UNITED STATES
FEDERAL COMMUNICATIONS COMMISSION

In re of:)
FEDERAL COMMUNICATIONS COMMISSION)
)

Public Hearing for 7th Annual CMRS
Competition Report

Pages: 1 through 121

Place: Washington, D.C.

Date: February 28, 2002

HERITAGE REPORTING CORPORATION
Official Reporters
1220 L Street, N.W., Suite 600
Washington, D.C. 20005-4018
(202) 628-4888
hrc@concentric.net

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In Re :)
)
FEDERAL COMMUNICATIONS COMMISSION)
)
Public Hearing for 7th Annual CMRS Competition Report

Room 303
445 12th Street
Washington, D.C.

Thursday,
February 28, 2002

The parties met, pursuant to the notice of the Commission, at 1:00 p.m.

BEFORE: RACHEL KAZAN
Presiding Official

Branch Chief

APPEARANCES:

On behalf of Name of FCC:

JIM SCHLICHTING, Deputy Chief
DAVID FURTH, Senior Legal Advisor
CINDI SCHIEBER, Economist
Federal Communications Commission
Room 303
445 12th Street
Washington, D.C.

Panelist Appearances:

ROBERT ROCHE, Vice President for Policy
and Research
Cellular Telecommunications
and Internet Association

CHRIS MURRAY, Telecommunications Fellow
Consumers Union

Panelist Appearances: (cont'd)

GREG ROSSTON,	Deputy Director and Research Fellow Stanford Institute for Economic Policy and Research
MICHAEL REESE,	Economist Bureau of Labor Statistics
DAN GINSBURG,	Supervisory Economist Bureau of Labor Statistics
ADAM GUY,	Senior Analyst Mobile Wireless Research, The Strategis Group
CHARLES MAHLA,	Senior Economist Econ One
KEN JOHNSON,	Director Legislative & Regulatory, Rural Telecommunications Group
TERRY ADDINGTON	President Rural Cellular Association
DOUG STEPHENS,	Interim Chief Operating Officer and Vice President for the Central Region Dobson Communications Corp.
MARK RUBIN	Director of Federal Government Affairs Western Wireless Corporation

Hearing Began: 1:00 p.m. Hearing Ended: 4:30 p.m.

P R O C E E D I N G S

(1:00 p.m.)

MS. KAZAN: Hello, I'd like to welcome you to today's public forum on data gathering for the competition report. Before we start, I just want to do a couple of housekeeping things. One of which is my favorite announcement at the FCC, which is, if you have cell phone or a pager, could you please turn it off in this room so it won't disturb anybody.

The forum is structured so we'll have three panels. What we'd like to do is, each of the panelist will be giving you short presentations. If we can hold all the questions to the end of the presentations, we'll have a Question & Answer period afterwards.

In the middle of the room, there is a microphone. So we'd like anybody who has questions from the audience if you could get up and stand in line over by the microphone, and we'll do those questions and answers after all the presentations.

Anybody who does get to ask questions or wants to make comments, we would love to get additional written comments from anybody. We encourage those. We also encourage you to e-mail them in because we're still working with the radiated mail, and it's taking us a very, very long time to get anything.

On the WTB website and on the satellite communications website there is actually an e-mail to send these into, which is CMRS7Report@FCC.gov. Any comments and all the written comments we receive, we'll also scan and it'll be on the WTB webpage so you can look at them.

Between each of the three panels, we're going to have a short break for about 10 minutes. We'd like to keep it down to the 10 minutes. Restrooms are right out that door, two hallways down.

The housekeeping being out of the way, I'd like to introduce Jim Schlichting. Unfortunately, Tom Sugrue couldn't be here today because he is out sick.

Jim Schlichting is the Wireless deputy bureau chief in charge of policy in the Commercial Wireless Division. Jim's been with the Commission since around 1985. He's been with the Wireless Bureau for almost three years. He has a unique perspective on telecommunications issues since he's worked both in wire line and the wireless world. Jim?

MR. SCHLICHTING: Thank you, Rachel. I thank you all for coming and also thank the experts and the speakers who have volunteered their time and come to speak before us. This is something that the Bureau is trying new this year in the context of the preparation of

the annual CMRS competition report.

As most of you know, the Wireless Bureau is the bureau charged with producing the draft annual commercial radio service competition report, which the Commission is charged by Section 332 of Act to preparing each year, analyzing competitive marketing conditions with respect to commercial, mobile radio services; including such questions of whether or not there is effective competition in the market.

Staff at the Bureau has worked hard for six years. Now working on our seventh, to produce this annual report. We're trying to think, each year, of ways in which we can improve the information to be included in this report because this report comes to be relied a lot, both by the Commission and by folks outside the Commission with regard to competitive conditions in the CMRS marketplace.

This forum is intended to help us try to determine whether there are other sources of information or new ways of analyzing the information that we do collect in the production of the upcoming annual CMRS competition report. We're particularly interested in under served areas on which we have not been able to get as much information as we would have liked in the past.

So in the context of this forum, we're hoping

that the speakers and our folks would address such questions as whether there are other useful techniques for analyzing data that we currently present in the CMRS competition report; whether there are other sources of public information that should be included and considered in the competition report; and how we ought to analyze the quality of the information -- what it tells us and the like.

We do have a special focus on how we can determine the amount of CMRS services available in rural or under served areas. A lot of the public information we have right now is focused, generally, on CMRS service provision served across the country. Some of the price indexes and the like that are prepared tend to be done, either on a nationwide basis or urban areas in particular.

In the rural areas, we're very interested in trying to figure out we can measure how markets are performing in those rural areas; the number of competitors that we have in the rural areas; the prices that are available for consumers; the service quality; the coverage; the features and options that are available to consumers; and the level of subscribership in rural areas.

So to the extent that this forum potentially

leads to helpful information or lead into trying to get more information in those areas, it would be well worthwhile of both the time of our people and the time of the folks who have come to the Commission to help us out with regard to that.

So with regard to that, I want to again thank the experts who have come to help us this afternoon. I will repeat Rachel in encouraging folks to provide any additional information after the forum, or if there are questions in the context of each of the panels to present them. We look forward to all of this as we work on the 7th Annual Commercial Radio Competition Report.

Thank you very much.

MS. KAZAN: I'd just like to take another two or three minutes just to highlight where we currently gather data so everybody is on the same page on this. Also, how we structured today's panels.

The first panel is suppose to be an overview panel, more or less. The second concentrates on data collection and analysis. And the third concentrates on world with world representatives. In terms of producing our annual wireless competition report, we rely on widely available public information and also, a series of subscriptions and reports, usually, free ones. Although, sometimes we might purchase information or reports.

The widely available information we use include such things as company FCC filings where we look at operating and financial data; company websites and their press release where we compile information regarding world out of service and general news information. We're constantly looking at telecommunications, financial sites on the web, for example, we look at CTI site, including their daily news site.

We use our own sources. We do use ULS, the Universal Licensing System, where we'll look at build-out filings by PCS carriers and cellular license areas shown by the cellular licensees.

Examples of subscriptions and reports we use, we use Wall Street analysts reports. We're on the list for most of the major houses that also assist us in compiling the operating and financial data. We do pick up reports issued by the major telecommunications consulting firms. We have representatives here today from Strategis and Econ One.

We look at the different consulting company reports for our market sector estimates, operating financial data, and we also look at them often for forecasts. We also have reports issued by the trade associations. Of course, we look at the periodicals, such as RCR, Wireless Week, TR Daily and Com Daily.

That's the basic places. We do have copies of the previous two years competition reports in the back of the room, if anyone would like to pick them up. Also, if you look in the appendices is where we do all of the heavy-duty data gathering and sources.

With this overview of what we collect, I'd to introduce our two moderators for the day -- David Furth, who is the senior legal advisor in the Wireless Telecommunications Bureau will moderate the second panel. And Cindi Schieber, who's an economist in the Auctions and Industry Analysis Division, will moderate the first and third panels.

Cindi, you want to introduce your speakers?

MS. SCHIEBER: We have three speakers on the first panel today, which I want to introduce. Our first speaker is Dr. Robert Roche. Dr. Roche is Vice President for Policy and Research at the Cellular Telecommunications and Internet Association, where he's head CTIA's Research Department since January of 1993. He's responsible for administering CTIA surveys and providing research findings and background information about the industry to the media, industry analyst representatives of the government agencies and foreign governments and businesses.

He co-authors CTIA's comprehensive semi-annual

report on the U.S. wireless industry and the new CTIA insight series. He's going to highlight the data gathered from the semi-annual survey, and also describe the process by which the data is gathered.

Our second speaker is Chris Murray. Mr. Murray is the internet and telecommunications counsel for Consumers Union Washington office. Consumers Union is the non-profit publisher of Consumer Reports magazine.

Before his position of counsel for Consumers Union, he was a Ford Foundation fellow working on broadband and other telecommunications issues for two years. Mr. Murray also worked on broadband issues with government relations firm Leslie Harris and Associates.

Mr. Murray will discuss the methodology used by Consumers Union to prepare its reports, and he also plans to address issues related to carrier self-reported data.

The final panel speaker is Dr. Greg Rosston. He's the Deputy Director of the Stanford Institute for Economic Policy Research, and he's a Research Fellow there as well as a visiting lecturer in Economics at Stanford. His research is focused on industrial organization, anti-trust and regulation. He's written numerous articles on competition in local telecommunications, implementation of the Telecom Act of 1996, Auctions and Spectrum policy.

As many of you probably already know, prior to joining the university, Dr. Rosston served as deputy chief economist at the FCC. Dr. Rosston is going to address issues related to government data gathering initiatives, including a confidentiality and compared data analysis in other industries.

And without further ado, Dr. Roche.

MR. ROCHE: Thank you very much. I'm going to focus principally on the method that's been used in generating CTIA's semi-annual survey results. And then, quickly go through a series of slides after that, that basically illustrate what that has derived or generated.

To explain, CTIA initiated a survey of the facilities-based wireless licensees back in January 1985. Since then, on a semi-annual basis, we have been soliciting the results from the operational wireless providers every six months. This has taken the form of the survey, which we've sent out to each facilities-based licensee for whom we have contact information.

We send out a request for the information as well as a list which indicates the markets that we understand they are the majority owners or operators of. Now the method that we use by this is to determine the actual operational carrier's response base. So, for example, if knowing that there are 2,150 operational

systems across the nation, we send out the list for each particular carrier -- United States, Cellular, Verizon, RFD Cellular. These responses come back.

The actual data survey responses go to a third-party accounting firm, which aggregates the data. The listing of the markets comes to CTIA, which are annotated to indicate whether or not there has been any change in the ownership or operation of these markets. If carriers acquire or divest markets, if they turn on markets, this goes into the mix. We're able to determine which companies and which systems have been reported for as well as which have not.

It's important in interpreting and understanding CTIA's data to know that we define these systems and markets consistent with the FCC's licensing system. The 734 cellular market areas with their two licenses each. The 493 BTAs with their four licenses each. Then the overlaying MTA markets.

We ask each responding company to report for the systems which they are, as I said, the majority owner or the managing partner. This way, we don't have to serially go out and try to collect data from each of the limited partners. We don't get partial data. And we also ensure that we don't get duplicative data. We know, for example, that AT&T responds for "x" markets. That

Dobson's Cellular responds for "y" markets. And that AT&T and Dobson, for example, do not both report for the markets for which they are in partnership.

If we can look to the slides now, the survey measures a set series of things. It looks to the number to the number of active revenue-generating subscribers. The revenues, which are generated by the services during the 6-month period, we solicit the cumulative capital investment, the average local monthly bill, direct carrier employment, usage measurements, by which I mean billable minute of use and billable calls.

(Slides shown.)

MR. ROCHE: There are a number of things, however, which the survey does not track. This next slide shows, for example, that we do not track the price per minute. We do not track the cost per gross ad. There are financial houses which track cost-per-gross ad. There are a series of companies which have tracked price information over time.

It's inappropriate for a trade association to do so. But we're aware that the Yankee Group has tracked, for example, a bundled price-per-minute. That Econ One has been calculating prices for average packages recently. Historically, Carol Hanson published a cellular price newsletter through October of 1991.

Subsequently, Paul Kagan Associates in Carmel, California also published a price index rate guide. All of these were generated, by review, to my knowledge, of the actual offerings of the operators.

It's something that we've never tracked. We've not tracked prices. We haven't tracked actual operator offering, such as the one-rate plans. We don't look to carrier-specific data. We're trying to assemble a portrait of the industry as a whole. And, therefore, we have this process by which the carriers submit data, under terms of confidentiality, to a third party accounting firm, which aggregates the data, destroys the underling submissions after generating the aggregate results. And no CTIA personnel, no persons other than the principles of the accounting firm see any carrier-specific data.

It's also important to know that when carriers submit this data, to the extent that they are multi-market operators who may operate MSAs and RSAs, MBTAs, they submit a single, consolidated response. We don't have separate RSA responses, MSAs responses and BTA responses from these operators. The data comes in, in an aggregate form. Nonetheless, the data which does come in can be used to provide series of benchmarks for the industry as a whole.

If we look to the next slide, for example, we can see that, in connection with our subscriber figures, we ask that company's report to us, their active revenue-generating subscriber base. We ask that they report this both at the beginning and the end of the survey period. That way we exclude from this employee phones, non-revenue-generating test phones and the like.

We also ask that these same companies report their digital subscribership, beginning and ending. We ask them to report the prepaid subscribership, beginning and ending; and gross ads and disconnects. This, in turn, allows us to determine an overall reported subscriber base for the industry, which the next slide shows.

By virtue of the fact that we have this check off system, we're also able to determine what percentage of the industry we've not heard from. We know which specific markets or licenses have not been reported for, we're able to look to third-party sources, either their FCC filings or analysts reports, which identify some specific carriers subscriber-base for some periods.

For others, we look to other analysts reports, which use non-public data to generate subscriber estimates for some companies. For the remaining small markets, we look to similarly sized and aged systems to

determine a surrogate penetration rate for, say, some particular set of RSAs. This allows us to generate, then, an estimated wireless subscriber base as the next slide shows.

Because we ask for this information cut in these different ways -- the total subscriber base and the prepaid and the digital base, we're actually able then to derive and track information about, for example, the transition of the marketplace from an all analog service through one in which that, as of June 2001, for example, 77 percent of the reported subscribers were digital. This is in the next slide.

Basically, you can look at that and see that in 1995 there were only just over a half million subscribers who were digital. Whereas, by the end of last year, the reported digital base was 85 million. It's important, again, to know what's in the survey and what qualifies within certain definitions. For example, the next slide talks about what is in total service revenues as we've tracked it.

