
A. I'd say at least several dozen.
Q. And when was the last time that you were deposed?
A. Sometime within the last 12 months. I can't remember exactly when. My recollection goes back to a case that I was involved in in Milwaukee which I think would have been just about a year ago.
Q. And so we went over certain ground rules in Mr. Cooper's deposition yesterday for depositions but just a few points of emphasis. I'm going to do my best to ask very clear questions and I'm sure I won't always succeed. So if there's any time there's a question you don't understand, just let me know and I'll rephrase it and make sure we're communicating effectively.
A. Understood.
Q. If at any time you need a break, just let me know and we'll find a good place to stop.
A. Will do.
Q. And have you been retained as an expert witness for the defendants in this case?
A. Yes, I have.
Q. And you prepared an initial report in this case; is that right?
A. Yes.
(Exhibit No. 2 marked
for identification.)
opening up which was policy analysis into domestic issues where they needed a demographer and they wanted to have m\& there for a year. I went for a year taking a leave of absence from the University of Pennsylvania. That extended into a second year and at that point I realized that I was much more interested in doing the policy research. And so I had to resign from the University of Pennsylvania, although I kept my sort of personal ties with my colleagues there and have continued to do so ever since.
Q. Did you teach any classes at the University of Pennsylvania?
A. Yes. The class that I taught most frequently was introductory statistics for undergraduates and I had a few other courses in substantive areas of sociology.
Q. And you said you were a demographer during your first position with the Rand Corporation; is that right?
A. I think they would have called me something else but that was what they had in mind, and I ended up eventually, the label they put on me was demographer and then I became senior demographer.
Q. What does that mean?
A. What it meant was I was somewhat more seasoned and they wanted to distinguish between a demographer who had been there for ten years and a newly hired one I guess. It was kind of an arbitrary term. Their terminology doesn't
Q. And that's been marked as Exhibit 2?
A. Yes.
Q. And your resume is attached to the end of this report?
A. Correct.
Q. Is it accurate and up to date?
A. I would say it's up to date. Even though it says June 2012 updated, it is up to date. Nothing has changed since then, with the exception of one additional publication which is accepted for publication but I haven't listed it and that is forthcoming.
Q. And can you describe your educational background.
A. Yes. My undergraduate work was at Dartmouth

College. I then did my graduate work at Brown University where I got a Master's degree and Ph.D. in sociology with a specialty in demography.
Q. And can you describe your work experience?
A. When I received my Ph.D., immediately thereafter I had, I was invited to take a position at the University of Pennsylvania as an assistant professor in the sociology department and an appointment in the Population Studies Center there which is one of the distinguished centers in the country. I was there for two years and in my second year I was invited to work with the Rand Corporation in Santa Monica, California in a new area that they were
correspond with the academic worlds. They have people who are classified as researchers, social science researchers. Within that field there are lots of different, especially psychology, sociology. So I was their demographer.
Q. So what does that entail? What kind of work did you do as their demographer?
A. It was really just across the entire spectrum. The only -- and I would say it was not only across the entire spectrum of domestic topics but I actually had some involvement with the military side of Rand which was of course the predominant one at that time. But it mainly had to do with anything that involved populations that needed to be measured using census data and the dynamics of change if those populations and also the implications of population structure for various programs such as the impending retirement of the baby boom generation and its implications for Social Security financing. A lot of work on the growth and decline of metropolitan areas. Cities that were expanding rapidly or contracting, anything that involved using data and developing methodologies for projecting the future in those context. So it was kind of like everything, anything that arose that involved a population I would be called in on at some point for some part of it.
Q. And you said you liked the policy research angle of this. Is that what you described, that kind of policy?
A. I found it invigorating and engaging. And at the same time it provided me an opportunity to explore a numbe of different applications of demography to real world problems which I over the years have managed to turn into published journal articles. So I think it's fair to say that I'm regarded in my field as someone who has brought to the attention of purely academic demographers a number of different ways in which their skills can be applied to real world problems published in peer reviewed journals. Very often as case studies for them to use to teach their own students.
Q. So that's the distinction you make. You described yourself as an implied demographer.
A. Yes.
Q. Would you describe yourself as a political scientist?
A. I'm not a political scientist, although I have I
think a good understanding of political science, where my field of demography intersects with political science on the quantitative side and I have in fact worked with political scientists. I don't know that I can say I published anything with a political scientist. No, I don't believe I've ever published anything with, co-authored any of the books. I've worked with political scientists and I've worked on some of the issues that arise in voting rights
elections, but in terms of analyzing elections themselves, I don't profess to be an expert in that area or to have done that per se.
Q. Have you testified as an expert witness in cases involving redistricting?
A. Yes, I have.
Q. And about how many of those cases?
A. If you mean deposition, deposition testimony, it would be at least several dozen. Courtroom testimony it might be on the order of a dozen or two.
Q. And are you primarily retained by plaintiffs or defendants in those redistricting cases?
A. I've been retained by both. I would say more often by defendants but not infrequently by plaintiffs.
Q. Do you have about a percentage breakdown for eithe side?
A. I would say just ballpark would be probably four times out of five I have been retained by a defendant and probably one time in five I would have been working on plaintiff's side of a case.
Q. And have you testified in any cases in which a party is advocating for the creation of a districting system to replace an at large election system?
A. Yes, I have.
Q. Approximately how many?
cases where political science and demography are on paralle tracks dealing with addressing questions that arise in the litigation.
Q. But you don't have any formal training in political science?
A. No, I do not.
Q. Would you describe yourself as an expert in racially polarized voting analysis?
A. I wouldn't say that I'm an expert in that area but I feel competent to, you know, to testify about how one puts together the data that are used in those analyses. I think I'm more -- my expertise is confined to assembling and evaluating the data that experts on polarized voting would want to use. Their expertise lies in the modeling that they do. My expertise is centered on the integrity of the data that they would be using.
Q. And you've never been qualified as an expert in the analysis of racially polarized voting?
A. Not to my recollection.
Q. Would you describe yourself as an expert in the analysis of elections?
A. I don't know really what you mean by analysis of elections. I certainly again would say that I am an expert in assembling data that describe elections at the precinct level and provide the data that one would use to analyze
A. Did you say have I testified or have I worked in? Just repeat the question.
Q. I believe I asked have you testified.
A. On behalf of a party that is going from at large to districts?
Q. Or any case involving that question.
A. Okay. What I have done most frequently is I have testified evaluating alternative plans that were being considered for a situation where going from at large to districts was being contemplated or being required, and I'm just trying to think of how often or with what frequency. A lot of what I've done is on the evaluation of alternative plans. I have probably testified on, in a dozen cases at least in which part of my testimony was comparing alternative plans and showing what was wrong with some and what was right with others. So that was kind of the nature of my testimony, rather than saying you should or you shouldn't do it.
Q. So were there cases in which you testified in which you've been retained by the party advocating for the creation of a districting system to replace an at large system?
A. I'm sure I've done it in at least one instance. I'd have to go back through all the cases l've worked on, but the answer to that question is yes.
Q. And how about for the other side, for the party that's advocating that the at large election system remained in place?
A. Probably at least a dozen times.
Q. Have you been involved in cases where a party is advocating for the creation of a majority minority district?
A. Yes.
Q. And in about what percentage of those cases have you testified on behalf, or have you been retained by the party who is advocating for the creation of such a district?
A. I'd say only several at best to my recollection.
Q. And how many cases have you been retained by the party opposing the creation of such a district?
A. Probably several dozen.
Q. Have you drawn a redistricting plan before for consideration by a court?
A. Yes, I have.
Q. When?
A. Countless times. I've drawn, I've drawn districts and alternative districts for citizen evaluation, for court consideration in just numerous cases. Too many to count. Dozens.
Q. How about for consideration by a legislature?
A. I don't know about a legislature. I'm not sure who
is considering. I would say I always thought of them as
A. More local than statewide. I've actually -- I don't know that I've ever drawn an entire statewide plan. I have evaluated portions of statewide plans. But the plans that I've drawn, I think I can say have been exclusively at the local level, that is to say for jurisdictions within states rather than an entire state.
Q. And can you give me some examples of where?
A. All over California. You can work your way north, south, east and west and name some places. I'll start with A, Alhambra, Compton, Elk Grove, the city of Elk Grove. Salinas. I don't know there's anything down in the XYZ range. But I would say at least several dozen cities, school districts, other local entities where they needed a plan and I drew it, or I evaluated a plan, one of several plans that were being put forward and said which one I recommended or could be justified as being the proper plar to use.
Q. And not all of these were involved in litigation?
A. Many of them were occurring under the cloud of potential litigation, and what was happening is they were proceeding in a way that would avoid litigation which they managed to do sometimes but not always.
Q. Has the court ever refused to admit any portion of your testimony as an expert witness?
A. No.
plans that I have -- that are going to be evaluated by someone who matters. I think it's typically the court. Legislatures, I don't really know how many there would be. I don't think that it would be very many. But I have done some work that I know has been, for whom the audience was a state legislature, whether they -- whether that was the primary recipient of my work, I don't know, but I know I was doing it on behalf of a state redistricting scheme.
Q. And have any plans, redistricting plans that you've developed been adopted by a court?
A. Yes, they have. I don't know that I can tell you how many but I know it would be more than a few.
Q. Could you give me some examples which court cases?
A. Well, there's -- I can't distinguish between the ones that were involved in court cases and the ones that were simply put forward in order to avoid a lawsuit and for which the jurisdiction then went forward with them. I know that, I know that there are at least a few instances that I could probably find in my, in my long list of cases where I have crafted a plan, shown all of the statistics about the plan and the plan has been adopted with the court's concurrence. I don't know if it was the case that the court said we want you to adopt that plan, that's the one we want you to adopt but it was with the court's concurrence.
Q. And have you drawn both statewide and local plans?
Q. Has the court ever refused to qualify you as an expert for any area for any reason?
A. No.
Q. What is your usual rate that you charge?
A. I charge $\$ 215$ an hour for the work I do and for deposition and courtroom testimony I charge $\$ 400$ an hour.
Q. How much time do you usually spend on these kinds of cases?
A. It varies widely. I don't think of it in terms of hours but I would say any -- probably the least time I've ever spent would have been maybe two or three days and the most time I think in terms of having worked on and off over a period of 18 to 24 months that might add up to, I don't know how many hours it would be, but possibly four to six weeks. Talking about four to six weeks of eight hours a day, six days a week type work spread over a lengthy period of time.
Q. So approximately what percentage of your annual income is derived from your work as an expert witness?
A. I've never thought of it that way. I would say probably -- in a good year perhaps half, in a bad year nothing.
Q. How about this year?
A. Which year are you referring to?
Q. 2013 so far.
A. 2013 so far. Well, I would say that probably would be a 50/50 balance. 50 percent of my income, household income I'm referring to.
Q. And how about last year?
A. Last year would be about the same.
Q. When were you first contacted by defendants?
A. It's going to take a moment of reflection. I'm thinking it was probably about seven or eight months ago but I'm not sure. I could easily tell by checking my billing records but somewhere in that vicinity.
Q. As far as you know was this lawsuit already filed at that time?
A. I believe it was. I'm not sure. The honest answer is I don't know for sure.
Q. And who contacted you?
A. John Safarli.
Q. And in general what were you asked to do with respect to this case?
A. I was asked to do what -- I don't know the words that John used, but I understood it in my terminology to be what I call a demographic workup. It's like you got to pull all the census data, you got to see what's going on in this place over time. You got to look at the population, composition, structure. You have to look at how the different ethnic and racial minority groups are distributed
spatially across the city. I then, as is typically the case, proceed to evaluate what kinds of data are available and what kinds of limitations they might impose on an ideal analysis that one might want to do and that would extend not only to the demographic data per se, which would be the census data, American Community Survey data, historical data, availability of information about the overlaps, the overlap of different geography such as census geography with precinct geography. I would also look at the availability of precinct level election data and the availability of files that provide voting history. So it's really the entire spectrum of information that one would need going forward.

