:18 383:22 384: 23 386:6,10,10 387:25 388:6
session 303:6
set 250:19 251:3 277:17 384: 25 385:15 386:9,15 390:25 392:2,2 393:11
sets 283:2
setting 387:5
several 290:20
severe 375:22,22
sewer 329:6,9,11,15
share 277:12 294:5 392:9
shift 254:12,18 331:21
short 278:4 317:2
short-term 369:4
should 255:10 257:13 259:7 260:2 267:9 274:16 293:25

297:5 305:20 316:24 317:20 322:18 338:14 354:3 362:11 371:5,9 372:20 379:1,10 381:9, 11,13,14,17 383:25 384:2,14 385:11 386:20,24 391:10 392:8 393:7,9,14,18,20,21,22,25
shouldn't 267:8 276:13
show 238:2 248:17 256:24 269:4,12 282:21 286:10 304:23 315:19 320:16 331:16 338:14, 21 349:16 351:16 361:9 370: 22,23 385:20
showed 241:18 389:10
showing 254:8 256:24 323:23 326:21 370:20
shows 239:3 259:25 273:10 292:3 297:3 305:5 319:21 320: 10 329:10 332:7 351:14 352:10 358:6,18
sic 254:16
side 239:12 251:4 308:21 355: 14 382:22,22
sign 248:13 256:13 260:4 379: 2
signals 259:6
significant 329:3 347:5,8 362: 5 370:3
significantly 289:24
signs 260:2
Silicone 276:5
similar 298:12,13 304:13 343: 8 381:9
similarly 325:5
SIMMONS 282:11,11,13 283: 7,12,16 290:10,13,19,22 292:6 303:9,11,11,14,23 304:17,22, 24 305:20 306:9 332:18 333:4 339:11,13,17,20,24 346:2,4,4, 15,18,22,25 347:4,11,14 354:6, 8,10,15,18,22
simple 240:7 256:17 258:10 275:2 306:15 323:15
simplify 377:15
simply 242:24 266:22 274:22 297:10,19 331:23 335:1 336:1 337:20 379:6
simultaneously 248:20
since 248:8 255:14 260:3 266: 24 283:12 284:23 303:19 308: 14 337:9 343:4 349:20,20 380: 15 386:6
single 242:24 247:23 330:25 343:12 349:21 363:15
sir 246:14 247:17 256:18 263: 23 268:11,23 269:1,14,16 272: 1 273:24 274:8,11,14,20 275: 12,17 278:24 280:3,9,12,19 281:15 282:2,8 285:1,7,10,13, 20 286:1,12,17 287:4,10,16 288:8,19 289:4,7,11,18,22 290: 1 291:4,9 294:14 295:22,25 296:3 293:20,23 302:5 311:2 312:7,14 313:2 318:22,25 321: 18 326:2 5,8,15 327:13,16 329: 15 333:11 334:24 336:5,10 337:2 340:4 341:23 342:2,5,19 350:2 351:3 361:22 364:14,22 365:5,16,20,25 366:23,25 367: 21 368:2,18 373:23 374:2,7 376:20 377:1 380:13
situation 271:24 391:11
six 272:9 283:2 338:25 339:10 343:23 348:23 349:5 353:21 360:16,25,25 361:11 372:12
size 249:7 336:22 337:3,21,25 339:15 375:7
skip 319:19
skipped 280:23
slash 317:20
slate 384:5
SLC 239:23,25 240:1 302:7, 18,19,24 303:3 311:18,20
slide 240:7 241:18 242:10