Traditionally, total service revenues, which, again, we established as a definition back in January of 1985, was composed of monthly usage charges, monthly subscription charges, vertical services, if there were charges for three-way calling and the like. It excluded,

however, toll. At that time, most carriers did not offer it. And, indeed, some carriers could not offer it under the terms of the MFJ. I maybe one of the few people left here who actually remembers the MFJ from having been intimately connected with it in a previous existence with U.S. West and with AT&T during the divestiture case.

Nonetheless, by virtue of that, toll revenues were traditionally excluded from this total service revenue category. We have, since, begun tracking toll revenues as a separate line item. Thus, it's possible for us to say this is a total service revenue and here's a grand total service revenue figure.

The next slide shows, actually, the graphic presentation of the traditional definition of the total service revenues that have been generated on a six-month basis. Again, it's important to know what's in and what's out of these are, indeed, service revenues. Therefore, they're exclusive of the costs of equipment, whether it's purchase, lease, repair, installation. Those are completely outside of this. Also, excluded from the revenues which we track were the end user charges, which we track, are such things as taxes, the excess tax, any pass through surcharges or the like. It's purely service-related revenues that are at issue here.

Again, we cut this information several ways. Thus, we're able to say that there were $30.9 billion in total service revenues for the first six months of 2000, as the next slide shows. There was another figure, roughly $1.9 billion of that $30.9 million that was roaming revenues. And, sequentially, we're able to go through these other cuts -- how much was prepaid and how much was toll.

We don't, however, break it down further granually to say, okay, this is what the average activation fee -- anything along those lines. We do, however, calculate the average local monthly bill as a surrogate for ARUP. Again, this is based upon the local service revenues and the average subscribership for that period. Obviously, being local, it excludes roaming, toll and as I said before, the equipment and taxes and other surcharges.

There are other measures of ARPU which, however you may define it, may include roaming by some calculations or toll. We've established, historically, January 1985, this definition. It is what we've consistently reported over time. We have included in the indexes report that we now publish, a series of other definition, using the data that has been provided to us by the responding companies.

Knowing what's in or out of this is important for understanding the information over time. It's also important for understanding ARPU as compared between carriers. We don't do such comparison, but we lay down benchmarks that people can use. All I ask is that people understand what is actually in the definitions of the data that we provide.

We can flip through the next couple of slides fairly quickly. Here's the actual graphic representation of the average local monthly bill. Beyond that, we track things as cumulative capital investment. This is investment in the systems used to provide the service. We actually capture this in three different ways. We ask for a total capital investment, network and non-network capital investment. This is exclusive of the costs of licenses however they were acquired, whether through the public auctions, private auctions or other transactions.

It also excludes intangibles. But it does help us portray the investment in the industry overall as the next slide will show. Basically, 99 plus billion dollars as of June of last year.

We also track the actual number of cell sites that are operational as of the end of the period of time so you can see what the actual build out has been in terms of the networks. We don't have actual geographic

coverage of the Unite States, but we do collect the data to indicate there are "x" number of cell sites. We went from 17,000 cells sites in 1995, for example, up to something on the order of 114,000, and a handful, as of June of last year.

Using this data, as the next slide can show, we can actually break the data against each other so you can see what the relative trends have been in terms of subscriber additions, reported subscriber and the reported cell sites. You can see where there have been discontinuities and you can use this to actually calculate an average for the industry as to subscribers per cell site, which is roughly 1100 at this point.

We can flip through the next couple of slides as well. As I said, we track the usage. The average minutes of use can be calculated by the reported subscriber figures and the reported minutes figures. This allows you to say basically, we've gone from 122 minutes a month in June of '97 to 320 minutes a month for June of 2001. This also allows us, as this graphic shows, how the industry overall has grown from 13.6 billion minutes for all of 1992 to a total of 259 billion as of the Year 2000.

For the first half of 2001, we were already up at 197 billion minutes. This will be on the next slide

where you can see the tracking of the actual subscribers and the minutes that have been reported to us. Beyond this, we also track not only the subscriptions, but the direct carrier employment for these companies. We don't track the non-facilities based companies. We don't track the number of agents for the companies, but we do look for direct carrier employment. This can lend itself to the calculation of a number of related ratios, whether it's subscribers per employee, revenue per employee or the like. The next graphic just illustrates the recorded employment number.

Using this data, though, since January 1985, we've assembled a fairly good data series. Typically, we've captured 85 percent of the operational systems. I think that the high that we achieved was 92 percent. Sometimes carriers or their systems drop out as a result of transactions, but we seek to recapture these.

We seek to build a consistent and reliable data set that people can use for analysis, whether it's the FCC, the carriers themselves or the financial community. We believe that getting the best data out there is the best way to generate a whole and accurate picture of the industry.

Thank you.

MR. MURRAY: Thank you for having me here today.

I'll speak to you from two points of distinct disadvantage. The first is, by being the youngest member of the panel, by both inference and probably fact, I have least knowledge of anyone here. The second is I don't have Power Point slides. So I'll try to keep you awake by being a little provocative.

As was mentioned, I work for Consumers Union, the people who publish Consumer Reports magazine. We've been very interested in wireless services now -- for more than a few years. The basic mission at Consumer's Union is a simple one. We test products. We provide the best information to consumers that we possibly can. That, we believe, helps the marketplace to work better.

The FCC's congressional mandate here to determine whether there is meaningful competition in the wireless marketplace is truly a Herculean assignment. It's an enormous task and I commend the Commission for the job that it's been doing so far.

Nonetheless, I'd like to take a few minutes and ask the question, are there ways we could be methodologically more rigorous as we do the annual competition report. I'd like to do so by examining some of the methods that we use at Consumer's Union to test products.

We have a sort of methodological bible that we

use. Let me just share a couple of examples from that. First, whenever possible, we try to gather our own data. We try not to rely on data provided by industry. If industry sends us a product, we send it back. Sometimes it's not possible to simply gather independent data, and we do have to rely on industry data. When we do so, we always try to verify it independently.

If we're looking at cell phones, rather than just whip out the manufacturer's spec sheet and print that to our subscribers, we get out the calibers. We test the size of the screen. We test the length of battery life. If we're testing cordless phones, we actually do range measurements. This is obviously an expensive process. It's very labor-intensive, but we also believe it's the best way to get accurate data.

Second, we always try to get as detailed data as we possibly can. If we're looking at automobiles, we gather 150 to 200 pieces of information on each car before we even get it onto the track.

Third, we test a wide variety of products and services in a wide variety of markets using a wide variety of methods. If we're looking at customer satisfaction for, say, cable television and satellite services, we go to rural markets. We go to urban markets. We look at people with high income. We look at

people with lower incomes and we try to account for the ability of individual or companies to give us self-serving claims.

If we ask questions of people, we'll try and ask a question in several different ways. We don't necessarily look at the sort of total picture of the answer first. We look at the nuances of their answers first. Then we look at the whole picture of the data and try to discount any self-serving claims.

Fourth, whenever possible, we try to talk directly to consumers. If we're testing hotels, for instances, and doing a product on hotel services, we don't necessarily call up the 10 leading hotel chains in the country and say, could you tell us, please, how you serve your subscribers? Are you guys doing a good job. We go to the people who have been to those hotels, and we ask them a lot of detail questions about their stay. We try to account for what mood they might have been in that day. If there was any other events going on in their lives. We really try to drill down into what's really going on there.

If we're comparing, say, hotels, again, we wouldn't do the Ritz Carlton and the Motel 6 in the same report. We would do one report for business travelers. We would do one report for families and people who are

not going to spend $500 a night.

The fifth and final key issue is, I would like to say, that when we present the results of our studies, we always try to say where the data are from and what the data are not. If we're looking at the frequency of repair of a particular product, we note that it's for brand and not -- rather that it's for model -- I had it right the first time. It's for brand and not model. We just feel that it's critical to try and put into perspective the limits of the data that we have.

With those principles in mind, I'll take a quick look at how I think the report might be able to be a little bit more methodologically incisive. The first, and one of the most important things I'd like to suggest, is that I don't think the Commission can rely on the presence of multiple carriers in a part of a market as a proxy for competition in that marketplace.

You can't say that because there are three or five or six carriers in a county that everyone in that county has access to three or five or six carriers. If we did that same analysis for cable television, it would give us obvious results. If you look at most counties in the nation, there are probably two or three different cable providers. Yet, that's not reality. We know that for most people, they have one cable provider. Less than

one percent of all Americans have choice in cable television services.

I'm not suggesting that the wireless marketplace is as concentrated as cable. It's not. I also see where that analogy falls down because the signal of a cable wire, if you will, is limited to that cable wire. It doesn't extend beyond that. You can't get it on wireless frequencies. But, nonetheless, I think the analogy does make the point that you just can't look at competition in a part of a county and say there is competition for all the consumers in that county.

Second, the report seems to assume that since usage is going up, that is a good indicator of competition. We should remember that, under AT&T, pre-MFJ, it was a monopoly and usage consistently went up. Usage increase doesn't necessarily indicate competition.

Third, I would like to see the report look at coverage in a more granule way in particular markets. For instance, if we really wanted to look at who's providing coverage, we could do what the cellular industry does. We could hire TELEFIA to do drive tests. They look at a road route that covers 90 percent of a particular MSA and they'll drive it and they'll see where there is dropped calls. They'll do some voice quality measurements, et cetera.

The Commission could hire TELEFIA to do those surveys, or even better, the Commission could do that itself. It could, perhaps, get Congress to get the National Research Council to do this. At Consumer Reports, we did a cost study to actually try and do this ourselves because we thought it would be incredibly valuable information to consumers.

We determined that with a full-time staff of about 10 with three or four people that were willing to live in permanent roam mode, that we could do that. It's not a billions of dollars proposition. It's not a millions of dollars proposition, and it would be incredibly incisive and valuable to look at these markets on the basis of whose competing where.

As I indicated, I think the report could drill a little bit deeper into competition by examining the differences between business and residential users. Nextel may have some very valuable services for, say, their instance group conferencing functions, even if it's a little bit expensive. Leap Wireless may have some outstanding flat rate local billing plans, but it's sort of a laughable proposition to suggest that these two services are competing against each other for the same consumers in the same marketplaces.

As I was saying, I think that the meaningful

competition part of the congressional mandate is very important. We're not suppose to look at just competition. We need to look at where that competition is meaningful.

Another example where I think the report could parse the data a little bit more finely is where it dismisses a rise in average revenue per unit of 15 percent over the last two years as attributable to a rise of usable minutes. That may be correct, and I'm not saying that's not correct. I'm just saying that we don't really necessarily know that. I don't think we've parsed it finely enough to tell if that's correct.

There is one study that's cited for that proposition. But, again, it's an investment analyst survey. We don't necessarily know what their interest may be in the matter. I would suggest that it would be very useful, for examining meaningful competition, if the Commission took a stab at establishing a definition of what a usable minute is. I would suggest that is a minute, for me as a consumer, somewhere between 8:00 a.m. and 9:00 p.m. at night that covers me if I'm at home and I'm at work.

I would love for the competition report to see what prices are doing in that particular nitch. We've seen that, perhaps, this rise in ARPU is attributable to

that ever-expanding bucket of peak minutes, or rather the ever-expanding definition of peak minutes.

We know that the carriers recently extended peak from 8:00 o'clock to 9:00 o'clock, which might use 6000 per month minute buckets. It maybe useful to me if I'm an insomniac with a lot of friends in Tagekastan (phonetic), but I don't know if they're an accurate measure of what's going on.

I think that, and pardon me if I do one quick side bar on this, but way in which the minutes expanded sort of all at once with all the carriers from 8:00 p.m. to 9:00 p.m. was interesting. I know I'm not suppose to do policy here, but the last time I checked, a lot of -- a handful of producers making similar decisions in the marketplace all at once, I thought I remember -- I'm not an economist. I'll have to defer to our economist here, but I thought was Oligopula (phonetic) behavior. I digress.

Whenever possible, again, to reiterate, I think the Commission should not rely on data from industry. It should gather data independently as much as possible. I appreciate that the wireless industry does have the best data out there, but we need to account for the obvious incentives on behalf of industry to paint an overly rosy, overly competitive picture.

Plus, if we're going to rely on industry data, let's get the really good stuff. Let's get the coverage study that they're doing to find holes in their networks, et cetera.

I'll skip a bit. Again, I don't want to suggest that these data are wrong. I don't want to suggest that the Commission as done a woefully inadequate job here. I would just like to suggest that we need to a better job of accounting for incentives.

The final thing I would like to say is that the report needs to establish a baseline. It needs to establish a quantifiable, numerical threshold for where competition ends. One job of the report is to establish the current state of the marketplace, but I think another very important job is to say is there a point at which this market is no longer competitive at which it might be appropriate for the Commission to intervene at some level. I think we need to do that with HHI data.

I know that, traditionally, that hasn't been used for reason that I don't necessarily understand the nuances of. I'm not even sure whether it's worst to rely on bad HHI data, as I think the Commission did in the Spectrum Cap proceeding, where we used Spectrum allocation as a proxy for market share when that put Next Way and Verizon on parity in many or even most markets.

I think we can see that there are some holes in that. But, nonetheless, I think we should try to use HHIs and try to do a very granule assessment of this marketplace.

To sum up, either the Commission should figure out a way to do this. It should ask Congress to commission the National Research Council to do this or we should admit that there are some inadequacies in the data. That we haven't necessarily painted a wide enough, diverse enough picture.

The report is, again, not just about assessing the current state of competition, but it's about laying down a baseline for which we can say at certain point, okay, maybe this has become too consolidated. I would humbly suggest that the methodology that we've used could be a bit more finely tuned and, perhaps, using some of the techniques that Consumer Report uses and that other folks use might be helpful.

As I said, though, this is a Herculean task and I really do commend the Commission for the tremendous job that it's done so far.

Thank you.

MR. ROSSTON: I come at this from a somewhat different background as an academic research trying to think about what data would be useful for me to characterize an industry and think about what's going on.

The previous two speakers, one talked about a great wealth of industry data that they have, and the second said the FCC should gather its own data. I think they're both right. I think this is -- in reading the competition report, this is something where there could be more data brought to bear on issues and setting up a framework for analysis of current and future questions. How the FCC thinks about it should -- the FCC should take a step back and say, what are the kinds of questions that we want to answer and that should dictate the kind of data that we should be, either getting from industry or gathering ourselves in trying to figure out how we go about this.