And I refer to that as a demographic workup but it really is both a demographic workup designed to characterize the population but also a workup of the available data to understand what one has to work with, what the quality of the data are, especially the election data and especially the American Community Survey data and the scale which it would have to be used. So that is -- I can't remember what your question was, but that's the end of my answer to that question.
Q. Did counsel provide you with certain facts that you considered in forming your opinions, facts about the case?
A. I can't think of any facts about the case that
formed, facts that they gave me that formed my opinion. The facts that formed my opinion were the facts that came out of the data that I analyzed. I mean I knew something about what the case was about and my -- I guess I would say that I informed them what facts I thought they needed to have in order to have my testimony pertain to the litigation that they were talking about. And the issues that I told them I needed, I felt I needed to address were the three Gingles factors and that I was going to proceed to do so.
Q. What about the senate factors?
A. I was cognizant of the senate factors but I didn't really focus on those at the beginning, and I guess my feeling is I'm in a position to focus on them as needed. But my primary focus thus far has been on the three Gingles factors.
Q. Did counsel provide any assumptions that you relied upon in forming your opinions?
A. No.
Q. So no assumptions about the desirability of maintaining the at large election system?
A. No. There were no assumptions. My only assumption was that it was going to be legally possible or legally not possible, but they didn't provide me with any assumptions to make, no.
Q. Have you had any communications with the defendants
themselves?
A. No. Um, no. I'm looking at the names of the
defendants and I don't know any of them.
Q. Can you describe the materials that you were
furnished by counsel in preparing for this case.
A. I think -- well, apart from the complaint, these are
the things that come to mind. I don't know if this is an
exhaustive list. But the complaint, I then looked at the
complaint and I said I need you to provide me with contact
information in the, I don't know if it's called the
elections department, but the place where I would go to ask
about election data and would not want to be just another
member of the public saying, you know, could you furnish me
with all sorts of data and help me. But I wanted to have an
introduction so I believe I was referred to someone in the
election's department and was told that they will be, you
know, either willing to provide you with the information you
want or if necessary, willing to bill the client if there
are any costs involved, which I don't know if there were or
not. But I was given that introduction and that was what
they furnished.
Q. Anything else, any documents?
A. Not that I can think of. I know that I received
documents that were filed by experts on the other side but I
don't think that there were any documents that were provided 3 know, basically to the best of my recollection.
Q. So what sources of information did you rely upon in forming your opinion?
A. Well, there's a number of sources. The primary source is, the broad source is the U.S. Census Bureau. U.S. Census Bureau is the source of decennial census data which obtained at a particular place on their website known as America Fact Finder. I also accessed in a separate website American Community Survey data -- let me just go back to that other question.