257:3,6,12 267:23 268:16 269:6 272:1,17 277:20 283:13 288:25 290:2 311:10 319:21 325:12 328:7 352:10 360:14 362:16 379:11 380:11
slides 238:1
slightly 284:15 331:19 346:6 370:12,22,23
smack 260:11
small 244:23 249:6 253:3 269:3 314:18 321:15 325:19 378:7 386:24
smaller 375:7,9 391:5
snapshot 356:25
snow 371:24 372:1
social 359:2,8,8,11,15 375:8 389:12
society 389:1,4
socio-economic 243:2
solely 376:16
solve 275:3
some 236:6 237:11 240:23 243:16 244:25 250:5 256:23 258:16,18 261:11 264:10 265:20 267:19 269:5 272:4 277:5 282:14,18,21 283:21 290:3 303:24,25 305:13,23 308:12 310:1 312:25 319:20 321:15,16,16 327:10,20 328:5 332:14 339:22,24 346:9 349:18 358:7 363:20,20,22 366:14 372:8 373:2 379:14 381:11 382:13 383:23 388:11 392:4 393:5,16 394:15
somebody 276:5 297:24 298:1 316:19
somebody's 387:3
someone 290:25 296:19
something 236:3 244:16 245:4,9 246:12 252:4 264:17 266:9, 20 279:20 290:3 291:20,21 300:9 301:24 303:7 308:16 310:12 312:15 319:12 327:11 332:14 339:14 346:25 348:13 349:10,17 355:3 371:4 373:25 377:19 386:15 390:13
sometime 281:13 283:11
Sometimes 276:14,14 348:12, 12
somewhat 283:8
somewhere 237:2 240:12 245:2 256:13,15 318:16 320:19 326:25 336:18
sorry 237:25 238:16 239:7,16, 20 246:16 247:16,19 248:7 249:1 251:7 254:14 256:10 257:1,2,16 272:10 274:2 280:3 289:11 294:20 295:15 299:9 300:18 303:9 308:5 310:14 314:22 317:21 318:1 320:8,25 322:18 323:4,20 327:7 329:20 332:19 334:12 336:12 341:19, 23 345:3 346:8 348:18 356:15 361:18 364:1,17 365:5,10 370:12 379:1 381:5
sort 236:5 240:6 242:9 243:3, 5,7 252:5 265:18 272:10 283:22 292:23 293:6 338:17 344:6 355:9 367:8 382:15
sorts 242:1 267:15
sounds 349:3 373:17
source 240:25 241:2,7,8 356:4
sources 343:8 376:19 391:3
southeastern 391:1
southern 379:18
speak 235:6 285:12
speaker 235:12 383:15
SPECIAL 234:4 371:25
specific 244:9 250:17 259:23 283:14 295:13 304:19 312:21 366:25 367:2 386:3 393:9
specifically 237:5 261:14 263:18

spectrum 260:11
speculation 255:24
spell 393:6
spend 320:6 322:3 323:17
spending 239:13 270:1,3 319:22 320:3 324:16 331:24 332:3
spent 322:12,13 376:3
spiral 282:6
split 272:18
spoken 388:1
sponsor 269:4 271:1,5,12 318:1 351:20
sponsored 306:16
sponsoring 267:20
spread 255:15
Sprint 235:15 348:23 381:9
square 338:3
squared 338:3
St 295:12 376:10
stable 369:11
Staff 234:11 264:23 274:4,13 278:15,16,16,18 282:15,18 286:2 290:5 292:11,14,19 317:21 318:4,13,16 336:11 340:5 341:6 346:4 347:20 353:14 355:1 367:10 391:2
staff's 264:9 265:23 267:12 277:9 285:16 295:14,15,16 319:3
stand 381:21
standard 336:20 388:7
standpoint 249:21
stands 243:5
start 235:10 266:11 268:7 273:15 358:2
started 235:1 280:17,18 288:14 364:20
starting 266:10,10,17 267:7,16 272:24,25 273:2,4 293:10 316:22 330:22 331:1 351:21
state 244:4,8 252:2 256:19 259:23 260:8,9 288:24,25 298:16,17 299:14 302:11,23 306:12,13 311:23 312:21 318:17 338:25 339:8 340:7,14,17,18 341:1,4 361:11 387:5,12 391:7, 10
state-specific 303:20
stated 251:8 276:17 286:7 300:6 319:18
statement 274:21 328:9 340:10 373:12
statements 290:4
States 240:12 241:20,21,25 244:10 260:7 290:20 297:2 298:12 307:20 308:2 311:21 373:2,3 375:24 379:18 390:24 391:1,9,12,16,18,20,24 392:23
statewide 237:16 311:24
stating 351:20
statistical 237:18 246:23 336:14 371:12
statistically 237:19 329:3 355:23 370:3
statistician 377:5
statistics 339:6 379:15
statute 360:17
stay 248:10
stayed 389:9
stealing 327:4
step 275:10 351:25 363:18
stepped 302:15
steps 271:16
still 238:12 282:22 315:25 326:13 330:1 355:20 360:8,9 362:14 369:11 372:18 390:2 392:21
stop 247:20 326:16
stopped 361:2
store 376:9
strategic 265:10,16 266:16 267:7,15 269:6 270:16 271:4,6, 14 273:4 279:18,24 281:25 291:21 316:22 317:23 331:2