So what I wanted to do was to talk a little bit about data, and then, think about a framework about this. Gathering data is a big task, and the FCC has done a lot of getting industry data. I found, in thinking about this, one of the things you want, if you're going to take a set of data, is you want a consistent set of data that you can know exactly what's going into it, exactly how it's done, and understand all the frameworks of it and also be able to rely on it.

One of the interesting quotes from the Competition Report was talking about different studies. They said,

"Because these studies use different methodologies in mark-up samples, their findings vary and are comparable in only the broadest terms." Well, that makes it difficult for the FCC to make findings about things if these things are not comparable and not consistent across time. It sort of says, well, maybe some questions we can answer with a data set that is consistent over time. But others, maybe the FCC should actually proactively go ahead and gather its own data and try and figure it out.

For example, I noticed in the CTIA slides, there was a point where the average local bill has been coming down, coming down, and then kicked up in the last two or three data points. One argument was it an increasing number of minutes. Another maybe that, well, this local bill may include a lot of the digital one rate plans or something like that. Understanding exactly what goes into that is probably pretty important to the ability to use that data. So trying to think about how you get a consistent set of data is really important.

As a researcher, I loved to have the FCC go out and gather a lot of data. In thinking about what kinds of data to gather, I talked to some other people who studied different industries, and wanted to find out what happens in other industries. I thought that might be useful for thinking about what a regulatory agency could

do. I'm not saying "should" yet, but to think about data gathering.

When I was at the FCC, we started this competition report and the industry was not happy about the FCC doing this survey or making reports to the FCC of data. When airlines were deregulated, well, they were deregulated, but they still report a huge about of information to the Department of Transportation.

The Department of Transportation has data on every flight on a monthly basis as to the quantity of seats, the revenue of the seats on each flight for every city pair. They also require the airlines to provide a 10 percent sample of the tickets. So you know 10 percent of all the tickets that come in, you can go, as a researcher, or as the Department of Transportation, analyzing the merger in airline has a huge amount of data. They know 10 percent of the people who flew from Boston to Washington, and 10 percent of the people who flew from Boston to Chicago. They have their tickets. They know the fares. They know exactly what was paid, where these people went and how they -- with 10 percent sampling, you're pretty confident in what's going on. So they gather a lot of data.

Electricity -- the electricity provider generators are being deregulated. Probably to

California's chagrin, I think, but they've been deregulated. They still have to report their fuel usage, their generation, their outages, other data on what they do; but they still report this. So there is a sort of precedent and places for other regulatory agencies overseeing relatively somewhat deregulated industries that they actually gather data.

From what I could see, in reading through the FCC's Competition Report, the actual data that is reported to the FCC seems to me to be limited to data that was part of the local competition report, not part of the wireless competition report. I assume that there will be other data that could be teased out of the universal service filings as well because carriers are required to report for universal service fees.

There seems to me that, in my dream world as an economist, as a researcher, I would love to have data that is much more granule than what CTIA reports. There is a lot of benefit to the information that is already out there that everybody provides, and you can do a lot with it. There's just a lot more that you could do if you had data on a market-by-market basis.

I realize when I say "market-by-market basis," I'm getting away from the problem of is a market an MSA, an MTA, a county or whatever it is; but you still would

like to know -- you're going to hear later on from Econ One about pricing data that they do for, I think, 25 markets, where they collect and then they try and figure out what's happened to prices for various numbers of minutes in different markets and how that change is on a month-to-month basis. This is great, but it's limited to 25 markets. It's useful but it also doesn't give quantity information. You'd like to know what people are buying if you were going to do a real supply/demand study and try and figure out what's going on to be able to compare a cost market.

One might think what is the FCC going to use this information for? Well, I would imagine it would be removal of the Spectrum Cap that there would be mergers that the FCC has to evaluate. It maybe possible to do it without this data, but with this kind of data, the FCC might be able to build a time series and cross-sectional data set that could be used to evaluate the impact of mergers in different markets and understand what's going on.

So there are other reasons that the FCC may want to gather data on wireless. For example, I've long advocated a much more hands-off approach to Spectrum policy. But the problem is, is the FCC is not doing that, and unlikely to do that for a long time. There are

still going to be satellite guys who want Spectrum or there are going to be rules about -- the FCC has to set initial rules on interference and understand what's going on.

Well, that essentially forces the Commission to make allocation decisions. Having data to know what the value of different services would help the Commission figure out some of these policy decisions. Should it allocate more Spectrum to satellites or less.

Now I've sort of talked a lot about the benefits of collecting data. There are costs to collecting data as well, and that's an important thing for the FCC to consider. We heard about the costs of having people actually go out and physically collect the data on coverage. Well, that's just one cost. There is the direct costs of actually having the companies gather and report that data. We've seen that for 85 percent of the companies, at least in aggregated form, they already present some of the data for CTIA's survey.

This is something the FCC should figure out. Does it costs a lot for the industry to gather this data on quantities, prices, and other things that has to be reported. Also, questions about confidentiality and whether this would be or could be used anti-competitively. There was lots of talk about tariffs.

MCI wanted to continue filing tariffs on long distance. Some people said, well, wait a minute, though, the use of filing tariffs on long distance has allowed tactic collusion because you're basically announcing your prices to your competitors and enforcement mechanisms. Is this going to be a problem? That could be a possible cost.

So the question you have to understand, what can it do to keep data confidential and should it keep data confidential and use it internally. And if it does keep it confidential, can it use it in making decisions or not. There is also a philosophical cost of this, which is, is this a deregulated industry and are we collecting data on a deregulated industry and is that the position of the government?

In order to answer these questions, we need to find out what are these costs and understand how this data might be used. So what I would hope is that the FCC would try to figure out how they could put together a clear and consistent data set on relevant variables like prices, quantities that could be used to inform these decisions that the FCC is going to have to make in the future.

I last just wanted to address the rural area question a little bit. One of the things is Econ One does the top 25 markets and it's in their interest to do

something that looks at a large fraction of subscribers. Strategis Group and others probably also focus on where the money is, where the subscribers are. So the FCC may have to be more proactive in doing things in rural areas if they want to get data.

On the other hand, they also, in terms of burdens on small, rural areas may be served disproportionately by small companies, and the burden on the companies of providing data may be great as well. So the Commission should worry about the costs as well. So I think I'll end on that note.

MS. KAZAN: Thank you very much. We appreciate the information you've provided.

If we don't have anybody standing, waiting to ask a question, I'd think I'd at least like to start.

Chris, you'd mentioned this idea of getting out and collecting the data yourself, driving the routes, that sort of idea, which, of course, is time-consuming, very costly. But I'd also be interested in some understanding -- I know this gets to what are we trying to collect, but what do you consider when you try and determine what routes to even go out to? How do you get a handle around that to make it a manageable beginning? I know some of that gets to Greg, what do you want to get?

MR. MURRAY: Well, I would think that by using the same sort of sampling techniques that you would use on any data set, you could do the same thing. You could do it by sample zip codes. You don't necessarily need to determine in every market across the country is there competition. But if we took a solid sampling of rural markets, urban markets, suburban markets and saw how are they assessed. That there are three or five or six carriers in most of these markets is standing up to the truth test.

MR. ROSSTON: Also, in answering in that question, it depends on what your goal is. Is your goal to find out whether people have coverage or whether people have effective competition? And it maybe the case that my house only has one wireless carrier that provides service to my house. But because I live near an area where there are lots of wireless competition and I buy my service from them, it could be I actually don't pay a higher price.

But, on the other hand, there maybe less competition actually at another cell site. So I may get blocked more. So it depends on what you're thinking about in terms of how do you decide where to go and what effect it is.

MR. ROCHE: I think that there is one thing that

should be kept in mind when doing this, which is, though we're awfully accustom to how quickly things have grown, the wireless industry is only, in fact, 18 years old. And that, during that time frame, we've gone from having to, indeed, nine licenses per market. I'm not saying there are nine active licensees in every market, but that, in fact, we're in the period of build out and growth. That we're actually really at the beginnings of things.

If you look at the wire line industry, at this same point in time, really they were just reaching the end of the patent monologue. They had less than half a percent penetration of the entire country. At this point, we're at 45 percent penetration of the population.

Measures of competition, whether it's meaningful competition, effective competition, can't really be reduced to a strict number. You can't use something like an HHI as a thermometer to take a temperature and say, aha, you're below effective competition. You're just on the verge of meaningful competition.

This really is something that's a moving target. It's an evolving target, not only among the providers, but in the minds of the public that are adopting these services and using these services. They're looking at these, not just as competition within the wireless

industry, but competition with wireless precedent, parent, the wire line industry. As we saw a couple of weeks ago, 18 percent of wireless users see their wireless phone as being their primary phone.

Again, we're in an evolving market. We need to be careful the measures we develop, which -- I have an academic background on my own. Things I would love to know in the academic sense, they're not appropriate for me to know in my role at a trade association. But also, they can sometimes threaten to bound and limit the ways in which the industry may develop and competitive benefits actually be experienced by consumers. We need to be careful that how we define things don't limit our choices.

AUDIENCE: If the three of you were doing an academic paper for a peer review journal on the question of what the nature of competition in the CMRS market is, what information, other than what we have in the CMRS report would you feel is absolutely necessary before you would put your repetition before a peer review journal? Not thinking about resources at this time because I think that's kind of a separate question.

If we have information, do you think aggregated information, self-reported data, information about total revenue, total subscribers, information about carrier

employment or carrier revenue is enough to add up to a conclusion that we have the data that's necessary to say in an academic peer review paper that there is competition or there is not competition or that we just don't have enough information to know either way?

MR. ROCHE: Well, I'm not sure whether I want to defer to the current academic. One of the things I was going to suggest is these are all components, whether we're talking about the carrier reported data, the trade association gathered data, the information from the third party consultants and the like, the actual carrier data that's published on their websites -- for example, this folder here is just some of the rural carriers websites that I just started to surf through in the last couple of days.

I think all of these things could probably be combined if I were to do something like a structure-conduct performance review in a paper. They can all go together to form sort of a mosaic illustrating the structure and conduct and performance of the wireless industry.

It's something, again, and I hate to use the term "evolving," but it's something we need to recognize as dynamic; and is created and needs to be constantly recreated.

MR. MURRAY: Maybe I'll just follow up on that point. I absolutely agree that this is a dynamic marketplace. The limitation of the report is it's just a snapshot of this point in history. But, nonetheless, it's really important for us to remember the ways in which this report is used in policy-making decision.

It's relied on, for instance, in the Spectrum Cap decision, basically, the combination of the HHIs they did and indications from this report that this is a competitive marketplace allowed us to get rid of Spectrum Caps, which at Consumer's Union, we think, were a very important component of allowing this marketplace to develop as it did in a vigorously competitive way. The way in which we allocated licenses ensured that there were at least four players in every market, or theoretically could be.

I guess, for the question of what I would put into a peer reviewed article, to determine that, I would definitely I will defer to the academic on that one. I guess my point is I don't think we're quite there yet with the limited, I think, not nuanced cut we've taken at pricing, for instance. Well, I'll just defer to Greg.

MR. ROSSTON: I think there is a different standard for academic reviews and things -- for academic papers, obviously. In top economic journals, they look

for a lot more for techniques and things. But I think there's a lot of data available that indicates competition. But if I were doing something, I would love to have more data to be more sure about what you could do with this.

When I did research on my dissertation on the cellular industry, I went and actually gathered market-by-market data on prices and quantities of subscribers. I think that helped a lot in trying to understand what was going on in the cellular industry thing. If I were writing something, that's the kind of information I would try to get if I were trying to write an academic article on this, trying to look at how markets differ.

It's, for example, possible that you could see are there differences where there are markets with three carriers versus five carriers. Those kinds of things to see what the differences might make with the different carriers, trying to figure out -- it's kind of tough to use something like a learner index in an industry like this because you're going to have positive price cost margins in this industry because you have fixed costs that you have to recover and keep investing in, in this industry.

But those are the kinds of data you would like to gather in order to make a really strong conclusion.

But given what you have, I think you can still look at some of the structure and data on customer turn, on pricing and make some inferences that may not make it into American Economic Review, but might allow you to get something that would be in a peer reviewed academic journal.

MS. KAZAN: I think we're about out of time. We can do some questions certainly during the break. I want to thank all the speakers for coming, and we'll come back at about 2:20 p.m.

(Whereupon, a recess was taken at 2:10)

MR. FURTH: Let me start with our second panel. I'm David Furth. I'm the senior legal advisor in the Wireless Bureau. This panel will focus on industry research and data analysis. We're going to be looking at some of the ways that government and industry compile data about the wireless market and the conclusions that can and, perhaps, more importantly, cannot always be drawn from that data.

As a famous writer once said, "There are lie, damn lies and statistics." Hopefully, we'll be able to cut through some of the fog that often surrounds the use of statistics in policy debates and generate some discussion about the value of the data that we collect, how to make the best use of that data in a policy arena

and whether there is other data collection and analysis that we should be thinking about. I think this is a good follow on from the last panel, which really started to bring those issues into relief.

On this panel, we've brought together a diverse group of professionals who spend their time looking at the wireless industry. First, two gentlemen from the Bureau of Labor Statistics at the Department of Labor, Dan Ginsberg and Mike Reese. Dan is a supervisory economist at the Bureau. He's worked there for 40 years. He has a business degree from the Boston University College of Business Administration, which I gather is now called the School of Management. That's what it was called back then.

Mike is also an economist and analyst at BLS. He's been there 16 years. What they're going to talk about is the process by which BLS calculates the consumer price index for wireless services, which is something they've been doing for the last couple of years.

Then we have Adam Guy from the Strategis Group. Adam is a senior analyst for Mobile Wireless Research at the Strategis Group. He graduated from the University of North Carolina. He has an MBA from American University. He's worked on numerous projects relating to wireless, including studies of the team wireless market and Next

Generation mobile products and services.

Finally, we have Chip Mahla, who has joined us from California. He's a Ph.D. economist. I don't know whether I should call him Chip or Dr. Mahla. He works at Econ One Research in Sacramento. He's also done extensive market analysis of the wireless industry. He has a BA from Lafayette College, and his Ph.D. in Economics is from UNC Chapel Hill.

He is well-known monthly surveys that he and Econ One conduct of over 2000 wireless service plans that are offered in selected markets across the United States.

As with the last panel, I'm going to ask each of our panelist to talk in turn. And then, at the end, we'll have some time for questions.

So I'll turn it over to Dan and Mike.