You said did the defendant's attorneys furnish anything to me. I do recall receiving a large package that contained a number of maps and other sorts of materials that had to do with public service delivery I think, and those had really nothing to do so far as I could tell thus far with my analysis. I still have them in a box but I took a cursory look and I said I don't have any current need for these. So I did receive those but I haven't used them.
Q. Any other maps that you were given that you did consider or rely upon?
A. Not to my recollection. I think the maps I got were precinct maps from the election's department. But I'm pretty sure that everything that I got was from the
election's department, not from the defendant's attorneys.
Q. And you were listing some of the sources that you relied upon.
A. Yeah. Basically the Census Bureau is the major source of information. I then obtained a voter history file and -- basically I downloaded a lot of data directly from the website of the election's division, so they were a source of the election data. And I then consulted a lot of Census Bureau technical documentation and decided that I wanted to get some additional tabulations of census data that had to do with basically quality control in the sense the bureau collects data and also what's known as the public use microdata sample for the American Community Survey. S all of this is under the general category of Census Bureau. Lots of different cubbyholes, but I think that's an exhaustive list of all the sources.
Q. You said you accessed the voter history file. What does that mean?
A. Voter history file is a file that an election's
department keeps in which they -- it varies from place to place in terms of how they do it. But in this case it's a file of -- kind of imagine there's a snapshot of everybody who's a registered voter today where today could be this month or in the last, you know, yesterday or last week, the last time we ran it. And it says these are all the
because an exemplary case of the issue of how, or of the dilemma that arises because of the tension within the law. That we're obliged to draw districts based on total population but when one gives predominant emphasis to race or ethnicity, what can happen, it doesn't necessarily happen, but it happens in certain local demographic settings, is that you end up with an effort to concentrate Latinos in a district in order to make them a majority of that district and empower them to elect candidates of their choice, while at the same time you are disenfranchising people in other districts who are not only nonHispanic Whites but may well be other racial minorities or in fact many other Hispanics who happen to be citizens living in another part of down. And it creates a tension within the law because originally drawing districts based on total population would closely approximate equipopulous districts in terms of persons who were entitled to vote. But because of the demography that has come about in this country in Latino communities you get this paradox that has only come to the attention of demographers I think, you know, in the last ten years. And it's not something that one encounters when one is dealing with the issue of African American versus nonAfrican American populations.

If you've been drawing districts in which you've tried to address voting rights concerns that have to do with
the African American population, which of course trace back historically to -- that's where the Voting Rights Act really came into being, it was designed to remedy, you will not have encountered the problem of citizenship typically because the African American population, perhaps with the exception of Florida today and some other states, really the citizenship issue was not an issue. So if you learn how to do all this over 20, 30 years based on predominantly cases that involved African American populations, encountering this dilemma with citizens is kind of a new problem and it's one that l've been sensitized to about 15 years because it first cropped up in California. Now it appears here in Yakima and it's an issue that is cropping up all over the country. I've encountered it in Gainesville, Georgia and other places as well.
Q. Now I'm going to come back to discussing that issue I just wanted to make sure we've covered the universe of all the sources that you relied upon in forming your opinions including the one about the electoral imbalance.
A. To the best of my recollection, yes.
Q. Did anyone assist you in your work on this case?
A. I would say that I have requested or asked for second opinions from colleagues with whom I have co-authored papers on certain issues where I believed that I was correct but I wanted to be 100 percent sure. In terms, in terms of
A. Yeah, that was Tom Bryan at the former Census Bureau.
Q. Was there also a research assistant?
A. No. The only other person I work with who is a former colleague at the Rand Corporation. He was a mathematician there, he's a Ph.D, and he's retired from Rand. His name is Allan Abrahams. As I was the demographer, he was the statistician at Rand, one of many statisticians. And just happened to be the person that I had called on probably starting 20 years ago to do Spanish surname matching. And ever since, any time I need to have it done, just send him an email say here's the file, run your program on it.
Q. And did you send him any emails in this case?
A. I'm sure I did, yeah, I sent him the files and said run the match on this file.
Q. I'm sorry, maybe I misunderstood. Did you not say you also had somebody else who was either matching up the voter files, who was doing the Excel spreadsheets for you?
A. No, I didn't say that.
Q. Can you tell me about your working papers in this case. What kind of notes did you make in this case?
A. Working papers?
Q. Yes.
A. What do you mean?
Q. Did you keep a case file?
A. Well, I have a file of stuff that I downloaded from the election department. I have a file that contains all the reports from the other experts. I have a whole bunch of spreadsheets that I put together that are the basis for the tables in my report. That's what I have.
Q. Did you make any other notes that would be in that file?
A. I'm sure I have notes on lots of things. I mean I have notes on all the documents that I've read. I'm sure I made notations on all the spreadsheet, the printout of spreadsheets calling attention to a particular precinct or circling areas where I wanted to focus on something. Usually what I've done is printed off -- basically I go on the Census Bureau's website and there's a table of numbers. I'll print the table off or download it electronically. And I may have taken that entire table and circled the numbers that I wanted in it and then those numbers will appear in a table in my report. But I mean that's -- you know, rather than reading it off the screen. So I have a paper record of where this number came from.
Q. Did you prepare any outlines or memoranda in this case?
A. No outlines. No -- I think there probably -- when
you say memoranda, I think I have emailed a few memoranda tp

John Safarli saying --
MR. FLOYD: If it deals with strategy or any questions that we had, I'll need to talk to you about it because it may be privileged, okay. If it's just passing information back and forth, I don't have a problem.
A. I think there was at least one email I can remember where I would say, you know, here's what l've done so far and here's what I'm going to do next.
Q. That was an email to counsel?
A. Everything that l've sent back and forth has been email. Yes, so it would have been email.
Q. And you mentioned your rate was 215 an hour for you research and your report writing and 400 for deposition and trial testimony?
A. Yes.
Q. And that's your rate in this case as well?
A. That's correct.
Q. And is payment of your fees in this case in any way contingent upon the outcome of the case?
A. No.
Q. Who do you submit your bills to?
A. I guess I submit them to John Safarli and he passes them along to whoever is responsible for paying them.
Q. Do you know who is responsible for paying them?
A. The checks I've been receiving so far have come from
the City of Yakima.
Q. How often do you submit an invoice?
A. Not very often. It's the least interesting part of my work. I would say it's been typically every few months.
Q. And about how much time have you spent performing your work on this case so far?
A. I would have to check back on the amount of time I spent. I really haven't kept track of it. I have a record of it but I don't really know off the top of my head. I would say it's quite a bit of time. In my experience it's been quite a bit of effort.
Q. But you have no approximate amount of hours?
A. I'd have to check. I couldn't quantify it, but a
lot of time relative to how much time I spend on cases generally.
Q. And do you know how much you've invoiced counsel t $\phi$ date?
A. I don't know offhand. I'd have to check my records.
Q. Have you completed your work in this case?
A. I don't think so in the sense that I may be, I may be and stand ready to respond if asked to address any other technical issues that come up and certainly I anticipate preparing for trial. I haven't yet given much thought to the exact form of the exhibits I want to use, but I do have kind of the general idea in my head and I anticipate that
once I'm told to do so, l'll be ready to sit down and draft
the exhibits that I want to use to make points that I want to make based on what I found.
Q. So you said you're ready to respond to any issues that come up but you're not going to do any further independent analysis?
A. No, I have not been asked to do anything further at this point, no.
Q. How did you prepare for today's deposition?
A. I reviewed my reports and I reviewed Mr. Cooper's reports and I don't think I did anything else other than that, other than I had a brief conversation with counsel which I shared with them my views and my reactions to Mr. Cooper's deposition yesterday. I told them what I saw and what my impressions were and the kind of conclusions that I had drawn about Mr. Cooper's work.
Q. Okay. So you prepared a report in this case that was served to plaintiffs on March 22nd; is that right?
A. I'll take your word for that.
Q. And I think you actually prepared another report that was served to plaintiffs one day later, and I think that one just corrected the paragraph numbers. Do you recall that?
A. I didn't know that. I was not aware that they corrected for paragraph numbers. All I know one report was
A. You mean information that does exist, a wish list of information?
Q. Information that does exist.
A. No, I can't say that there's any information that does exist that I would have wanted to have.
Q. So your reports address various criticisms of Mr. Cooper's illustrative plans 1 and 2 ; is that right?
A. That's among the things it does, yes.
Q. Your reports take issue with Mr. Copper's CVAP calculations?
A. Correct.
Q. And they also address his potential electoral imbalance issue that you described in your initial report?
A. Yes.
Q. Are all of your criticisms of illustrative plans 1
and 2 contained in those reports?
A. I'm thinking back now on what I heard in the deposition yesterday and I guess I would have a general criticism, and it is not a criticism that emanates from Mr. Cooper's written report but it emanates from the deposition itself.
Q. What is that?
A. It's my opinion that Mr. Cooper is good at what he does in terms of adding, subtracting, multiplying and dividing with numbers. He is a competent person in terms o
submitted and it was my original report. And they said they submitted it, so that's all I know.
Q. But you didn't make any paragraph numbering corrections after that?
A. No.
Q. And then you submitted a third, another supplemental report on April 8th; is that right?
A. I'll take your word for the date on that. Yeah, dated April 8th.
Q. Do you believe that you devoted all the time that was necessary to ensure the accuracy and trustworthiness of these reports?
A. Well, one never knows if one's devoted enough time and certainly one hasn't devoted enough time if there are typographical errors or if there are quantitative errors. So I would have to say I don't know how to answer that question.
Q. Do you have confidence in the reports that you wrote?
A. I have a high degree of confidence in the reports, yes.
Q. Do they comport with your professional standards?
A. Yes, they do.
Q. Is there any information you would have liked to have had that you didn't have in writing your reports?