351:6,14,18,21 352:7,17 353:3
straw 381:10
stream 377:16
strict 252:14 301:15
strong 374:24 380:21
structure 392:13
structured 347:23
studied 261:17
studies 236:16 242:2,5 243:6, 9,18 248:6 258:23 296:22 300:5 392:23
study 236:20,22,24 237:1,4 243:13,21 244:11 246:13,16 249:21 253:20 255:22 256:10 259:21 260:17,19,23 261:14 262:11,20 263:13,20,21 268:3 284:4,19 287:23 302:16 303:1 304:14 306:22 312:19 318:1 359:24 363:15,22 384:12
study's 317:25
subdivide 339:20
subject 268:1 349:2 368:21 384:8
subscribe 246:25,25
subscriber 309:18
subscribers 246:13,17,17 298:22
subscribership 236:13,18 237:11,22 238:4,6 248:25 250:3 309:2 362:20 373:21 374:5 387:24
subscriberships 308:24 309:5
subset 294:11,17 295:2 330:6
subsidies 388:12
subsidized 375:5,8
subsidizes 385:5
subsidizing 375:9
subsidy 375:1 393:16
substantial 386:5 387:23 390:17 394:5
substantially 373:22 387:16
substantive 307:9
substitute 325:18
subtract 323:18
success 238:10
such 239:22 243:3 250:19 322:20 332:1 347:23 380:4 385:11,16 386:19
sufficient 390:20
suggest 386:4
suggested 277:10 290:25 367:3
suggestion 275:12
suggests 352:20
summaries 355:3
summarize 317:4
summarizes 267:4
summary 259:25 276:6
support 390:5,10
supportable 393:12
supported 380:12
supporting 357:8
supports 393:8
suppose 250:19
supposed 370:20
sure 237:3 240:1 257:14 278:4 279:2 282:19,25 283:4 303:18 304:8,11 329:2 336:18 337:19 338:6 347:13 357:5,23 362:16, 25 367:6,14 368:12 371:11 372:14 376:1 377:5 379:16 380:11 381:10
surely 242:9
surface 291:10
surprised 265:19 359:3
surprising 242:14 358:20,25
surprisingly 237:20
surrounding 391:9
survey 236:1,12 237:19 240:23 241:3 243:21 261:3,5,6,6 264:10,20,22,25 265:4 267:1, 20,21 269:8,9,10 271:1,5,13 274:3,4,10 275:16,22 276:9

277:9 279:10 280:6 281:13 284:1,20 285:19,22,25 286:4 288:3 290:9 292:11 293:15 295:1,17 300:18,22 307:22 310:20 311:14 317:1,4,18,21 318:2,4,14,20 323:5 327:15 329:10 333:12 334:7,17 340:5, 21 344:17 345:20,22 349:17,25 350:3 351:6,7,10,13,20 352:8 355:2 356:9,12,19 358:6 361:24 362:10 364:16,18,19,25 365:12 366:6,7,12,16 367:8,12, 14,17 387:18 389:10
surveyed 318:16,24 361:10
surveys 247:22 276:1 279:25 289:9 293:5 362:19 392:18
survival 282:1
suspect 349:3
switches 384:21
synopsis 354:19
system 272:7 372:4