MR. REESE: Thank you. I'm Mike. Dan, my supervisor, over at the Consumer Price Index, basically, we want to go into how we are pricing wireless here. I want to start this out by prefacing we will try to be as kind to you as possible today. Both of us have been introduced at past seminars as the bald brothers. We will try not to bend over too far because of the lights. I really don't want to blind anybody.

Basically, in the Consumer Price Index, we have been pricing the cellular telephone component for only a

little over four years. The beginning of 1998 is the beginning of the pricing of this CPI for cellular services. We also include in the CPI the pricing of long distance services and the pricing of local telephone services. These have been in the CPI for a much longer period of time.

If we can put our very first slide on, I want to go ahead. The first slides gives an internet address. Many people do not know that we have an internet address where data is available for the CPI. We're frequently getting phone callers. So I want to leave this slide up in case you want to copy this down. It's also on the back table.

This is the address that has data from the Consumer Price Index. It is part of an overall Bureau of Labor strategic website. This is going to have a good deal of information on the CPI. Not only for telephone wireless services, but it's going to have it for just about any kind of item in the CPI, whether it be for foods, durables, non-durables, apparel. We're going to have a lot of information, a lot of data can be gathered from this site. A lot of the numbers that we put out maybe obtained from this site.

Specifically, I want to point people to the very bottom of the site. When they get onto this site,

they're going to find some information, which we refer to as fact sheets. There are 17 fact sheets in total, and one of these is entitled "How BLS measures price change in the consumer price index for cellular services." This is information that anybody can gather. You do not need to be an association member. You do not have to pay for this information. This is free to the general public. This particular documentation is about two pages long and it will give a very brief synopsis of how we price these cellular services in the Consumer Price Index.

Basically, we price the CPI using information that is gathered for sample selection from right here at Federal Communications Commission. And Dan is going to go into that a little bit further later on.

The data that we publish for cellular services is published on a national basis. We do not publish actually for any of the telephone components, whether it be local, long distance or cellular. We do not publish this data on a state or city or regional basis. In the CPI, some of you may have heard we do have information that we publish for average prices. However, cellular services is not a part of this. Therefore, any data you would gain would be on a monthly basis and it's only national data.

The data itself is going to be available from

that website. Not everything is going to be available there. If you do find information, or you do want information, you don't see there, you can also call our office just as well.

If we can go to the very next slide, I'd like to go into what we define as the CPI for cellular services. This is going to include personal residential phone service, the telephone instrument is going to be portable and sends or receives signals for calls through the airwaves. The service charges are permitted charges, roaming charges and any other charges normally included in the cellular plan are going to be eligible for pricing.

Now we are going to have various exclusions just as well, but the exclusions primarily are going to be from pricing and not necessarily from the weighing. Naturally, these items are going to be weighted. Pagers are not included, portable radios, pay phone charges and cellular programs that are business or international in nature.

Some of you who are familiar with our program know that we have some sister indexes, the producer price index and international price program, they're going to be looking at this from different standpoints; especially, international price program will be doing

this from a commercial or business point of view. We're looking at this primarily from a consumer point view.

We also exclude from pricing residential long distance charges and telephone instrument rental or purchase. Now I will make a note that if we're pricing a specific plan, some of the items I just mentioned, such as the telephone instrument or long distance pricing, also roaming charges, can be included if these are automatically included in a program that we are pricing.

In the CPI, we're going to use a checklist that we designed for this. If we can see the very next slide, this is going to give you a basic idea of what the first page of this checklist is going to be. Most of the checklists that we used for most of the items in the Consumer Price Index are going to be sent to field staff in various locations around the country.

However, the CPI facility or services is not going to be done that way. Some of the items are handled exclusively in Washington office, and cellular services right now is one of them. This is handled right now in Washington. Possibly, in the future, that could change. But this gives an idea of the first thing we're going to be using to price. We develop a checklist of some the types of items that are going to be priced with the different carriers.

A number of years ago when we initiated this information, we contacted many of the different carriers and talked to the people in their cellular wireless agencies and we were able to try and find how they desired to go ahead and price this information. I give special attention right now, I know it's difficult to read, the very first thing that you come across talks about cellular plans and also internal computer data.

Normally, when we contact the companies, the first thing we have to keep in mind is that the Consumer Price Index, many people do not know this, we are not a mandated program. We are a voluntary program. We cannot enforce compliance. Therefore, we do not pay anybody to participate and we cannot force anybody to participate. This is strictly voluntary. So if we receive information from an organization, this is going to be on a voluntary basis.

Some of the data that we gather, if a company so chose, they may give us what our A2 says. The A2 is basically going to be talking about information that is from the computer and some companies chose to give us a type of average revenue. It maybe average revenue per minute, revenue per bill, revenue per customer or it could even be revenue on a city, regional or statewide basis.

Most companies do not chose to give that. If this is what they chose to give, then this is probably going to be a more comprehensive measure. Many people feel that is probably a better method of pricing. However, we do deal with many phone companies where the phone companies maybe small and they may not produce revenue data or internal computer data that they can give us for pricing.

Other companies do produce it and with your very familiar word, which is "proprietary". So it's proprietary with the organization. They may use it internally, but they will not share it with us. Some of these companies will simply give us information that they could also give to a person in general public that they would like to gain as a perspective customer.

So we can price plan data and that is the other item that we have up there for A1. We price information right here where it simply talks about the plans that they have available. In many cases, we may gather information on a plan that maybe the most popular plan for that particular area that we're pricing, or we may gather information on a plan that is new and is really hot as far as this company is concerned in a certain area.

After time, a company may feel that a plan is no

longer selling as well and they're replacing it with new plans. We do have the ability to substitute to new plans to keep the market updated in that particular area. We also have the ability to take plan information and have a limited quality adjustment basis that we can use. We do obtain some information from some carriers that would give us adjustment values on the number or the price-per-minute and also some adjustment values can be obtained through Hedonic Project. We did do Hedonic Project on this a couple of years ago, and another one is probably going to be the offering within the next couple of years.

So this information can be adjusted on a limited basis. We compile all this information on a regular monthly basis, and, of course, it's put together to form the CPI for cellular services.

Now Dan's going to be going into this on a broader basis.

MR. GINSBERG: As I've been sitting here, I've been sort of, not puzzled, but wondering about what kind of contribution a program like the CPI could make toward an agency that has a certain amount of responsibility for ensuring competition exist, and in this, in the cellular wireless market.

One of the outgrowths of the CPI program, of course, are a series of indexes. Mike just described the

cellular index. After I go through just explaining what I hope will help you understand what the CPI is, I think I can offer, at least, some piece of information that could be used in helping to determine the status of competition in a particular market.

So first of all, with CPI what is really essentially. It's -- of average price change for a market basket of goods and services that we attempt to hold that quality of that market basket cost through measurement periods. Of course, we don't have complete control. We don't have complete ability to quality adjust for every facet of change that occurs. But if we can identify that a quality change has occurred, we'll adjust for it.

If we have some ability, either through dollar values, udonics (phonetic) to account for the change. If we know this quality change associated with the product between time periods and we can't identify the piece that's quality versus price, we just don't use that quote in the index.

So we attempt to make sure that, from time period to time period, we are reflecting the same quality of merchandise and the same quantity of merchandise so that we're not show phantom price movement through the changing items and numbers purchased.

Now the CPI itself is almost a bi-product of a lot of other surveys. There's a consumer expenditure survey that was conducted for us by the Census Bureau that asked approximately 500 households each year a whole raft of questions. Sometimes they're quarterly and sometimes it's a two-week diary to identify household expenditures for all sorts of items from food products through medical care services through cellular telephone use.

We've just recently revised the weight structure in the CPI in January, well, actually as of December 2001. And we now have expenditure values coming in from the 1999/2000 Consumer Expenditure Survey. For telephone services, the telephone services in total, 2.234 of the consumer's expenditure budget. It doesn't include any investment aspects, but just what you and I would go out and purchase to maintain our living expenses outside of investment.

Within local, assuming local is 100 for the sake of -- I'm sorry, the telephone services combined is 2.3 percent. Then, using that as a hundred, allocating the rest of telephone services into its component parts, local is about 49 percent, long distance, 41 percent and cellular 10, percent. Now some of our friends in Rates and Tariffs we've been talking to recently are sort of

surprised of the low level of cellular telephone as a measure of expenditure.

But, in fact, this represents, we hope, and the questions are framed so that they attempt to eliminate all business expenditures, and to the degree that a lot of cellular phone services that is even used for personal use is really an instrument that is paid for by an employer, ideally, those expenses wouldn't be included in our survey.

Now with the 10,000 households participating in the survey, and we have what we refer to as a UCC code for cellular services, we're somewhat optimistic that we're, at least, capturing for the set of households we're interviewing in 87 areas across the country, that those represent their cellular expenses for personal use.

Of course, even between 2000 and 2001, cellular seems to be growing in magnitude. I would tend to think that the next two-week weight update will show a larger percentage of revenue going toward cellular; particularly, as was mentioned earlier, the 18 percent of households treating cellular as their main phone instrument. There are increased anecdotal cases where people moving into apartments in expensive cities to get phone service, like New York, find that it's just as easy to keep their cellular as their main phone rather than

going to a wired instrument in the house.

Now we do have 87 pricing areas that are meant to represent the urban population. The distribution of areas are really standard metropolitan areas above a million and a half. Those are 31 of those that are selected with certainty. Metropolitan areas below a million and a half that are selected with probability. And then, there is a small set of areas that are between 2500 and 75,000 that are also selected with probability. We only have 10 of those in the sample because they don't really make up a large amount of the urban population.

So although the index itself is urban-oriented in that it covers about 87 percent of the population in the U.S. Even some of the rural population is actually covered because there are rural parts to the counties that make up a lot of the SMSAs, and they are, by definition, outside of New England. They are basically county definitions. So there are some rural areas included.

We do have monthly and bi-monthly pricing. Telephone services are prices monthly in the index. Many other items are not. Medical care services, for example, is priced bi-monthly, and this combination of monthly and bi-monthly is what makes up the index each month.

The outlet sources for the CPI are twofold. One, and our primary source is another survey that's conducted for us by the Census Bureau. It's a household survey that asks individuals via telephone collection system where did you buy your physician services? Where did you buy your long distance services? Who is your local carrier? How much did you spend at each provider of service? From this, we end up with a "universe" of service providers with a measure of size the revenue spent at each service provider. We use that to select our samples.

There are some items, including cellular telephone, where we brought it into the index at the '98 revision before we were able to generate a question for cellular services in this household survey that Census conducts for us. So in that case, we get measures of sizes cellular providers in the states in which we have local areas to be priced and a probability proportioned to the measure of size provided select a cellular carrier or carriers to be priced in each one of our 87 market baskets.

I'm not saying we price a cellular in every one of them because in some cases we've had cooperation problems. But we do have most areas covered.

We have three pricing periods a month, and this

goes for the telephone services as well, where roughly a third of the quotes are collected during the first eight days, second eight days and third eight days of the month. In this way, we're able to capture price change in a much a broader way of the month rather than at some particular point with in the month.

The indexes we publish include all taxes that are paid associated with the purchase of the items. So with telephone services, it includes a lot of taxes because there are not only some federal taxes, but there is a lot of local use and excise taxes that are added on to the telephone bills. We pick up all of that; although, frankly, it's quite complicated in many cases to do it. The computer systems in the telephone company seem to be able to collect and calculate the taxes much better than the humans beyond the computers. And since we're aren't really collecting specific bills, we're dependent on the human beings to do the collection.

We do attempt to rotate our samples periodically. Many items have a subset of their outlets rotated every year so that over a four-year period an entire sample is rotated. That happens with local telephone services. In theory, it's suppose to happen with long distance telephone services, but we have had some cooperation problems in that area so that we are

contemplating contacting the carriers only once every four years rather than every year for getting updated samples.

Cellular telephones is still on a cycle of doing it altogether every four years. So there's been no update since the current initiation effort back in 1997 that became the basis for the '98 revision that Mike was mentioning.

Now one thing, as I said earlier, that I was really wondering about is how we might be able to help. After all, the Bureau does produce these indexes and there is a broad range of them that can be used for a number of purposes, including estimating how much more it cost today than it cost yesterday to purchase a certain set of goods an services.

So I was looking at the telephone services indexes we produce, and looking at three of them specifically. One is local services, long distance and cellular. One of the things that struck me was local services, if one would contemplate that, that is the least competitive of all the telephone service markets, interestingly enough, if one looks at the last few years of price movement, December to December, every year has gone up. The last four years are up 4.5 percent, 5.5, 2.8, 1.3 and 1.0 percent. So definitely, an increasing

cost for local telephone services.

Now if we look at long distance, that situation is somewhat different. We've made some changes in the long distance services so that we had to start a new index in '97. But if we look at the last four years for long distance, we find every 12-month change has gone down -- 1.8 percent for 2001, 9.2 percent in 2000, 1.3 and down .10 in '98. Now long distance is certainly, I think, reasonably viewed as much more competitive than local markets. So that maybe a helpful indicator that where there is a lot of competition within the industry, it has a beneficial effect to consumers on pricing.

And finally, the cellular that Mike has just gone over, that is similar to the long distance. The last four years every 12-month change has been down. Last year it was down 5.5, in 2000, 12.3; in '99, 11.6, and in '98, 8.3. So at least, there is some hint in these numbers that there is, at least, potentially, a competitive market in place for cellular telephone services, and long distance. For that matter, that may, in fact, be reflected in our index changes during the last five years that benchmarking it against local where there is relatively little competition in that area, prices have been going up.

So that's something for others to interpret.

But I just offer it as a possibility.

So, I guess, off the Adam.

MR. GUY: Thank you. I'd like to start by thanking the Commission staff for including the Strategis Group. It's an honor to participate. I concur with some of the previous participants. This is a gargantuan task. I know first hand because every month or two I have to make a similar decision. I engage in a new research project and have to decide, okay, how am I going to narrow the scope enough to make it meaningful. And in this industry, that seems to be changing all the time. It becomes a real challenge.

Now I do have a luxury that I can call subscribers or potential clients and say, okay, what's the market clamoring to know? There I can get my directions to what are the critical components. The Commission staff has a distinct mission to determine an appropriate level of competition, which may be more subjective. So I sympathize with the challenge.

We can go ahead and que up the first slide. What I'd like to do today is to share a couple of examples of the type of data that we collect and analyze. Not necessarily that our findings will directly contribute, but, perhaps, our methodology can shed some light about what's readily available, what's difficult to

obtain and what the Commission staff may find worthwhile to gather and interpret going forward.