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working with numbers. However, I was struck by the fact that he is not concerned with what the numbers actually are measuring, that is to say what lies behind the numbers. And by the standards of my field I was concerned that he does not apply the skepticism that demographers normally apply to numbers, that is to say here's a number but it's not necessarily a perfect reflection of what it is that I'm trying to get at behind the number. And what demographers routinely do is they will test the validity of or they will at least try to gauge the precision or imprecision of numbers so that they know what it is they actually can know from the number.

And I don't believe that Mr. Cooper exercises what I would regard as kind of the minimal necessary evaluation of data quality that prevail in my field. I know that were he to be judged by the standards that prevail in my field, there would be lots of questions about have you looked at the data to see what might be wrong with them. Have you taken any account of the limitations of the data. And I don't really, I don't fault the calculations that he's made because I haven't found any calculation where he made an egregious error, divided a number by another number and got it wrong. He got all the calculations right, but he doesn't seem to grasp the significance of some of the basic assumptions that he's making when he draws conclusions fron
and the data in this case you're referring primarily to his analysis of the Citizen Voting Age Population numbers?
A. That's, that's the one of primary concern to me. I can't offhand cite some of the other data, but I think my concern also is with the methods that he uses. I'll give you an example.

He and I have a difference of opinion as to how to allocate ACS citizenship factors that are published at the bloc group level across individual blocs that lie within those bloc groups. He has his method, I have my method. His method, I would characterize it makes some sense but it's kind of a method that he invented that there's no -- it's not a standard method that one would use and it's definitely not the method of choice in terms of standard demographic practice because it violates a basic assumption, which is a logical assumption, that the whole should be the same as the sum of the parts. And the fact that it violates that assumption is a basic reason why I would say if there's another way to do it, you want to do it that other way rather than his way, if you can get rid of that violation of the basic logical assumption. Conditional upon the fact there isn't something, some other basic assumption that's being violated with Morrison's preferred method.

I considered Mr. Cooper's method and I considered my method and I concluded that my method was the one of choice
the numbers, and I don't know if this traces back to the fact that his background is rather thin by the standards of my field in terms of his professional qualifications.
That's a brief summary of what conclusions I drew from yesterday's deposition.
Q. So when you say -- you're talking about the numbers, what numbers in particular are you talking about, what data?
A. Well, the numbers that he uses to assert that a particular district has a particular number of Latinos, Latino voting age citizens.
Q. So the numbers are --
A. That would be a number of central importance. I mean all of the numbers one should have some degree of concern with evaluating. Not to say that you're concerned about them but just to say here's a number, we need to understand where it came from, what its limitations might be and we need to understand how to interpret the measures tha: we are calculating from the numbers such as the percent Latino calculated from two numbers. I'm just saying that demographers routinely evaluate -- they spend a lot of time evaluating the data on which things are based. The completeness of the data, the accuracy of the data, whether the data are subject to possible misreporting of things

Just to give you an illustration. If I showed you a table that says here's the number of births that are
registered -- you know births get registered, there's a very good registration of vital events. The number of births registered in the City of Seattle for the year 2012 calendar year. I say oh, that's the number of births in Seattle.
Now, that could be the number of births that were registered as occurring in hospitals in Seattle on the part of people who came to those hospitals from suburbs outside the city or it could be the number of births registered to residents whose usual place of residence is in Seattle, where the birth might have taken place in some other city.

So if you don't ask kind of the basic questions about what am I working with here -- and that's an extreme example, but that's the kind of -- you know, you say you just have to be cognizant of the fact that someone collected those data in a particular way and you need to understand how those data were collected, you need to understand what lies behind them, you need to understand what their limitations are so that you can make an informed -- you can formulate an informed conclusion about what they show or what they might not be capable of showing or where the limits of those data are. Just how fine a line can you make in drawing a distinction between let's say 121 people and 119 people. Do you really have two more people. You need to understand where the data came from.
Q. So in terms of Mr. Cooper's analysis of the numbers
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But I wanted to be 100 percent sure and I consulted my statistician colleague, Tom Bryan, who concurred with my evaluation and who also suggested that I contact Professor Swanson. Professor Swanson concurred and his words I think were to the effect, unless you have a compelling reason not to use your method, you are obliged to use your method rather than Mr. Cooper's method because there is a compelling reason not to use his. And that confirmed my opinion, which is that you don't need to do it in a way where Latinos and nonLatinos don't add up to what the total published estimate of total is if you can avoid that problem.
Q. So the dispute you have with the methodology and the numbers, or Mr. Cooper's analysis of the numbers it is, as far as I can tell, it's all about the Citizen Voting Age Population. Are there any other numbers or data?