T

table 295:23
tables 369:1
tabulate 283:17 293:24
tabulations 295:8 345:18 350:8
take 236:15 237:13 238:14,24 239:10 240:3 241:23 249:3,14 259:21 260:1 262:16,17 264:20 266:21,21 267:9 270:10 271:15 273:6 275:9 276:3,4 277:4,9 280:20 283:21 285:5 286:4 292:7 297:12 299:11,12 317:7, 10,12 318:10,11 319:13 321:14 331:7,15,21,22 332:6,21,23,25 335:8,15,21 338:8,13 340:25 348:2 353:17 355:10 356:21 357:24 361:13 362:11 363:3,18 375:12 378:1 383:16 391:21 392:22
take-it-or-leave-it 267:18 330:23 332:11,17 367:3
taken 265:3 335:24 358:1
takes 262:23 263:2,10 344:21
Taking 258:7 271:23 273:4 378:24
talk 235:21 237:6 240:23 243:15 245:11 264:9 269:21 270:16,16 283:22 309:9 319:20 324:13 338:23 347:10 358:4,5,9 363:14 365:8
talked 261:25 269:20 270:22 277:5 284:5 312:13 319:8 330:19 360:4 372:24
talking 245:18,20 247:22 256:4 259:8 278:8 283:13 293:14 296:5 297:8,17 300:16 322:24 325:14 328:20 355:13 370:7 372:25 376:25 386:25 389:13
Ta lahassee 383:22
Ta npa 295:12
Ta npa-St 277:14 294:21 295:1 299:2,15,17
Tardiff 243:13,17 244:13 254:5 256:11 257:10 259:21 284:4,5, 11,18 296:23 297:7 300:10,19 302:20 305:8 309:7 312:19 344:5 363:21 374:9 375:19
target 375:3
targeted 375:1
taught 291:16
Taylor's 243:10
technique 266:4
techno 381:24
tele 366:23
telecom 328:8
telecommunication 242:15 317:9 329:1 386:10
telecommunications 234:7 239:12,13 325:3,7 384:15 386

6,13 390:3

telephone 235:17 239:10 245: 14 246:25 261:17,22 270:20 302:12,14 306:16 309:18 317: 5,6,18 318:7 319:24 327:15 358:7 362:25 365:2,3,8,12,21 366:24 373:15 376:12 378:16 389:1,7,8 392:25

telephones 365:13,23 376:8, 10

tell 252:9 266:2 272:9 279:3,20 299:7 300:12 314:10 322:2 323:3 333:25 339:7 342:18 343:20 357:21 366:3 387:21 393:4

telling 286:20 370:10 393:1

tells 309:24

ten 318:9,23 319:1,6 331:4

ten-year 264:19

tend 344:23,24 358:21 375:18 377:23

Tennessee 304:12

tenths 284:7,7,12,13 299:6,12 343:23 370:15,16

term 252:3 299:24 376:25 385: 14,14,16 389:12

terms 237:15 242:11 243:2 244:12 245:12,21 252:16 260: 12 267:20 303:25 304:19 307: 21,21 318:2 325:14 336:15 347:21 354:16 362:22 363:5 374:10 388:23

terrain 375:22 376:7

territory 289:2 317:18 318:18 355:16

test 316:23 330:22 353:9

tested 325:8 346:12,12

testifying 259:9

testimony 268:1 307:13 313: 17 336:19 380:25

Thank 238:1 246:15 247:4 259:15,18 263:24 269:18 295:9 304:24 306:18 312:8 316:17 321:20 329:4 336:9 348:18 353:10 357:11 367:21 371:13 376:21 383:14 393:13 394:19, 20