Before I do that, I have just a few words about who we are and what we do. The Strategis Group is a consultant/research firm. We've been in business for 36 years. I haven't been working there quite that long, but I'm making my way up the learning curve.

We have separate and distinct groups. One that does consulting propriety research projects for specific clients. And then, a separate group, Research, which is where I work. On the last panel that came up, the incentive that there may be certain research entities may have to come up with a certain result. That's something that someone in my position doesn't feel.

I mean, I may go out to the marketplace and say, okay, what do you guys want to know? What would add value? We really need an analysis of churn (phonetic). But nobody says just make sure it's low or make sure it's high. That's just not something we wrestle with. We work pretty hard to stay separate and stay objective from propriety-specific interest.

Our core companies are on wireless and broad band. I work in the wireless group, and we collect a wide swath of data, most of which is global. I'm going to focus just on the U.S.-specific projects to stay

germane to our objective here.

It comes out in the form of interactive data bases, on-demand maps. We do somewhat regular surveys, which I'll talk a little bit about the methodology and the limitations. A lot of times there is the feedback that, okay, what kind of hard numbers can you glean from these consumer surveys. And then, of course, technology, market-specific forecasts of users revenues and usage.

One thing, just in thinking about this panel, I thought I'd focus on two areas from 309J, which came in the invite. After I looked that up, I realized we were talking about the appropriate level of competition that would stimulate technological innovations, but also competitive pricing. So I'll share basically two examples of what we do that may shed some light on what's available and appropriate.

So if we could just advance to the next slide. This is a map. You may have seen these. We show these for some of the trade press. I believe this one popped up in a Wireless Week somewhat recently. And this is a graphic if AT&T's deployment of certain technologies, GSM/GPRS. We have it on the map as just a term GPRS for short, TDMA and we also have the Sun Com affiliate on here.

Real brief, this isn't groundbreaking. All this

information is public, but how do we go about getting this. Most of it the carriers provide, either in terms of announcements of markets where they've deployed a specific service or sometimes we'll get a map that we scan and then, through a GIS software, we GO code the geographic area which then rolls into the data base. So it's just an example of the type of data that we collect. We find, not easy to find on a uniform or ubiquitous basis, but relatively out there in the public domain.

If we can advance to the next slide, this is another popular component of the some of the research that we've produced. A breakdown of actual usages of specific technologies. This is different from what was in the previous map because, while that showed where our codes where deployed certain services or technologies, it says nothing about who's using them. This was a lot easier maybe a couple of years ago when -- or at least until the dissolution of the UWCC, the TDMA trade association. A lot of folks could rely on those reasonably well in order to determine how many subscribers of specific technologies. But it's gotten harder and harder and more confusing.

By the way, we classify these as mutually exclusive. So off course, you may have a dual mode handset that supports TDMA and analog. What we're

calling that subscriber a TDMA subscriber. It's the same way with the GSM and GSMGPRS. We separate those as mutually exclusive.

If we could just advance to the next slide. I'm just going to walk you through -- I don't mean to represent precisely what we do in order to come up with these estimates, but I just want to walk you through my thought process. How do I get that? How do I figure out how many GPRS subscribers there are when, of course, nobody's talking about how the uptake is going. How can I say that .12 percent of the marketplace is actually using GPRS on a regular basis?

Well, we start with what we got out of the first map, the actual markets where the carriers have deployed services. Obviously, we know how many people live in those markets. And we have a reasonable idea how many subscribers to wireless service in general are in this market. So that serves as our top line dressable market.

Then we have to make a decision how to look at markets individually. If we were doing it on a national basis, as shown in the chart before, we tend to assume that the operator's overall penetration of its cover population applies more or less uniform. I mean, obviously, it doesn't, but that's an assumption that we make.

We do, do some work, where we segment markets specifically. We apply some of the demographic data that we get out of some of the surveys mentioned before from BOS or from the U.S. Census in order to proxy, okay, which markets are likely to grow really fast based on income or based on the average age of that particular market. But in this case, we pretty much view a carrier's penetration as a carrier's penetration across all market just to make the model manageable.

Then going from the top down approach to the bottom up, on a quarterly basis, we review the financial statements of carriers where, now they're starting to disclose a lot more minutes of use, some segmentation of revenue per user and almost all will share the digital penetration, historical and going forward. So now we have, in each of these markets, a reasonable assessment of how many digital subscribers there are.

Then it gets sticky with certain carriers, like the Cingular example has always been a problem. Maybe I don't know the right people there, but I can't get anybody to tell me how many GSM subs versus how many TDMA subs. So we just go back to the historical data of who made up Cingular and what they had and just apply a basic trim line. If the Pacific Bell subscribers are growing at this rate relative to the rest of Cingular's property,

so then we have a reasonable breakdown of the technology-specifics of these particular carriers. So we do this on a carrier-by-carrier basis where there are multiple digital technologies, for example.

Then we start to apply the survey data. This is where our sample sizes are usually somewhere between 500 and 1000 users, which, granted, there are some variation and some statistical significance issues when you start to segment them in multiple layers.

If we tried to compare agriculture workers with professional workers within that base, we might have some statistical problems. But we feel like they give us a pretty good trend of what's happening. So we ask a wide range of questions about usage trends, but also attitudes toward forthcoming products and services and willingness to pay.

So we have some sense of what percent of the current subscriber based is interested in an always on, higher speed data service. We have a reasonable guess as far as what percentage would be willing to pay a certain price point for it, and when they would anticipate paying a little bit more. So now we can sort arrive at an adoption curve for a technology. So if we weight this the right way and apply it to the digital subscribers in a particular market, we also have assumptions about turn

and replacement rate for our handset data base forecast and products.

If we roll all these things together, we feel like we have a reasonable sense for how many, either CDMA 2000 1X subscribers are there going to be six months after the service is rolled out and in which specific markets. And then, of course, there is the other 5 percent that we don't capture in the top 25 U.S. carriers that we track. There the survey is useful, but also we make some decision. We figure there is obviously going to be a lower digital penetration and we just allocate the technologies there.

So unless you're an evangelist of a particular technology, you'd be justified in saying, well, so what, we'll just have to deal with competition.

I just want to highlight, this is how we arrive at a technology distribution. When maybe next generation services are more ebiquiously available, this type of data collection and analysis maybe useful in determining what markets are being left out? What markets are being left behind? I'm not suggesting that markets where there aren't particular technology right now aren't competitive. But really I just want to share a little bit about the methodology.

So why don't go ahead and advance to the next

slide. The other thing I want to talk about, a clear result of meaningful competition is pricing. It's come up again and again. This, too, has gotten a lot harder as the pricing plans have gotten more complex. On the left side there, pretty much, everybody knows these are some of the different dynamics that can come in a pricing plan.

The most challenging one is the urban versus world because we, like the other participants, don't really have any way to assess the rural population as a whole. We tend to just spot. We tend to just pick out markets and I just pick out favorite ones with interesting names or cities where people are from.

I always like to look at Russell, Kansas because it's where Bob Dole is from or politicians playing in some of these discussions, Tibidoe, Louisiana, where Billy Tauzin is from. It's interesting to look at what pricing plans are available there. Honestly, that's how I go about picking rural markets to examine.

In a slide, I'm just going to show a model of a result of what we come up with when we look at different pricing plan on an admittedly arbitrary basis. What's become challenging is we used to have to worry about peak versus off-peak. We would just assume a basic rate. We always used 40/60. Forty percent of the minutes are

probably used in peak times.

I don't know if that's realistic or not. We would get that from the survey. But admittedly, users may not know how many minutes, using period, let alone, how many are peak versus off-peak. But it just gives us an idea. Somebody would just have to pick a coefficient.

But these are of a value added service to make it really complicated because we get survey data on the average -- how much folks spend a month. We think they're more likely to know than the minutes of use. I mean, everybody writes a check once a month, so they have some idea of how much they spend. So we can, at least, identify a trend, whether we're spending more or less going forward.

The real challenge is something we're wrestling with now, is how do we back out some of these -- the other one is long distance, which has come up a few times. I didn't put it on the chart, but how are we going to discount the price-per-minute or the unit on a minute of air time for bundled long distance. I mean, even the carriers that I feel like are frank with me aren't sure what the discount rate for that is. What's that worth? Also, night and weekend minutes, what's 3000 minutes on the weekend worth or what's the relative cost.

I just thought I'd tee up some of those facts

that make it really challenging to examine price plans. But it's impossible to examine, in rural America, as a whole, or at least, not worthwhile. I'm not saying it's not worthwhile to know that, but for us, selling research, it's not worthwhile the manpower to round that up. We just find it's not worth what we'd be able to get for that research.

Let's advance to the next slide. Here's an example, and this is about year-old data, we picked a market. I believe this was Seattle where these four carriers offered service. We just plugged in their price plans and said, if you're using this many minutes a month, and you're on the optima plan, which we know that doesn't always happen, but if we assume that if you use that amount a month, this you optimize your plan. This is the least cost per minute of use.

We published this and said, well, this shows that, at least, when you get beyond just a handful of minutes, it pretty much the same for these national plans. Now we're looking at some of these arbitrary markets and looking at family plans and local plans and regional plans. We expect to see some more variation, but this is an interesting way to compare urban markets with rural markets. You almost have a number. Here's Sprint's least cost per minute of use for this particular

number of minutes.

Let's go ahead and advance to the next slide. Speaking of scope, paging the historical reports they've included components of fixed wireless, paging, specialized mobile radio. And just what we've done with these areas, fixed wireless, we actually cover as part of our broad band group. We just view that as oppose to a market segment, but listed here, I won't bother to read them out to you, are the things we track within that space.

Basically, top line data on what's happening. Who's the point in services. Who holds licenses. Paging, we used to do comprehensive, separate paging studies, but now we're looking more at messaging as a suite of services within the overall wireless space. Likewise, the specialized mobile radio. I mean, the point is well taken that Nextel doesn't compete directly against Cricket, but it's really the same type of service. So we've rolled specialized mobile radio in as a segment of the overall wireless space. So we're not really looking at that separately anymore.

I thought I would share those thoughts that, that's where we've gone with our annual market assessment for the U.S. wireless space. We look forward to taking any questions at the end of the panel.

MR. MAHLA: Adam, your reference to picking cities for doing studies, it reminds me of a study that was done by William Shoe in the old pre-PCS days where he showed that there was a statistically significant reduction in the cost of service in capital cities. The theory was that keep legislators happy. It's interesting that, that's your way of selecting cities.

I'd like to start out by thanking the staff of the Commission for inviting me and Econ One to today's forum. It's a worthwhile endeavor to try and get our hands around the costs of cellular service and rural issues, rural pricing in particular.

Because this is a public forum, I'd also like to thank the staff at Econ One for their tireless efforts in putting our survey out each month. Greg, Dr. Rosston referred to the cost of acquiring data, and there is an explicit as well as an implicit cost of doing that. I would like to thank the folks who work oftentimes at personal costs to collect this data. Because Econ One is not a funded survey, the acquisition of the data that we use in our survey is something that's done after hours, so to speak.

I thought I would spend my time today telling you a little bit about what the Econ Wireless Survey is. Also, I think it's important for me to explain what the

Econ Wireless Survey is not.

(Slides shown.)

MR. MAHLA: The survey, itself, began initially in June of 1999. It came as a result of recognition on the part of some people at Econ One that there was not particularly good publicly available information about the costs of services across different markets.

That came as a result of litigation work I had been involved in, and in that work, the question came up, what is the price of service? We went about trying to find the cost of service and found that it was not an easy task. It was not an easy question to answer. And so, back in the middle of 1999, we initiated our survey. Initially, did the top 10 markets. Expanded, so thereafter, in September of 1999 to the top 25 markets across the country, the top 25 markets based on population.

One of the benefits of doing the top 25 markets for me, personally, is that I head up or Sacramento office, and it turns out, at the time that we ranked the top 25 markets, Sacramento turned out to be No. 25. So we got to track what was going on in Sacramento as well.

One of the things the survey is not, is not a consumer questionnaire. I get a lot of questions from the media, who do you talk to? Well, we don't talk to

anybody. We're economist. We don't talk to anybody. What we do is we acquire data from carrier's websites, and the survey entails a collection and analysis of over 2500 pricing plans each month. The first Friday of every month we survey websites of the carriers, download each and every plan offered on their websites and then put those pricing plans through a pricing algorithm that includes four different usage levels.

We assume 30, 150, 300 and 600 minutes of use per month. We recognize that none of these are likely the average use in any particular city. But that's not exactly what we're trying to get to. We're looking at a "what if" situation with our survey. We report the results from our 70 percent peak, 30 percent off-peak analysis.

We do, in fact, run the pricing plans through three different peak/off-peak usage assumptions -- 70 percent peak/30 percent off-peak; 40 percent peak/60 percent off-peak; and 10 percent peak/ 90 percent off-peak. For those who are interested in seeing how those different peak/off-peak assumptions play out, I invite you to the Econ One website or the wireless survey.com website. We report those numbers on the site each month.

In describing our survey, one of the most important things that I'm consistently asked about is

what's the average cost of service in Chicago or what's the average cost of service in Miami? And my response is, well, I don't know. We put out a survey that looks at four different usage levels. We, in fact, calculate an average across those four usage levels. And we oftentimes report about that simple average. That average is sometimes converted into the average cost of service. Clearly, that is not the average cost of service, and we try to be care about representations that it is.

It is a not a cost of service study in that sense. We do not attempt to value roaming or long distance. We don't have enough information to effectively put that kind of information into our surveys; particularly, on a city by city basis. So we leave it alone.

We do believe that the survey does provide insight into service costs from a trend perspective because we've been doing this since September of '99 the same way. To the extent that we've maintained a constant methodology, we're able to say something about what's been going on, at least, in terms of the trend of service over time.

Some of our observations from our survey -- not all from our survey. Some of them are obvious. The

first one being demand for wireless service continues to grow. I'm sure you're all thankful that I'm here to tell you that. Penetration and usage seems to be on the rise. It has been since we've been doing the study.

Things we have noticed while doing the study since '99, cost of service to the end user, the consumer, based on our methodology, continues to fall. Footprints are getting larger. Since 1999, the advent of Cingular, Verizon, and some of the acquisitions we have seen, even lately, Verizon's acquisition of Price Communications is an extension of their footprints.

Footprints are, in fact, getting larger. The Spectrum Cap issue is likely going to have an impact on those footprints. It will be interesting to see how that unfolds.

The other thing that we've noticed is that there is a movement towards regional and national plan structure.