MR. FLOYD: Object to the form of the question. Compound. She's asking you about numbers. She's asking yo about analysis. So there's two different things.
A. Take them one at a time.
Q. I'll rephrase the question. You mentioned that Mr . Cooper, you were concerned with the way that he is measuring the numbers, that he's looking at the numbers. And the numbers that you mentioned so far have related to the Citizen Voting Age Population numbers; is that right?
general limitations of the person who has drawn conclusions from the data, that is to say I'm -- my confidence is shaken insofar as the person who has drawn conclusions from the data has failed to take into account all of the issues that I brought up about the quality of the data which are all making me conclude that the number of Latinos has got to be less and less and less with each issue that I looked at than what the ACS numbers imply.
Q. The number of Latino citizens of voting age population?
A. Correct.
Q. You mentioned earlier that you've drawn numerous redistricting plans for courts and for other entities. Have you drawn or attempted to draw any redistricting plans for the City of Yakima?
A. No, I have not.
Q. Do you have available as part of your work any GIS software?
A. No. I don't do GIS. I always rely on a person who is specialized in that area.
Q. And who did you rely on in this case for that?
A. I didn't do any GIS work, so I didn't rely on anybody.
Q. Are you familiar with any GIS software?
A. Oh, yeah, yeah. I mean I know what's out there and

I actually have -- my practice is to sort of, you know, look over the shoulder of a person who's manipulating the software and say I know exactly what we can do with this, move this bloc there, et cetera, et cetera. And I prefer to do it that way because that's a very specialized kind of area and the software is constantly changing. So if I were to learn how to do it today and come back and do it six or 12 months from now on another case, the software would have changed and I probably would have forgotten some of the fine points. So I view it as a specialized kind of skill. I rely on people who do it day in and day out. I tell them what I want, they draw a map, I double-check the work. I say show me the numbers that are behind the map, I look it over and I say great, now I'd like to change red to dark red or green to light green, go ahead and do it.
Q. And you read that Mr. Cooper used a software called Mapitude for redistricting?
A. Yes.
Q. Are you familiar with that one?
A. Yes.
Q. Have you used that in the past or supervised somebody who's used it?
A. I believe that Mapitude was the software that I was looking at when I looked over the shoulder of at least one GIS person that I was working with. I know there's Mapitude
and there's some others. But Mapitude is a fairly common one.
Q. So you would agree it's a generally appropriate tool to use?
A. Yes.
Q. But you didn't use any GIS software in this case?
A. I had no reason to. Well, actually I take that back. I think there may have been -- I think there was a point at which I asked my GIS person to, at an early stage, to draw me a map that showed the relative, the relative layout of different ethnic groups, different racial groups in Yakima just so I had kind of a picture of what the lay of the land was. And that would have been probably at the bloc level using decennial census data. That's to the best of my recollection. I'm not sure that I did that. I'm not sure exactly what the map was like but I know I wanted to have an orientation map to just have an idea of where things were in the very early stage of the case, and this is before there were any maps that I saw.
Q. And who was that that you asked?
A. That person is a person with whom I have worked. Her name is Kathryn Norcross and she is an applied demographer who specializes in GIS work. She basically map $\$$ census data. She has a Master's degree from Florida State in applied demography.

|  | 45 |  | 47 |
| :---: | :---: | :---: | :---: |
| 1 | Q. Did you use any other software or programs in your | 1 | Q. And that's on page 13. |
| 2 | work in this case? | 2 | A. Yes |
| 3 | A. I used Excel. | 3 | Q. And you see here in this paragraph Mr. Cooper notes |
| 4 | Q. So let me ask about your knowledge of Latino | 4 | that nearly three quarters of the city's 2010 Latino |
| 5 | population in Yakima. You said that you had Ms. Norcross | 5 | population resides in that nine mile square area east of |
| 6 | map out the concentration of Latinos. Do you know how long | 6 | 6th Avenu |
| 7 | Latinos have been in the city of Yakima? | 7 | A. Yes. That answered the question then. Those |
| 8 | A. I know going back historically, not in the | 8 | umbers, if they're correct, yes, the majority live east of |
| 9 | in the recounting of the history of Yakima valley, quite | 9 | north 16th |
| 10 | few decades. There is a long tradition of season | 10 | Q. And the figure on page 13 as well shows that the |
| 11 | agriculture workers coming and going and that's a ver | 11 | largest concentrations of Latinos are east of 16th Avenue? |
| 12 | typical pattern. That's h | 12 | A. Yes. Those areas with the highest share, the |
| 13 | California got settled and I see Yakima as being kind of an | 13 | largest percentage of total Latino population are east of |
| 14 | extension of that process. It's a well-understood phenomena | 14 | north 16th, yes. |
| 15 | in my fi | 15 | Q. Are you aware of any other large concentrations of |
| 16 | Q. And the Latino population has grown over the last | 16 | Latinos in the city of Yakima? |
| 17 | few decades? | 17 | A. There are areas that have greater and lesser |
| 18 | A. Yes. | 18 | concentrations west of North 16th and you can see them in |
| 19 | Q. And in fact they comprise about 41 percent of the | 19 | this map. They're not as, they're not as extreme as the |
| 20 | city's | 20 | nes east of North 16th but there is a pattern of -- you |
| 21 | A. I'll take your word for that num | 21 | know, it's an interesting pattern to me. Not all the |
| 22 | Q | 22 | ncentration areas are east of North 16th. There are som€ |
| 23 | R. FLOYD: Whenever you want to take | 23 | er areas where Latinos are more concentrated relative to |
| 24 | wheneve | 24 | n |
| 25 | MS. KHANNA: We can take a break right now. | 25 | Q. But not relative to east of 16th Street? |
|  | 46 |  | 48 |
| 1 | We'll go off the record. | 1 | A. No, not in terms of total population here. This is |
| 2 | (Recess taken 10:13 a.m. to 10:24 a.m.) | 2 | ery coarse measure, it's a total population. When I look |
| 3 | BY MS. KHANNA | 3 | it, I look at this map and I see exactly what you're |
| 4 | Q. Dr. Morrison, woul | 4 | saying and I have no dispute with what you're asking me |
| 5 | Yakima are primarily located east of 16th Avenue? | 5 | about. But one would want to look at this in terms of, a |
| 6 | A. When you say primarily, do you mean | 6 | least my view of this is I see here what would be regarded |
| 7 | them? | 7 | a traditional long-standing Latino enclave with som |
| 8 | Q. | 8 | er emerging areas of Latino residents elsewhere in the |
| 9 | A. I haven't actually looked at it but | 9 | city, quite possibly areas where the Latinos are more likely |
| 10 | plausible, but I wouldn't say until I checked the d | 10 | to be citizens than in the more heavily concentrated areas. |
| 11 | actua | 11 | So there's kind of an underlying historical developmen |
| 12 | Q | 12 | ocess here that one has to be aware of based on what l'v |
| 13 | asked her to map out the various concentrations of the ethic | 13 | seen in other places |
| 14 | groups in Yakima. Did you see anything where she had mapped | 14 | Q. But you have no dispute with the information as |
| 15 | out the concentration of the Latino population in Yakima? | 15 | presented on page 13 |
| 16 | A. Yes, I know | 16 | A. I have no reason to doubt that the numbers were |
| 17 | east of that | 17 | accurately |
| 18 | I mean there's a | 18 | Q. So given this information would you say that the |
| 19 | are -- they appea | 19 | Latino population in Yakima is geographically concentrated |
| 20 | than elsewhe | 20 | A. The total population certainly is geographically |
| 21 | (Exhib | 21 | concentrated, no question about it. |
| 22 | fo | 22 | Q. And you reviewed illustrative plan 1 in Mr. Cooper's |
| 23 | Q. Could you turn to in Exhibit 1 which is Mr. Cooper's | 23 | declaration; is that right? |
| 24 | initial declaration, turn to paragraph 27. | 24 | A. Yes. |
| 25 | A. Okay. | 25 | Q. There's seven districts in that plan; is that right? |

offhand. One of them is something, Colby something measure
A. That's my understanding
Q. Are the districts in illustrative plan 1 compact?
A. Compactness is a relative term. You can only say it's more compact or less compact than some other comparison. I would say they are not bizarrely configured which is a term that I would carefully apply to some plans I've seen.
Q. So relative to other plans that you've seen, would you say the districts in illustrative plan are compact?
A. No, I would say they're not bizarrely figured.