Thanks 308:17

that's 236:2 241:5 244:5 246: 6,14 247:19 248:11 250:13 251:21 255:4,8,24 256:22 258: 20,21 259:7,8,14 260:22 263:3, 3,22 266:4 267:2 275:17 276: 20,23 277:2,25 278:7 279:12 280:9,12 281:19,22 284:16 285:1,4 286:15 287:1,24 289: 18,22 290:10,21 291:9,19 295: 12,15 298:8,10 300:17 301:20, 25 302:8 303:10 306:13 307:10 310:23 311:2,5 315:11,20,21 316:11,17 320:18,21 322:2,5,7, 15 323:10 326:5,19 327:4,13, 19 328:23 329:16,24 330:11 332:8 333:7,21 335:4,4,12,19 336:5 337:8,13 338:6 340:2 341:5 342:2,15,19 344:22 345: 6 347:3 349:5,13,17 350:2,12, 13,14 353:16,24 354:14,17,21, 24 359:15,20 366:15 368:21 369:1,19,23 374:22,24 376:23 377:7,18 381:24 382:9 383:1,6 385:17 386:1 387:13 390:19 392:8 394:2

theoretical 384:12

theory 292:23

there's 283:6 381:23

therefore 248:10 253:3,14 297:25 320:22 390:1

they'll 389:6

they've 243:22 282:15 301:4 302:13 309:20,20

thing 235:3 237:25 243:4,5 247:23 252:25 253:2 258:4

262:20 269:20 275:9 293:2 301:8 307:17,18 309:9 315:25 318:7,15 324:13 325:14 344:1, 13 351:18 354:8 371:1 372:23 374:23 376:15

things 242:1 252:24 258:21 260:23 267:19 269:20 271:3 293:4 301:4 316:21,24 317:24 322:2,3 325:16,17 331:10 332: 1,16 337:8 338:23 348:8 352: 11 354:5 358:22,23 361:14 372:24 375:17 388:9 394:12

think 237:2 240:2 247:12 250: 8 252:4 253:25 255:5 257:2,6 258:20,21 259:8,8 260:19 262: 9 263:19 264:11 271:2,7 272:9, 11,13 273:13 275:8 278:7 279: 9 281:17 282:3,23 286:23 287: 13,22 290:3,5,17 291:25 292:6 294:21 295:10 296:21 297:11 298:8,11 300:2,7,21 301:13,22 303:5,7 307:12,14 308:18 311: 9 312:1,15 313:16 318:15 319: 8,24 320:1 321:6 323:17 324:6, 15 326:14 327:19,19 329:22 330:1,4 334:19 337:10 338:22 339:3,5 340:10 348:3,6 351:18 352:9,12,16 353:3,15,18 356: 16 357:5,13,16 358:21 359:3 363:5 364:12 366:4,22 367:6 370:24 371:3,25 372:8,17,24 374:6,20 376:14,15 377:22 379:4,12,24 380:1,4,5,10,15, 15,16,21,22 381:4,6,7,9,11,14, 22 382:1,3,14,20 384:23 386: 14,18 387:4,10,13 389:16,19 390:14,19,23,24 392:9,11 393: 8,11,18,21,21,25 394:6,12,13

Thinking 247:18 377:3 379:19 382:17

third 239:13 269:20 318:19 325:20 378:14

those 235:6,7 238:17,19,20 241:25 244:1 253:16 262:8 267:11 269:15 270:3 273:10,17 280:11,20 281:25 283:3 284:10 285:16 286:13 287:13,13 288:5 291:5 292:5,7 293:25 298:21 311:17 319:1 321:1,4,15,22 325:13 329:12,13 330:5 331:12 334:20,25 336:23,23 339:22,24 340:16 342:14,22 346:7,21 347:1,5,15 348:8 350:17 351: 22 352:19 354:15,16,19,23 359:6 360:18,19 362:1,9,12 366:2,2,17,20 368:14,25 369:2 373:7 374:16 379:22,22 380:24 381:13 387:1,19,20,21 388:11, 12 392:20 394:12,15,18