When we initiated the survey, there were far more localized cellular plans than there were regional or national plans. There has been a marked growth in the number of regional and national plans offered by the carriers.

This is a simple bar chart of minutes of use. The only reason I put it in here is to point out -- I

believe Dr. Roche put out a statistic about usage from the CTI study and you'll notice it's different than the one that's in this bar chart.

One of the difficulties in calculating the cost of service index is that if someone asks you what is the average minutes of use, it depends on what study you look at. Particularly, on a city-by-city basis, that is true. We don't have very good information about minutes of use in particular geographic areas.

This slide is consistent with some of the other statistics we've heard today. What we have found, looking at 2001, we saw, on the average across the four levels of use that we survey, a 7.3 percent decline from December of last year. That follows up on about a 7 percent decline the previous year. You'll see in a slide or two how this may not be representative of all users of cellular services.

If we look at the actual decline in the average monthly costs across all cities at different usage levels, you'll see that actual service costs appear to have actually risen at the very low in. And the drop in cost actually successively larger as the minutes of use go up. Clearly, then, the 7.3 percent decline is, perhaps, for some folks an understatement of what their actual decline in costs were. For some, it maybe an

overstatement.

This slide shows one of the interesting features of the increase in footprint that we've seen is that over time, since December of 1999, if we looked that top 25 cities, and looked at how much of a difference was there in the average cost of the buckets that we look at between the cheapest city and the most expensive city, there was a 34 percent premium. As of December of this past year, that premium had fallen to 8 percent.

So one of the things we've seen, at least, through our looking at service plans over time is that where you live has less of an impact on how much you pay for service when you're talking about the top 25 cities than it did back in 1999. We attribute that to the nationalization of some of the service plans. Some of the carriers in our survey appear to have the same service costs regardless to the city you're looking at, and that was not always the case. Costs actually varied substantially by city. That seems to be eroding and there seems to be much more consistent pricing from city to city.

Difficulties in calculating a service index, and these are some of the things that we don't have the resources at Econ One to get into. We would like to. We'd love to have this information. Dr. Rosston talked

about the benefit of having more data. We would love to have more data. Some of this data is difficult to get. Specifically, city-specific minutes of use data is difficult to find.

Another component one would need to get to the true cost of service is time of day usage statistics. When do people use their cellular phones, that would be an important component to understanding the true cost of service. Also, the distribution of users by plan type, that information is not easily obtained.

There have been a number of presentations that have talked about actual surveys of consumers. They're very helpful. For us, it's very difficult for us to go down the road of conducting consumer surveys because of the resources it would require.

One of the questions I ask is, how accurate are consumer surveys with respect to the questioning of consumers about their use of cellular service. I raise that question, antidotally, my own experience has been there are very few people who actually know how many minutes they use; when they use their cellular phone; when their peak period begins and ends; which plan they're even on in some cases.

So consumer surveys, unless they're conducted very carefully and with lots of forethought about how you

get to that information may not be as accurate as information, obviously, directly from carriers. These bullet points all raise questions about how does one get to a cost of service index that would be reliable.

I want to talk a little bit about the cost of service in rural markets. We received a call from Ben Freeman of the FCC last summer. He inquired as to whether or not we'd done a study on rural markets. He understood we had been tracking the top 25 markets for some time and wanted to know if we'd done a rural study. You don't have to hit us over head. We said, we should do a rural study.

So given our limited resources for doing these kinds of things, we set out in October of last year conducting a 25 market rural analysis that was very similar to the one that we do in the top 25 market. The market selection was not scientific. It was, perhaps, a little more scientific than choosing congressman's home towns, but not much more.

What we did was we randomly selected from RSAs and then simply chose cities within an RSA. The one, perhaps, selection bias is that we chose cities that were not adjacent to or very close to larger urban areas. So we randomly selected the RSAs we used and then, selected cities within those RSAs to conduct those studies.

I don't believe the definition of rural markets would comport with some of the government agencies definition of rural markets. The average population is a little over 95,000 people. Interestingly enough, they are much smaller than the average 4.4 million that are in the top 25 markets that we look at. So they are small relative to the large markets that we look at.

It is interesting to also note that the standard deviation of the populations relative to the mean of these two different market groups was actually much smaller in the small markets than in the large markets. So the distribution of the actual population across those two top 25 markets in those rural markets is actually much smaller relative to the large markets. There is an interesting implication about that a little bit later.

Also, the average number of carriers per market, 3.3 percent versus 4.9 percent in the large market studies that we do. That was an interesting finding. That basically means there is a little over one PCS carrier per market in those rural market versus almost three in the larger markets.

This is a map and it may not be as clear. This is a map of the cities that are actually in our rural market study. It has such hot spots as Calaspell (phonetic), McComb, Mississippi, Diesburg (phonetic),

Tennessee and places like that. Maybe you can see on your handout there, we have ranked, based on the average cost of the four buckets that we analyze, is connected to each of those cities. Where a city comes out on the map is spread pretty evenly across the U.S. There is no particular pattern to where there were more expensive cities versus less expensive cities.

You can see, from the yellow dots, that we got, through our random sampling, a pretty good distribution across the country of rural markets, perhaps, the southeast is a little under represented. I also should point out that I don't represent to you that we can draw a tremendous number of conclusions about this because we've only done one data point. And as I said before, the benefit of our survey is really the trend information that comes out of it. The information that comes in the next couple of slides should be taken with that in mind.

Some of the results of what we found, interestingly enough, at the low end, there was almost no different in the average of the four levels that we analyzed. At the high end, large markets appear a little bit cheaper, at least, the did in October of 2001. In the 150 and 300 minute categories, it appears as though there was a premium paid in large markets. So the average across the four markets was actually lower in

rural markets.

Can we say anything about competition in those markets from that alone, no. But it is an interesting fact worthy of further study. The final slide is one of the more interesting findings from this one data point, is that the -- I mentioned before that the premium from the cheapest to most expensive city in the large markets was about 8 percent in December of 2001. In October, it was 8.3 percent.

The spread between the cheapest of the small markets there was a 59 percent spread. So there were fewer carriers with a much wider disparity in pricing across the markets, which simply means what you paid for cellular service in rural markets was much more dependent upon where you live than it is in the large markets.

We do plan on doing more of the rural studies. We probably not engage in doing them on a monthly basis, but we will continue to do them, perhaps, quarterly as we go forward. So with that, again, thank you for having me. It's been a real pleasure.

MR. FURTH: We have a few minutes for questions. If you have questions, please feel free to come up to the mic there in the middle of the room. But I'd like to lead off following up on Chip's last point with a question really for all of the panelist.

A lot of the discussion, both at the last panel and this one, has had to do with nationally aggregated data versus granule data, market-specific data or perhaps even more than market-specific data. I guess, my threshold question is, to the degree of what we have available to us, and much of what we collect is nationally aggregated data. And what BLS collects is essentially nationally aggregated data.

To what degree in the wireless industry or in other industries can we draw any kinds of conclusions based on nationally aggregated data about what's going on in particular markets, whether they be urban markets or rural markets? What are the limitations on the conclusions that we can draw from that kind of national data, which would then require us to look more specifically at more granule data?

MR. GINSBERG: Well, it seems to me that the range of rate structures that are out in the marketplace is very broad, and there is a lot of different competitive situations in local areas -- New York versus Dallas versus Seattle, that the national data isn't all that helpful in analyzing local area situations.

In long distance, for example, particularly, intrastate, since there is one rate schedule that applies everywhere across the country, the problem is very

representative. But in cellular where a lot of the plans are local in orientation and the competitive situation varies, at least, our data wouldn't be all that helpful to discerning what's really happening in the local market.

MR. GUY: I guess I've already flushed my credibility with my small town methodology, but it came up in the last panel. It seems like quality of service is one that would be really valuable. I mean, even if it was just in particular markets, the surveys that we do over time, we ask folks why they turn or why they're thinking about their carrier. And over time, covers capacity and quality of service becomes increasing important or it comes up more and more often in terms of a competitive factor.

So it seems like, well, if there is no one to turn to, then you're stuck with poor quality of service. So the only way I can imagine would be just to pick towns and go there and do the tests that were referred to in the last panel. Verizon just launched its new ad campaign of we're everywhere or however the jargon goes. So I think it's becoming more and more of a marketing, competitive factor. But I think that would be really an interesting data point.

MR. MAHLA: I think that I agree with Adam's

assessment that you really do have to go out and kind of look. I think the rural versus national market information that we calculated points to, at least as a starting point, that there is a need to -- you cannot rely on national data solely. You maybe able to draw some inferences about patterns and competition on a broad scale. But that, in fact, you do have to go out and collect and look at specific markets to get a true handle.

MR. FURTH: I guess the other question I would ask is, all of you rely on data given to you voluntarily. The fact that people may have their own agendas when they provide you with information or when they chose what information to provide, what steps do you take and what steps would you advise the Commission to take in terms of its collection of voluntary information.

And is there any particular type of information that you think that's relevant to the issue of competition that you think it's particularly hard to get on a voluntary basis, so that we might want to consider whether it's something that we should seek on a nonvoluntary basis?

MR. MAHLA: Well, with respect to data that's easily accessible, on the rare occasions that I get calls from an irate carrier that someone has represented

something about our survey in a way that makes them look less than beneficial, I always probe them and ask them, well, perhaps, you guys could send us some data and we could know for sure what's going on in these markets.

The response is typically, well, that's a nice thought. Thanks but no thanks. Specific information about minutes of use on a regional basis would be helpful. And any other components you could use in deriving a cost of index certainly would be helpful. I don't know what the FCC's mandate for requiring that data is, but it certainly would be helpful.

MR. GUY: I agree that maybe a couple more layers of segmentation. I mean, I don't know how to require it, but if we knew the prepaid minutes of use versus the post-paid. That would be meaningful in determining what is the impact of new packages of services. It seems like we're kind entering a era of more disclosure with everything that's happened in business over the past several months.

I'm not lobbying for required disclosure, but since the Fair Disclosure Act, my job's gotten a little bit easier because I get more information now. It used to be the security analyst would get everything and then we'd get it later. I'm not saying that's the right policy, but that helps when carriers are required by some

regulatory entity to at least disclose what's happening.

MR. FURTH: Do you want the last word on this?

MR. REESE: Actually, one thing you may want to start doing, and this is going to be more general information, you may want to get on some of the company websites just to try and find some information from there. It's not going to be detailed. There maybe some items that you can glean from this. We certainly have gone on many of the websites of a number of these different companies. In some cases, they may feel some of the information you can use is worth disclosing and it may be of value to you and it's not going to hurt their market position.

I find this what really they are against, anything they feel is going to hurt their market position. If you want to ask them directly, which I've done many times -- I think the one hard thing to gain from them is revenue figures, especially, if they feel this is going to hurt their market position. Revenue figures, in some cases, they may give to you. Probably, they're going to have to feel this is going to be to their advantage to do so. Many of the carriers will not.

I actually had one particular lady from one particular organization say they do produce revenue data, but she would only give it over her dead body. And those

were her exact words. So some of them are vehemently against providing these data. You can try. I mean, there's certainly no harm in trying, but the revenue data would probably be a better type of information to gather. Once again, with some companies you're going to run into a lot of resistance.

MR. FURTH: I think we're out of time at this point. I would like to thank the panel. We're going to take a break until about 20 until 4:00 o'clock.

(Whereupon, a recess was taken a 3:30 p.m.)

MS. SCHIEBER: I think we're about ready to get started on our last panel of the day. We have four speakers representing various rural wireless interest with us today.

Our first speaker is going to be Ken Johnson, who is Director of Legislative and Regulatory at the Rural Telecommunications Group. Mr. Johnson is an expert in the numerous policy and regulatory issues that effect rural telecom companies. Having previously served as a legislative and regulatory analyst with the Organization for the Promotion and Advancement of Small Telecommunications Companies. There he specialized in universal service and competitive issues for wire line and wireless carriers.

He is the editor of the Washington Watch and the

World Spectrum Scanner, newsletters provided to all of our members.

Our second speaker is Terry Addington, who is the president of the Rural Cellular Association, and also, CEO of First Cellular of Southern Illinois. He also serves on the Board of Directors for CTI, the Illinois Telecommunications Association, the Renlake Foundation Board of Directors, and the Jefferson County Economic Development Commission.

First Cellular is licensed to provide cellular services to 488,000 pops in two Illinois RSAs.

Our third speaker is Doug Stephens. He is the interim chief operating officer of Dobson Communications Corporation and vice president for the central region. Mr. Stephens has been in the wireless communications industry for 15 years, holding management positions with Cellular Communications, Inc. and U.S. Cellular prior to joining Dobson Cellular Systems in March of '97.

He recently assumed the position of interim chief operating officer, and also, served as vice president of Dobson's central region, where he's responsible for sales and operation over Oklahoma, Texas, Kansas, and Missouri.

Our final speaker is Mark Rubin. He's the Director of Federal Government Affairs for Western

Wireless Corporation. Western a leading provider of wireless TELEFIA in rural markets in 19 western states. In this position, Mr. Rubin represents the company on Capitol Hill, at the FCC, before the Administration and at industry-related events in Washington.

Mr. Rubin comes from the FCC where he was a legal advisor to the current chief of the Wireless Bureau. He also worked in the Office of Legislative Affairs, focusing on wireless and broad band issues. In the first quarter of '99, he was selected to be a detailer from the FCC and served as Congressman's Rick Boucher's legislative counsel.

And with that, we will start with Mr. Johnson. Thank you.

MR. JOHNSON: First, I'd like to thank the Commission for inviting me to this forum. I'm going to take a different track here that were sent to this panel. Previously, the panels have talked about collecting data. I'm going to talk about how we can keep from giving you data. So as much as you'd like to crack the royal nut, I have some ideas how you can actually finally take a look at it and then reasons why you don't want to take too close a look at it, but based on the burden of collecting data from rural carriers.

First, a little bit about what the Rural

Telecommunication Group or RTG is. They are world wireless providers. They're either affiliated with world telephone companies or small businesses. They straddle all aspects of competition. In some markets, they're the competitor or they're the incumbent and they're being competed with. In some markets, they're the only provider. And that's more on a coverage basis, a cell-site basis.

For example, if you're in eastern New Mexico and you're driving along, and good golly, you're roaming, there's probably only one cell site and it's an RTG member that providing coverage in that area. Perhaps, because there's a population density of one customer per every two square miles. Or if you want to do it per square mile, I can do the math there, that's a half customer.