Compactness is a relative term. You'd have to ask me are they more compact or less compact than some other comparison.
Q. Would you agree that they're not oddly shaped?
A. Again, it's a relative standard. I would say the standard that I could apply without any question is that they are not bizarrely shaped.
Q. Are you aware of various ways of measuring compactness?
A. Yes, lam.
Q. What are some of those ways?
A. I think there's as many as a dozen different
measures that have been developed by political scientists and geographers. I can't tell you the names of all of them offhand. One of them is something, Colby something measure

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but basically they get a different conceptualizations. Like if a perfect district were a circle, how different is it from a circle in terms of geometry. There are a lot of different measures and they all, you know, quantify what we have in mind, which is does this thing look reasonably square or reasonably circular or are there, you know, is the perimeter around the plan much more than what it would be if it were a circle. If you have a district like the ones that have been configured, I can think of some in the state of Illinois, in North Carolina where you look at it and kind of the test one uses if you look at it and you say it looks like an insect that got driven over by a car, that's not going to be compact. But all of these measures pick up different, analytically different aspects or analytically distinct aspects of a district, and basically when you look at it, you can tell when it's bordering on being bizarre.
Q. So one way to tell compactness is really an eyeballing?
A. An eyeballing can tell you if you got something that really looks strange. You look at it and say why would anyone draw something that should be more or less, you know normal or nonbizarre, and an eyeball test would be one test. But the compactness measures are very useful because they give you a metric that allows you to compare different plans and say one -- if all other things are equal, this one is
might say we'd like the deviation from ideal to be zero but in order to give weight to let's say a particular community of interest or to avoid splitting a precinct or to avoid an extreme degree of electoral imbalance or do any number of things or to deal with the fact that a river is splitting part of the city or there's a natural barrier, we'll have to let the deviation from ideal grow a little bit larger than zero. And the general understanding is that if the deviation from ideal reaches ten percent or exceeds ten percent, that's pretty much the point at which courts seem to demand to know why is it that high. And if there's a legitimate answer, there's nothing wrong with it being above ten percent if there's a reason for it.

Now, the reason could well be a geographic barrier that sometimes will arise. You see there is no way you can do this when you have an outlying enclave of people here and you have to connect them through a lot of rural territory with the rest of the city over here. There's just a lot of -- there are geographic elements that sometimes rule out any other way of doing things and then there's a reason. But when there's no obvious reason or no stated reason, a deviation from ideal that equals or exceeds ten percent gets you into what would be called the danger zone where withou an explanation, it's unjustified
Q. And is illustrative plan 1 in the danger zone?
A. I don't believe so. Not to my recollection. I don't remember exactly what the deviation from ideal was, but I don't think it was not anywhere near the danger zone
Q. I believe paragraph 55 in Exhibit 1, illustrative plan 1 has an overall deviation from the ideal district size of 6.33 percent
A. Right. No, that is not in the danger zone as I've described.
Q. Does illustrative plan 1 respect communities of interest?
A. It depends what community of interest you're talking about. Community of interest can take on any number of means. Certainly it respects the Latino population's concentration in that area and in that sense it respects the Latino total population community of interest. That would be -- and what I'm referring to there is specifically all Latinos, children, immigrants, citizens, noncitizens, everybody who is a Latino, if one envisions that as a community of interest, then District 1 respects that community of interest. What it may not respect is the community of interest of registered Latino voters or Latino registered voters citywide.
Q. And how is that?
A. Because it has the effect of devaluing the vote, the voting strength, devaluing the votes of Latino eligible
voters outside of District 1 elsewhere in the city, while overweighting the votes of, as I recall it's roughly speaking half of eligible voters within District 1 . So you can think of it as the community of interest of all Latinos is respected by district 1 , but if you think of community of interest of Latino voters who might have a particular political stake in one or another electoral outcome, something on the half of Latinos, if my memory serves me correctly, certainly a significant fraction of Latino eligible voters are seeing their votes devalued by virtue of the way that District 1 is configured.

One of the problems I have with both of these illustrative plans is that Mr. Cooper, while he's done a workmanlike job of configuring these and managing to boost the Latino share among eligible voters, that is to say Latino CVAP, he doesn't seem able to conceptualize the factors that need to be balanced when you talk about balancing traditional redistricting criteria. He seems to be totally unaware of what was happening with the damage that was being done to the weighting of votes across the city by configuring District 1 that way.

I didn't hear yesterday in his deposition -- I certainly haven't read in his report and didn't hear in the deposition yesterday any specific way in which he accounted for the various traditional redistricting criteria. He said
he balanced them, but that's like saying I took account of all the things that I should have taken account of, but I didn't hear him respond specifically how he had taken account, for example, of the differential weighting of votes. That is to say I would have liked to have heard him say I noticed that there was a severe imbalance and, therefore, I took this step to try to moderate the imbalance. So while it still existed, I had kind of taken the -- I had reduced its severity as one step in trying to balance redistricting criteria.

Now, there are other criteria where I would have liked to have heard him say there was this criterion, there were other communities of interest or there were precinct boundaries. And I noticed that I had split x-number of precincts and what I did is I made a slight modification to make it one less precinct that had been split so that I could hear him explain exactly how he had looked at a criterion and balanced it against some other criterion and said I've come up with a district that balances each and every one of the traditional redistricting criteria or at least acknowledges it and says it's not going to matter what I do, it's going to stay about the same. And here is a plan that balances these criteria where one can look at it and say yes, it's a reasonable compromise for someone who has to take all these things into consideration.

My astonishment yesterday was that I didn't hear anything specific about how that had happened. And I don't as best as I can tell, I don't think Mr. Cooper had even thought about the problem of the severe overweighting and underweighting of votes depending on which district an elector happens to reside in. It's a very, very damaging imbalance that, as I've said before, exposes an underlying tension within the law and it does so unnecessarily. It's something you could say the law hasn't told us what to do about this problem but by drawing the boundaries in a different way I can at least make the problem not so prominent.

And my concern is that from everything I can tell looking at this, what Mr. Cooper has done is he has subordinated either all of the traditional redistricting criteria or at a minimum has subordinated the electoral imbalance issue to his concern with race, that is to say ethnicity. Race or ethnicity was the prominent, was the predominant factor in drawing District 1 in all of these plans.
Q. When you say he subordinated all of the traditional redistricting criteria, do you mean compactness, contiguity, respect for communities of interests?
A. I should rephrase that. I don't think he
subordinated all of them but he certainly has subordinated it.
report about that and there should be some -- if not in the report, at least in the deposition I would have liked to have heard him explain that he had at least thought about it and had weighed, you know, the dilemma that you can eithe do more of this but it will be less of that. And all he said was yeah, I balanced them all. There was no content to

And that led me to conclude that I don't think he really understands the issue here. As I say I think he's very good with the numbers, he knows how to add, subtract, multiply and divide but he doesn't understand the complexity of the issues here. This is not an easy thing to do, to balance these. And you need to think it through very carefully and you need to be able to explain what the tradeoffs were and I don't think he even thought about the tradeoffs in any meaningful way. That's the conclusion that I've reached based on the deposition that I heard.
Q. In your report addressing illustrative plan 1 did
you ever raise any issues about Mr. Cooper's failure to respect precinct boundaries?
A. No, I did not.
Q. Did you have any dispute with that at the time that you wrote the report?
A. I didn't have any information on it and I was really waiting to hear what Mr. Cooper had to say about it. in stark, sort of in a very stark way the underlying tension within the law. He didn't need to do that.
Q. So the traditional redistricting criteria you believe he subordinated was the electoral imbalance issue?
A. At least that one and possibly others.
Q. Such as?
A. I haven't looked -- I would have liked to have heard him say something about how many precincts were split but I didn't hear that. I know he said that he'd like not to split precincts and then he said he did split some. I don't know if he said I didn't split as many as I could have or I had split some precincts but I was able to reduce the number that I split by doing $X$. In other words, I didn't get any sense of what the tradeoffs were. There's nothing in his