though 237:20,25 238:5 248: 25 250:20 251:19 253:2 282:22 305:21 309:12 326:12 360:4

thought 253:11 262:24 274:18 294:2 297:21 321:23 322:15 333:19 345:4 349:13 352:5 357:19 358:23 359:16 365:10 374:1 377:16 381:9

thousand 237:3 336:7 337:22 348:25

three 240:4,4 264:25 268:25 269:2,24 270:3 271:19,21 280: 20 283:2 311:23,25 318:8 330: 20 337:12 351:4 352:5 370:16 377:24 378:23 379:2

throughout 387:13

throwing 275:5 277:1

thumb 337:23

Thursday 395:1

tied 381:13

tihnk 372:6

TIME 234:15 238:1,5,18 239:7, 7,9 243:22 253:11 266:19 268: 8 271:13 290:14,14,16,20 304:

14 305:21,22,25 306:11 337:9 360:8 364:16 367:10 368:3,11 369:5,7 372:12 376:3 383:18 384:9 388:20 389:3

times 245:4 270:6 299:7 312:5 330:20 392:24

today 265:14 358:4 383:13 392:16

together 321:15 377:24

told 281:1

toll 239:21 241:25 242:17 243: 24 244:18 245:1,13,13,18 247: 7,13 248:4,15,19 249:10 250: 19,23 251:4,14 254:7,12,16,22, 23,25 255:7 256:2,3,14 260:13 263:13,14,18,21 285:6 287:19 296:25 297:5 298:13 301:7 309:15,15,21 312:12,24,24 313:3 314:5,6,7,8,9,13,14,25 315:3,5,7,13,14,15,16,18 316: 5,6,13 363:24 380:25 381:12 383:5,6,9

Tom 312:9 318:21 348:17

took 244:14 261:9 262:15 274: 19 283:18 291:1,5 295:20 303: 1 312:4 343:18 354:11 367:9 389:10

top 310:5 326:25 327:5 334:18

topics 358:5

total 239:13 242:22,25 248:23 249:11,12,18 255:24 262:12,19 293:15 294:18 295:3 298:22 299:14,15,17 312:6 314:6 339: 14 340:6

touch 236:10 359:9

towards 235:24 248:2,4 255: 10 338:18 344:14 359:22 363: 19 382:8

tracks 309:1

tradeoff 356:24

tradeoffs 271:3 363:22

transition 259:4

treat 286:3

trends 236:12,14 237:11 240:7

tried 283:19

trouble 280:17

true 250:24 255:8,17,19,21 256:20 259:14 260:13,13 276: 20 277:2 278:7 291:19 315:21 321:5 330:18 340:2 350:10 351:9 366:22 374:8 382:3

truncated 326:22 327:2

truncation 327:2

truth 276:25 286:20

try 235:7 236:6 250:8,12 259: 21 266:6 283:25 296:23 314:5, 6 315:9 316:5 323:5 373:7 384: 2 393:4

trying 264:22,23 280:1 283:17, 21 285:5 293:3 301:9 309:8 333:4 371:17

turn 235:21 236:7,13,19 241: 17 260:16 270:15 277:4 283:25 335:20 359:21

turned 339:8,9

Turning 247:6 308:14

turns 236:25 261:24 262:3 272:8

TV 321:13,14 328:18 330:3,5, 17

twice 247:13

two 236:4 238:7 243:9,12,18 252:24 253:16 257:24 268:9 269:20 272:18,19,20 273:6,11 274:19 275:2 284:7,7 299:6,12 314:19 319:13 321:15 322:12 327:23 333:23 337:13 341:14 346:16 352:11,19 358:4 370: 15,20 373:19 376:23 377:23 378:8 380:9

type 265:17 271:22 305:22 380:12 393:12

types 317:10 344:18 358:7,13,

18,19