What RTG's main mission is reducing regulatory burdens. We also have a mission where we want rural carriers to be able to actually acquire Spectrum, and I want to give a quick nod to the Wireless Telecommunications Bureau and the auction folks for recognizing that MSAs and RSAs give carriers who enjoy serving rural areas at least some sort of chance at acquiring rural Spectrum and actually providing coverage in that area.

Although RTG is affiliated with rural telephone companies, they don't always toe the wire line policy line, and this is based on RTG's mission of reducing regulatory burdens. For example, and I'm going to guess Western Wireless might talk about this more, I'll let them carry the water on this one, but RTG does not want wireless providers at universal service offerings to be regulated at the state level. Their CMS carriers, they don't need to be regulated at the state level.

Again, you can talk about competition there. As for the reducing regulatory burdens, RTG isn't concerned about the resources its members must expend. There's big things, there's Colea, there's Phase II E911, all the government-based mandates. A data collection -- Phase II E911 is up here, data collection is less of a burden and more of a hassle. And when I say "hassle," it's really the small size of RTG members. We're talking ulta-rural. There are three classifications of rural, and it's real scientific. There is rural, which is probably people study. They're like, okay, a rural carrier. Let's look at a cellular corporation. There is really rural and really, really rural.

Really, really rural are the folks you're not even taking a look at. I mean, I know with the Econ One, he took a look Roswell, New Mexico. I zeroed in on that

because we have members who are there. I don't know if they were 3.3 carriers in that area, but it could be. That's a good example of a rural market.

An example of why you don't want to collect too much data, and I think David Furth was talking about involuntary data, and that's what kind of gives RTG the willies. Who actually finds this data for a really, really rural carrier with less than 10,000 subscribers. When you have less than 10,000 subscribers, you're not even filling out the form that due on March 1st above local competition, the broad band reporting form. So the FCC doesn't even take a look at that data.

We had a member that just went over 10,000 customers. They've got to fill out the form. This is the first time they're going to make it on the FCC's radar screen. But who's filling this out? Usually it's the guy literally in the truck for the rural wireless provider. I mean, it's Mike in the truck. You call him up on his cell phone and he's in charge of the technical things, going to cell sites. He does not have the title "director of regulatory affairs," but that's what he does.

Every time Ken calls, he will pick up the phone and say, what do I have to do now? What do I have to send the FCC? Help me with this. That just gives, at

least, the FCC an example of the hassle that can be involved with providing data for the rural carriers to do it. They don't have a specific person in charge of that.

One of the questions put to us was some of the rural trends, competitive trends. The AT&T One Rate Program lead to some lower roaming rates. AT&T needed the rural carriers to have one rate throughout the entire United States. Now after build out, and AT&T and Cingular have been building out highways, which makes sense because that's where the mobile traffic is, and they've been building out rural highways, also.

Now that they're completing their build out, continuing to build out, we've seen -- and this is just a recent trend. We're still looking into it, but the roaming rates, especially for PCS carriers, seems to be raising. I suppose, from AT&T standpoint, that's going to make some sense. They've built out. Now they don't need the rural carriers and the rates are just beginning to creep upwards. But we're keeping an eye on it. If we're alarmed, we'll certainly run to the FCC.

Other rural trends, digital upgrades, for the most part, in very rural areas, these are done in response to the market. A few years back, there was still a lot of analog carriers. They didn't have any capacity problems. In the mountains of California, they

don't have any capacity problems there. They're making money off of their analog service. People are happy with it.

For the most part, within the next year, most carriers now that I've talked to are digital or are planning to convert to digital as soon as possible. I mean, there's some hold outs. There's a company up in Alaska that's still analog. If they switch to a digital switch, it's going to cost too much money. They would rather forego service. Right now, they're offering service at a break even point, almost a public service, as it were. They're the exception. For the part, rural carriers are shifting to digital roll out.

You also threw us a question about partnerships. There's been a lot of successful, so far, partnering with Sprint. They've set up a program. We have a number of members who work with Spring. Actually, we sell Sprint services under their own rural brand name. We found less success partnering with AT&T and Verizon. These are just some of the rural trends.

The other question was, what exactly is rural. The paranoid Ken Johnson thinks to himself, well, why are you asking what is rural? Why does the FCC want to know what is rural? So I gave you the three, highly accurate definitions of rural, very rural and really, really

rural.

Really, I think, population density is the place to start. I mentioned a half customer per mile. And where there is a half customer per mile, I don't think the FCC can expect too much competition. If it's there, then there is a reason that it's there. The market has dictated that there should be competition there.

I'm trying to figure out the definition of rural, can you look at RSAs? Fortunately, there are rural portions of MSAs. RSAs are a good place to start, but I'm not sure if that works. You can look at Census data. Again, I'm wondering what are they going to do with this data. If an area is super, super rural, do you not worry about competition? I'm going to argue that, perhaps, you shouldn't. In some cases, on a cell-site per cell-site basis, it makes more sense for their to be one cell site.

If one company has got that cell site up, and everybody can use it, they can roam off of it, then there is no reason to build another cell site in eastern New Mexico on the chance that a Cingular customer is going to drive through.

But going back to the Census, about what's a good cutoff, if you're looking at population density, it's one of the many factors that would determine rural.

I hate to make an analogy to the universal service cost model that was not developed by the Wireless Bureau, but that's incredible leviathan that, I believe, takes a week to figure out to run one set of data through it. Only one of the factors to decide where do we need universal service or where is it rural is population density.

I look at the Census and I think, well, maybe it's less than 100 people per square mile. So does that make Albermaryle County, Virginia -- I use Virginia because I'm from Virginia. Albermaryle County is were Charlottesville, there's the University of Virginia. They have 94.0 people per square mile. Does that make them rural, parts of it are? I mean, if you're right there at the University of Virginia, it's not rural. If you drive five minutes away, where Thomas Jefferson was born, it's extra rural.

So population density, I think, is one thing that the FCC has to look at to determine rural and the extent of competition.

As far as data goes, the question was asked, what are the limitations of the data that the FCC's collecting? And really, they're collecting no small data whatsoever. I brought the guy in the truck, who actually has to get this data and file the form. Right now, the FCC is not looking at any wireless carrier with less than

10,000 customers. There is more than a number out there. There's a large amount out there. As much as I hate to say this because I just said that they don't have time to do this. There is all these mandates that are costing these small companies money, where they have less customers per switch; less customers per cell site; so they have legitimate fixed costs, but a customer base that it's tough to recovery all these costs from.

But that being said, if you were to have all companies, and you've made this suggestion in your MPRM, I believe, even the companies with less than 10,000 say how many customers they had, it would be a hassle. I wouldn't support it, but I wouldn't be against it. I mean, that's the best I can say about that.

Other ideas I had when it comes to collecting rural data because it seems you guys are trying to crack this nut. I believe Econ One does it as a public service. I talked to Adam Guy, he'll sell it. So you want this data. Part of me is like you don't want the FCC requiring it involuntarily, just so Adam can go out and sell it. I'm sorry. But still, that being said, and I don't mean to pick on you, I think, a lot of the research they do is valuable. One question you could ask for all these rural carriers is, what is your website, specifically, do you have a specific one to your

pricing plans or anything like that. I mean, in addition to saying how many customers do you have? Okay, I've got 5,982. What's your website? That would allow these folks who have the economic motivation to search this. They could, at least, find a list of these carriers' websites and make more meaningful comparisons. I mean, that's public. It's out there. I don't think anybody should have a problem with that.

One last point on collecting data from rural carriers, the Commission has to be aware of the competitive nature of the data since aggregated data for a small carrier is not aggregated. If you get specific data for one carrier, again, I'll use eastern New Mexico for an example. There is a number of rural carriers there. You're going to know exactly what they're up to. So if you're asking what are your minutes of use during peak hours, any competitor, including Western Wireless, is going to go, hey, that's where I want to go. That's the sort of information that the rural carriers of wary of giving because of their size.

That's where RTG stands on this. Terry?

MR. ADDINGTON: I'm going to digress just a little bit from what I had planned to say because RTG pretty eloquently stated our position and we have similar insights because we represent the same constituency.

I'm going to talk to you this afternoon as the guy you want to analyze. I kind of felt like maybe I was a physiatric patient a while ago. Everybody sitting up here talking about slicing and dicing me, and I'm an operator/owner, and I run a small company. I've very proud of being a small business person. I used to work for large carriers and I really thoroughly enjoy working for a small company and so on.

While you're out there looking for small companies to analyze, it's me you're talking about and the folks that work with me and our customers. I happen to be this year's president of the Rural Cellular Association, but that's not a lobbying organization or an advocacy organization or a regulatory organization. It's much more small guys getting together and sharing operational comparisons and learning from each other because that's what we are. We're 91 carriers at RSA, 25 million pops. We don't even share our subscriber information with each other, let alone, do we want to share it with you. So I have no clue how many pops, or how many customers RCA represents.

One of the fears that I had as I listened to everybody, I'll be very honest with you, I've had to retain a manager because we recently went through our first layoffs. I'll go through that in just a minute. I

had to retain a manager just to manage mandates. Mandates are very, very difficult for a small carrier to manage because we're resource challenged.

I'm fearful, after hearing all the information that everybody wants, that I'm going to have to hire a manager to manage slicing and dicing to everybody. That's scares me.

Let me tell you what it's like to be a small business person in the wireless world fighting against the gigantic nationwide carriers. It's a lot of fun. We've been very successful, and I think small carriers can be very successful.

First of all, let me tell you, I'm a B-side carrier. I cover two small RSAs in southern Illinois. If you take a line from St. Louis to Evansville, we're everything south. Like I said, I used to work for large carriers and this used to be a partnership and we bought the big guys and decided to go it alone. I have seven independent small lexs that are owners. The smallest one is 600 access lines. The largest one is 30,000 access lines.

Together, we are bigger than they are aggregated. They love the wireless business because it's much more exciting, in their mind, anyway, than the small lex business. We cover 24 counties. We talked about

population density as a defining factor for rural definition. Well, we're 51 pops per square mile if you believe the Raymond James study that I got that number from.

Our largest city is Carbondale, Illinois. Southern Illinois University, if anybody's ever heard of that, I had not before I moved to Mt. Vernon, Illinois. That's the home of the Salukis. I didn't know what a Saluki was either. I had to learn all this stuff. There's a population of 30,000 in Carbondale, Illinois. Primarily, agricultural-based economy with some energy, light manufacturing and service.

We started business, opened our doors, in 1991. Obviously, we had one competitor. We've had one competitor for several years. We obviously saw what was going to happen as far as PCS and additional competitors. So years ago, we started planning what would we do, how would we respond to competition. Clearly, that competition was going to be, at least, large company in nature. And as the price plans has developed, as nationwide networks have developed, it became very apparent probably in '98, '99 that it was going to be nationwide in comparison.

We can't compete with that. I can't compete with a nationwide price plan. I can't compete with a

nationwide carrier, not on their terms anyway. If I went head-to-head with them, I'd fight a losing battle. And we'd be sold now or we'd be gone. One of the two. So what do you do? You decide to fight a different war and look to employ tactics and strategies that you don't think that they will use.

It's very obvious that they would come in with a business strategy utilizing their nationwide network, utilizing their obvious advantages to the business consumers. They were going to target and go after the business consumer. Therefore, that left the consumer in southern Illinois. So we came out with, and I'm not going to say the lead model because everybody refers to it, but we came out with an unlimited rate plan in 1999, unlimited minutes, no, none of this peak/off-peak stuff. We do offer, and I differentiate from the lead model, we do offer roaming. It's cellular. Well, for roaming, we offer free long distance within our 24-area counties. We offer 9 cents a minute long distance.

Clearly, what happened in our marketplace, is the marketplace got differentiated. The large carriers started, as we anticipated they would, going after our business customers. We let our business customers go, for the most part, because running the business models on a nationwide strategy, being a small carrier, it's not a

winning proposition.

We do offer some nationwide plans in small buckets, and that solved some of the issues for some of the carriers. But essentially, we're a local carrier and we provide dynamite voice service for the consumer and unlimited buckets for $39.99. It was $34.99 but I raised the price.

Demand has been exceptional. One of the things we obviously had to do in order to support this pricing strategy or this marketing strategy was, years ago, we decided to go digital. We went digital early and before the big guys got there. We not went digital, but we doubled the amount of cell sites from 45 to 80 plus cell sites. Overlayed everything with digital, we chose CMA for obvious capacity issues.

Now I say all this because my day consist of, not really worrying about what going on in Washington, and maybe I need to worry about that more, but my day consist of how do I get the next subscriber at the lowest possible costs. And how will I keep that person happy and keep them on my network. That's my day. That's our day. That's how we stay in business.

A lot of the other things have a tremendous impact -- mandates have a tremendous impact on us. The need for data, very apparent to me as I roamed the halls

of the Commission here the last few days. I meet with all the commissioners except for Commissioner Martin, but I met with the staff members in place of Commissioner Martin, need to have more data. I'll sit here and I'll tell you they don't understand our economics or, I guess, let me say this, they want to understand our economics.

Small carriers or small rural carriers, we're not in the thick of things. Large carriers, obviously, have a huge presence, not only in the marketplace, but in Washington, D.C. As we met with some staff people recently, the comments was that they see hoards and hoards and hoards of folks from Verizon and Cingular and Sprint and AT&T, and they don't see a lot of us, so they don't see a lot of the information.

I want to supply you information if it would help you understand small carriers, rural carriers desire to stay in business. My margins have gone down 8 percent since we've gone from two competitors to five competitors, which has only been about a year, year and a half. My margins have gone done 8 percent. My turn has gone up 38 percent.

So competition is real and it's impactful and it's out there. And let me tell, if you want to measure it, come with me on sales call, sit with me at a customer's location, I'll over my unlimited. AT&T will

come in and offer their one rate. Sprint will come in and offer something else -- free phones, free this -- let me tell you, that's competition.

It is absolutely good for the customer. It plays hell for my sleeping at night and for my ability to generate a return on shareholder value, but we're making it. We're doing it. We're successful. Cash flow, knock on wood, is still growing, albeit, at a much, much slower rate.

As I said, margins have come down a little bit.

I would suggest that if you want an overview or if you want to slice and dice us, go to our website. I don't want to hire somebody else to come in and be a manager of sharing information with everybody that wants information.

Our website gives you all of our pricing. It gives all of our services. Yes, you've got to make some assumptions, not bad assumptions. I'll tell you, on our unlimited plan, we're over 900 minutes of use, okay. I mean, I'll share some things. I've got some graphs back there. I'm not afraid to share a few things, but revenue -- very, very sensitive, net income very sensitive.