There's nothing in the report and I assumed that there would be something in the deposition. But I didn't say anything about it because it was not the predominant concern that I had.
Q. So on paragraph 56 in Exhibit 1 when Mr. Cooper says, "In sum, the illustrative plans comply with key traditional redistricting criteria," and then he includes a list, you do not dispute that it complies with compactness?
A. No, I don't have any -- I certainly have no, no -- I don't directly dispute compactness. That's not one of the factors that I would dispute.
Q. Or contiguity?
A. Nor contiguity. Contiguity is off the table.

That's not an issue.
Q. And you do discuss the one person, one vote issue in the context of electoral imbalance?
A. That's correct.
Q. But you do not specifically address the respect for communities of interest using that term?
A. I need to know more about what communities of interest there are other than the total Hispanic population that is concentrated in one area.
Q. Do you have any information on whether there are communities of interest?
A. I would say it would have been helpful if the term
communities of interest had been enumerated more specifically. Right now I know of one community of interest which is the total Latino population to the east of 16 th. The plural term communities of interest, there must be at least one other but I don't know what it is and I never heard him say what it was. It could be, for example, that a community of interest consists of the historic downtown of Yakima. That's very often a community of interest. Another community of interest could be an area that is populated predominantly by retirees who say we're not interested in more money being spent on schools. Our interest is more money being spent on Meals On Wheels. I don't know what the other community of interest was, community or communities, but there apparently was more than one but I don't know what it is.

So when he says he's respected communities of interest, he's just made the statement. But I would have liked to have seen another at least full page enumerating what I mean specifically here is on one person, one vote I tried to reduce this. On compactness it's about as compact as you can get given the other things I had to do. No problem with contiguity. I recognize that there were X communities of interest. I took them into account. Community of interest so-and-so as you can see is all within one district.
points north in District 1 and there's a puzzling figure in district 5 that points into District 1. So you could say -- and then in addition if you look at District 1 there's a little, I'll characterize it on the southeast side a nipple that intrudes into District 2 and one might ask what is the rationale for that. What is it, what is it that that is offsetting in terms of other traditional redistricting criteria or does that perhaps evidence -- my suspicion is that it evidences the exclusive emphasis on race or ethnicity in terms of configuring District 1. I would have to look at the data to document that, but I would be surprised -- my expectation would be that the nipple that I've referred to is an area with a high concentration of Latinos.
Q. So would you say that the districts in illustrative plan 2 are bizarrely shaped?
A. I wouldn't characterize them as bizarrely shaped, no, and you're asking me for an overall evaluation. Most of the other districts are, you know, reasonably compact but there are some exceptions and I would say District 1, district 5 in the northeast part and District 2 where the nipple intrudes, these are areas where I would say it's not bizarre but something's going on here. Maybe there is -- maybe he did take account of incumbency. I don't know if there's an incumbent in one of the, I would call them the

There's another element here which he has not included, he hasn't taken any account of, which is incumbency. Incumbency is one of the legitimate redistricting criteria. I don't know if he took any account of that. He hasn't mentioned it at all. That's a legitimate redistricting criteria.
Q. And you didn't mention it at all in your reports?
A. I had no reason to mention it. I wasn't doing the line drawing. I was simply evaluating the demography. But I guess I would say his summary statement in paragraph 56 noteworthy in the respect that it does not even include all of the traditional redistricting criteria that matter. He's given some of them but some of them that are there are aren't even on the list. I don't know what he did about incumbency.
Q. And you reviewed illustrative plan 2 as well; is that right?
A. Yes.
Q. That plan also has seven districts?
A. Yes.
Q. Are the districts in illustrative plan 2 compact?
A. I would say relative to plan 1 there is some -- I
haven't measured this exactly but I can tell just looking at District 1. District 1 in plan 2 is less compact than it is in plan 1. There's a puzzling finger that points out,
intruding fingers or nipples of territory. Sometimes one has to do that in order to deal with the incumbency issue.
Q. Do you understand Mr. Cooper's report as opining that the districts in illustrative plan 2 are compact?
A. That's what he said, yes.
Q. Did you dispute that in either of your reports?
A. No, I did not.
Q. Are the districts in illustrative plan 2 contiguous the way you defined it?
A. Yes.
Q. And does illustrative plan 2 have an overall deviation that falls under the ten percent threshold that we discussed?
A. Yes, it does.
Q. In fact it's 5.44 ; is that right?
A. Correct.
Q. As far as you know does illustrative plan 2 respect any communities of interest?
A. I would have to give the same answer that I gave with plan 1, which is clearly it respects the total Latino population viewed as a community of interest but I don't know what other communities of interest are out there. There is at least one other unnamed community of interest because Mr. Cooper used the plural communities of interest and there may be more than one other but I don't know what
all people who are entitled to register to vote. So if you're talking about a district that is sufficiently numerous and sufficiently compact to afford a group an opportunity to elect its candidate of choice, the group that you're talking about is the Citizen Voting Age Population of a group, that is to say the Latino, CVAP or the African American CVAP or the Asian CVAP, not the entire group of all persons irrespective of citizenship.
Q. So you'd agree that showing that Latinos are a majority of the Citizen Voting Age Population of a district is a typical way that a plaintiff might satisfy Gingles 1?
A. Correct.
Q. What is the American Community Survey?
A. The American Community Survey is the Census Bureau' replacement of what we have known in the past as the long form data that were collected on the 2000 decennial census but not thereafter. I don't know how much more you want to know about the American Community Survey but I could go on for two hours. If there's some particular aspect of it you

## want to ask about.

Q. I think that's sufficient for now, thank you. Now, you mentioned in your report, and I'm looking specifically at paragraph 15 of Exhibit 2, that the ACS data must be interpreted with caution; is that right?
A. Yes.
Q. And you say that's because the ACS data has a margin of error as well as nonsampling errors; is that right?
A. That's correct.
Q. Can you tell me what a nonsampling error is?
A. A nonsampling error is everything else that can introduce error into the American Community Survey apart from sampling. Sampling error is a statistical concept and I think you understand it. It's well defined. There is a well-defined body of statistical theory that tells us what sampling error is and we know how to quantify it.