We are here to stay. We don't want to sell. We're not looking to sell. All we are looking to do is try to compete. We need to be unfettered, free to

compete in the marketplace. Competition brings services and pricing to the customer.

I'm a classic example. My graphs are back there, take a look at them. Competition brings better pricing. It brings innovation. I wouldn't be digital today if we didn't have five competitors. My pricing wouldn't be a four cents a minute if I didn't have multiple competitors, five competitors. It's very real.

It's a challenging marketplace and I thank you for allowing me to share what it's like to be rural wireless operator. And I do want to work with you on your desire for information, but I don't need it to be intrusive. I don't need it to be something that becomes more important than the customer.

MR. STEPHENS: Terry, well stated.

I want to thank you first for giving me opportunity to discuss CMRS in the marketplace today. I hope that this public forum will help the Commission to reach a better understanding of the competitive landscape that Dobson Communications faces as well as all the other wireless carriers throughout the country.

The good news I'm here to report is not really news at all, I don't think. As you've reported in your annual reports to Congress, the Commission's wireless policies over the past decade have made wireless the most

competitive sector in the telecommunications industry.

Consumers have benefitted immensely from the build out of additional facilities, the roll out of digital technologies and high volume local, regional and national rate plans. In the steady decline of handsets and air time prices, all with that, the Commission should be commended, I believe, for promoting the competition in our industry.

The really good news particularly is, as it relates to the specific subject matter of the forum, that with limited exceptions, consumers living in smaller markets, which is certainly what Dobson Communications serves, are now able to fully enjoy most of the benefits of these positive developments.

Before I say a whole lot, I want to talk a little bit about the company that I'm with and that I'm representing today. Dobson Communication started in the 1930s as a rural TELLKO with a single exchange in western Oklahoma. We began offering wireless telephone service in 1990 in western Oklahoma and in the Texas panhandle.

We've rapidly expanded our wireless operations with an acquisition strategy, targeting under-developed rural and suburban areas. The company owns and/or manages wireless networks in 17 states from the California coast to the eastern shore of Maryland.

Dobson operates in 52 rural service areas and 13 metropolitan areas. We have a little over 1.2 million subscribers in a managed population base in excess of 10 million.

We are one of the first rural carriers to install digital technology in 100 percent of our markets, and are continuing to introduce a variety of innovative products and services into virtually all of our markets, such as wireless internet through our CDPD service, two-way SMS text messaging and voice activated dialing.

We undertook these initiatives even in markets with only one or two other facility-based carriers. While that limited competition is the exception, not the rule, in the markets that we serve, it's been our goal and the customers demanded that we provide big market-type products and services in our small market environment throughout the country.

For purpose of this inquiry we're engaged in today, it's important for the Commission to understand that the competitive landscape that exist in rural markets, even five years ago, bears no resemblance to the competition that we're seeing in the rural markets of today. In fact, I believe that it is no longer useful for the Commission to engage in urban/rural distinction, applying different rules according to some artificial

division between the two.

They're only markets. Some are large. Some are small. I think, if a difference does exist, in my view, it's probably a difference in the cost for subscriber bases to offer services to the customers in the rural markets because of the density of the population.

I can assure you that, as someone who's been in the industry for the last few years, competition exists very heavily throughout small market America. In most respects, small market carriers like Dobson are subject to the same competitive pressures as the large market carriers. Because of national advertising and the internet, consumers all over the country are educated about nationwide rate plans and services enabled by digital technology and the prices of wireless handsets.

No matter where they live, customers expect and demand the diversity of services at competitive rates. In many of our markets, the big national carriers are our competitors. If we didn't keep up with national trends, we would experience slow growth and higher turn.

To be clear, however, we face aggressive competition in many markets from carriers even smaller than ourselves. I'm happy to report that we do, in fact, compete well against small and large market carriers alike for the very reason that I believe the Commission

adopted pro-competitive policies for our business in the first place, and that is, to ensure that all carrier provide state-of-art technology at competitive price points.

We don't judge the extent of the competition we face according to how many facility-based carriers are in the market. That really doesn't tell the story. And the Commission, I believe, would do a disservice if its inquiry into CMRS competition didn't dig deeper and assess a state of competition from the prospective of the consumer. The average wireless customer has ample choice among service providers and the average annual turn rate in our industry is about 30 percent, I think, is ample evidence that the marketplace is highly competitive.

Even the few small markets where Dobson is, one of only two providers, we still offer the same nationwide pricing plans that are found throughout the balance of our markets. We've instilled digital technology in all sales sites and the customer is the beneficiary of very affordable, high technology wireless service.

Like many small market carriers, Dobson has entered into mutually beneficial roaming agreements with large, national carriers. This enables us to offer the aforementioned national plans even the most sparsely populated areas. Thus, a Dobson customer in central

Kentucky is offered the same type of national rate plan options as an AT&T customer is offered in New York City, and has the same ability to travel nationwide without incurring roaming charges and long distance.

This is a trend that has penetrated many of the smaller markets without regard to the number of facilities-based carriers and consumers in rural America are seeing the benefits.

In sort, I would urge the Commission to resist the notion that a different set of competition rules should apply in areas it defines as rural. Indeed, it's hard to see any reason why the Commission should engage in the exercise of attempting to define the rural term at all. The market should be viewed as competitive or not competitive based on their particular characteristics, not based on whether they fit within an necessarily arbitrary definition for ruralness.

It's the perspective customers facing the purchase decision that counts. And in my view, on this score there is plenty of competition throughout the country, and it's not just in large markets.

I would like to thank you all for your time today, and if you have any questions, I'd be happy to answer them after the panel's done. Thank you.

MR. RUBIN: Well, thanks, indeed, Rachel for the

opportunity afforded Western Wireless to participate in this forum for this 7th Annual CMRS Competition Report. Public forums like this one allow for the free flow of information of ideas between the public sector and the private sector. I congratulate the Bureau for accepting the challenging of always invigorating the annual report with new and pertinent information.

It's also a pleasure to be back home here with my former colleagues, notwithstanding the fact, that due to Western's universal service efforts, I often find myself spending more time with our friends in the Wire Line Competition Bureau than I do with the good folks of the Wireless Bureau.

As the largest CMRS carriers serving only rural America, Western has gained a unique understanding and approach to serving the wireless telecommunications needs of rural consumers. Western Wireless is an incumbent provider of telephone service in 118 MSA and RSA markets served as well as a new wireless local loop provider in the local exchange market.

Western strongly believes that the best course of action for any regulatory agency, state or federal, is a market-based approach with swift enforcement action for anti-competitive behavior. This Commission has largely taken this approach with the wireless industry, the

result of which is that CMRS is the most competitive segment of the telecommunications industry.

The recent decision to lift the Spectrum Cap is a good example of a market-based approach to regulation. By allowing marketplace forces rather than regulatory prescriptions to determine service offerings, quality of service and industry consolidations, consumers will benefit from the pro-competitive environment.

A well-informed decision, however, is predicated upon obtaining the data or information relative to the issue at hand. Additionally, because market conditions can change drastically, the data or information collected must be timely. Many times a report on the state of the industry is outdated before it's released. To address these concerns, Western Wireless suggest that the Commission and state regulatory commission should strive to complete all notice of inquiries, notice of proposed rulemakings and other rulemaking proceedings, including eligible telecommunications carrier applications, within a six-month time frame.

Although this might sound aggressive and not feasible in certain cases, six months can be a painful wait for industry members. We at Western feel that the carriers could or would very well be more forthcoming with information and data, and interested parties would

be more engaged in inquiries and rulemaking proceedings if the process were more transparent, timely and consistent with the fast paced needs of the industry.

I'd like to take a second and talk about some trends that we've observed. In many respects -- there is service in urban America. I think you were just saying that as well. For example, throughout the U.S., wireless penetration continues to rise. Customers are using more and more minutes and rates are declining. On the other hand, service to rural America, in many cases, poses unique challenges.

There is a very real opportunity, however, for wireless in rural America to expand its penetration, serve more wireless subscriber, roaming into rural areas and compete with wire line providers by serving the under served, the unserved and the people who rightly expect more options, excellent service and advance service capabilities.

I'd like to take a second to tell you about some of the ways that Western Wireless has responded to these marketplace trends. First, we've offered rate plans and service offerings that are competitive with the rate plans and service offerings of national carriers serving urban areas. The result is increased penetration rates, 1XRTT advanced wireless services are on the horizon, and

rural consumers are benefitting from the competition in the markets.

We are implementing technologies in not only serving the company's subscribers, but also roamers. The result is that CDMA, TDMA and analog technologies have been implemented in our network. We've become designated as an eligible telecommunications carrier or ETC for purposes of universal service support. The result is that we are now designated as an ETC in 12 states, plus the Pine Ridge Indian Reservation in South Dakota. We are currently providing universal service to thousands of customers in six states -- Kansas, Minnesota, South Dakota, North Dakota, Nevada, and Texas.

It's very important to note that updated and comprehensive data collection about the status of competition and high costs rural markets should be extremely helpful to federal and state decision makers as they review ETC applications and the presumptive benefits of universal service competition. I'd like to give you a sample of some of the compelling facts resulting from our wireless, local loop universal service-supported initiatives.

In Texas, more 52 rural communities have competitive residential telephone service. Our household penetration there is as high as 51 percent in some

markets. We have a high penetration of live line subscribers. In Pine Ridge in South Dakota, which I should add, is in Shannon County, which is typically the second poorest county in America, according to the Census, there we have an advanced digital network infrastructure completed and we're providing coverage throughout the Reservation.

We have more than 1500 household served there, of which, 42 percent didn't even have land line telephone service before we came onto the scene. There is also, on Pine Ridge, a one dollar a month rate plan with unlimited local usage in a very expanded local calling area.

Justice Stewart commented on the line between obscene and constitutionally-protected speech, I'll know it when I see it. Likewise, you'll know rural when you see it. That doesn't mean, however, that there are difference in telecommunication services available in rural and urban areas. Any differences that do exist may not attributable to any rural or urban distinction. For example, there are some rural areas that have better service and more competition than urban areas. Broad generalities, based upon NSA and RSA distinctions don't necessarily reflect the marketplace realities.

As a rural cellular service provider, Western defines itself, in part, based upon the low population

density of its service area. I think that we serve approximately 11 people per square mile. We cover 25 percent of the land mass of the continental United States. But yet, that represents only 3 percent of the country's population. I think only Verizon Wireless serves more square miles than we do.

There are many other traits of rural area, with every area evidencing different characteristics. Rural and urban consumers, however, share a desire for access to high quality, advanced telecommunication services and therefore, there should not be disparate regulatory treatment between urban and rural carriers, absent data fully supporting differing regulatory approaches.

Readily available information will assist the Commission and other policymakers in the evaluating the need for intervention in a free market approach to regulation, whether that intervention is to require LNP to establish service quality requirements to evaluate an alleged barrier to market entry or to manage industry consolidations, industry-related information must be at the policymaker's fingertips. To gather this information, the Commission should consider ways, in addition to forums like this one, where pertinent information can be exchanged between academics and leaders in the public and private sector.

On behalf of Western Wireless, I appreciate the opportunity to be here today and to express our views.

MS. SCHIEBER: Thank you, very much. Any questions from the audience?

I have one that I'd like to pose. I understand, Terry, your position that there's a lot of data out there already on websites. Take a look at our website, and Mark also indicated, don't assume there are differences between rural and non-rural. I pose back to you, if you could give us some advice or recommendations, and we were to go out to the websites, what key things should we be looking for and does that vary, depending on the market? What I mean is, you operate in many different areas within your region, does it vary, depending on which area you're talking about?

MR. ADDINGTON: Well, I think we have nuances to our own offerings or our own strategies. I think if I talk about competition in general, it usually comes down to a couple of things, and that's prices and services. Is the customer getting the benefit of competition through pricing, and are they getting the benefit of competition through services? It's probably a little bit simplistic to say you can get all that information on the website, but you can. I mean, you can go in and access pricing. You can make a fairly educated guess, based on

best pricing, what the people are buying.

As far as services, you can see if they're digital or not digital. You can see what their coverage is like. You can see where they're digital, where they're not, where all digital. You can see what services they're offering SMS, things like that, data services, things like that. So I think you can get a very good, general overview of the status of competition by looking and determining how many competitors are there and what's basically inherent upon each person's website with a little bit of analysis.

If you're looking to get to much more significant detail, we do share that level of detail with Dr. Roche at CTIA because it's dealt with propriety and aggregated into their small carrier survey. We do share revenues and things like that because it's safeguarded. Getting down to that level of detail, that information absolutely must be safeguarded.

MR. STEPHENS: There's not a whole lot to add to that. He hit it pretty much right on the head. I would just say there is a tremendous amount of information. We do a lot of research with our competition doing that same thing. We're looking at pricing. We're getting on the websites and looking at what the competitors are offering in the marketplaces that we compete in. You get a

tremendous amount of data off there. If you've got a zip code in a given area, you can certainly get that and it's very informative.

So I think there's an awful lot out there, and depending on exactly what you're looking for, you can get an bunch off the website.

MS. SCHIEBER: Any further questions?

I'd like to thank these speakers in this panels and all panels. Thank you very much.

(Applause.)

(Whereupon, at 4:30 p.m., the hearing in the above-entitled matter was concluded.

//

//

//

//

REPORTER'S CERTIFICATE

FCC DOCKET NO.: N/A

CASE TITLE: Public Hearing for 7th Annual CMRS Competition Report

HEARING DATE: February 28, 2002

LOCATION: Washington, D.C.

I hereby certify that the proceedings and evidence are contained fully and accurately on the tapes and notes reported by me at the hearing in the above case before the Federal Communications Commission.

Date: ___2/28/02_

___Rick Steel_____
Official Reporter
Heritage Reporting Corporation
1220 L Street, N.W., Suite 600
Washington, D.C. 20005-4018

TRANSCRIBER'S CERTIFICATE

I hereby certify that the proceedings and evidence were fully and accurately transcribed from the tapes and notes provided by the above named reporter in the above case before the Federal Communications Commission.

Date: __2/28/02___

____Gloria Hooker_____
Official Transcriber
Heritage Reporting Corporation

PROOFREADER'S CERTIFICATE

I hereby certify that the transcript of the proceedings and evidence in the above referenced case that was held before the Federal Communications Commission was proofread on the date specified below.

Heritage Reporting Corporation
(202) 628-4888

Date: _2/28/02___ ____Carlos Gamez_____
Official Proofreader
Heritage Reporting
Corporation