Nonsampling error is everything else that can happen ranging from what happens if someone didn't answer the question that the Census Bureau asked on the survey. What happens if the Census Bureau then tried to impute the answe and got it wrong. What happens if the machine, the machine that electronically reads the survey form where you filled in the little dots misread the form. What happens if someone filled in two dots when they should have only filled in one dot, what the machine did with that or how they
resolved it, whether they said it was one or the other but we don't know which. Anything else that can creep in that has to do with something not being answered exactly as it should be or recorded exactly as it should be or a mistake in the processing of the data in the computer, somebody who wrote the wrong code, anything that deals with those kinds of areas would be called nonsampling error.
Q. And do you know if the Census Bureau takes any steps to minimize the nonsampling error?
A. They take -- they spend an enormous amount of effort addresses nonsampling error, more than you know. More thar any of us knows. They devote an enormous amount of effort to that and they document very thoroughly.
Q. Does the decennial census data also have a nonsampling error?
A. Yes.
Q. So it's not unique to the ASC data?
A. No, it's not unique. Anything that the census collects has nonsampling error and that can be for the full count decennial census or when the decennial census was doing the long form data which is itself a sample. Same issues apply.
Q. Does the decennial census have a margin of error?
A. The long form data do, yes.
Q. Not the otherwise decennial census that --
A. No, because the short form data are a full count, that is to say as full a count as one could get. So they are not technically subject to sampling error. They are subject to incomplete enumeration where you might say the census estimates that it only counted 99.7 percent of all Americans and it missed 0.3 percent. It may have missed some homeless people and then you can talk about well, amon the African American population what was the completeness of coverage, et cetera. So that's a separate issue but it's not a sampling error.
Q. So there's no margin of error in the decennial census data?
A. The concept of a margin of error in the statistical sense, in the sampling sense does not apply to a full census.
Q. If a court were to be considering a districting plan in 2011, would they rely on 2010 census data?
A. Probably not because the 2010 census data would not have been issued yet by 2011 in the form that they would use it.
Q. How about a court in 2012?
A. Yes, they would use the 2010 decennial census data and that would be the -- the courts would require reliance on the latest official census and in that case it would be the 2010 census.
Q. So you mentioned earlier that in some redistricting plans one person, one vote requires, within one person a total population each district must have pretty much exactly equal population; is that right?
A. There are standards that describe how equipopulous the district should be. And as I said for local jurisdictions at the substate level it's typically the total deviation from ideal, which I think you understand what that number is, it's a metric, should, you know, should not exceed ten percent without a compelling reason, and in general should be, lower values should be favored over higher values where possible.
Q. But in Congressional redistricting plans it really is one person?
A. I think there the requirement is different. It's supposed to be as close to zero total deviation as feasible and there kind of a different standards apply.
Q. So the court that would be drawing a map or considering maps in 2012 and using the 2010 data, would it take that 2010 data as a given in determining the total population figure?
A. I'm not sure what you mean by taken as a given. You mean would that be the official source of data to use?
Q. Yes.
A. Yes, it would.
was one of the traditional factors that one would take into account which is uneven growth in certain parts of the boundary of the city.
Q. But generally the court, unless prompted otherwise, generally the court would look at the 2010 decennial census data as a way of determining population?
A. They would look at the 2010 census data as the official source of data to be used and then they would listen to the rationale for drawing the boundaries the way they were with respect to traditional redistricting criteria one by one.
Q. In terms of a Gingles 1 analysis, what percentage of the voters must a minority group be or the voting population of a minority group be in order to form a majority district?
A. You mean the Citizen Voting Age Population?
Q. Yes.
A. What percentage must they be?
Q. What's your understanding.
A. My understanding is if they exceed 50 percent, that is commonly regarded as having shown that there is at leas the potential for the group to elect candidates of its choice if they choose to participate politically at the rate other groups in the population do.
Q. And what's that 50 percent number? Where did that come from? What's that based on?
Q. And when they were trying to divvy up the districts so that the districts meet the equal population standards, would they take into consideration the fact that the likelihood that the population might have changed since 2010 data was released?
A. The court itself would not take it into account without being prompted by the redistricter who might say here is a district that I have configured that has five percent too few people according to the 2010 census, but the reason it does is because it contains an embryonic suburban development that was on the books, was being constructed at the time of the 2010 census and as of today is now being populated by people who are buying the homes and moving ir. So we are planning on -- we are taking account of the fact that there will be a burgeoning of population in this area that will bring it up from being not enough people to being more people, but had we not acknowledged that, it might have ended up two or three years later being too many people but we've drawn the boundaries.

So that's a legitimate redistricting criteria and that's one of the things that you would take into account in a situation where there was the imminent prospect of population increase with little doubt that there would be more people that might throw the plan out of balance. And this was a way of veering away from that imbalance and it
A. I can't say where it came from. I don't really know where it came from but I know it has an intuitive logic to it, which is if you make up more than 50 percent of the eligible voter potential, of the potential, of the eligible potential voters in this district, the only reason you haven't been able to elect a candidate of choice is either because you don't vote cohesively or because your eligible voters have not registered or turned out, but there is nothing in the boundary of the district or in the configuration that is diluting your voting potential as approved.
Q. But you understand that the 50 percent, the above 50 percent is a legal threshold?
A. I understand that the courts have interpreted it that way, yes.
Q. Do you understand the legal threshold to be 50 percent minus a margin of error?
A. I don't know how the courts have ruled about the margin of error. I can't say.
Q. You're not aware of any court decisions specifically discussing trying to take into that the margin of error? MR. FLOYD: Object to the form of the question. Calling for a legal conclusion.

MS. KHANNA: You can answer the question. MR. FLOYD: If you have an understanding other
than we've told you, you can go ahead.
A. I haven't read the court rulings on this point. I leave that to the lawyers.
Q. So your opinion is that the ACS data are not reliable in drawing district lines in the city of Yakima; is that right?
A. No, I never said that they're not reliable, you know, without qualification. I said, you know, there are some problems with them. I should say there are aspects o them that can make them unreliable in making very fine distinctions such as the ones that are called for in this case.
Q. So a fine distinction -- I'm sorry to interrupt.
A. Yeah, I mean a fine distinction of do we have 25 or 50 more or less Latino voting age citizens in a particular piece of geography, that's a fine distinction. And there are a lot of reasons for saying -- I'm not sure we can tell. The analogy I would use is you step on the scale and weigh yourself and say well, have I gained or lost 150th of a pound in the last 24 hours and the answer is it's an awfully fine distinction to make. You might be able to spot it but you're not sure if you really know.
Q. But you don't believe that the ACS as a whole or as a data set is unreliable in drawing districts in Yakima?
A. It is, it is unreliable in known respects, and that
the last year or so. I've used it to evaluate districts in the state of Illinois, Wisconsin, elsewhere.
Q. And in all cases where you used ACS data to evaluate the Citizen Voting Age Population for a proposed district, did you calculate the margin of error?
A. Yes. As a matter of fact, I not only calculate the margin of error -- I mean I don't have to calculate it. Sometimes I could just look at it and I see it's published with the number. But when one does have an aggregation d bloc groups, one has to formulate a way of calculating the margin of error that applies to that aggregate of territory and that becomes methodologically complicated. In fact I have worked out a procedure which I think is basically a statistical procedure that entails dealing with the problem that no one has dealt with before, which is how do you calculate a margin of error for an aggregate of territory where it's not published for that aggregate. If you want to know the margin of error for the city of Yakima, it's published. If you want to know the margin of error for the census track for the city of Yakima, it's published. If you want to know a bloc group, it's published. If you want to know for a particular district that Mr. Cooper has drawn, there is no published margin of error for that piece of geography. One has to figure out a way to put it together. I have not done so in this case but there are ways of doing
means that its application in redistricting has to be governed by judgment as to what it can and cannot assure us of. So it's like we all acknowledge it's the only, it's the only source of data on citizenship that we have and it is the officially designated one. We are talking about applying it not to a situation where we're distinguishing concentrations of African Americans, all of whom are citizens where citizenship is not an issue. We're dealing with a situation where citizenship is more of an issue here than it is probably in 95 percent of jurisdictions where redistricting is done. And the fact that there are many citizens and many seasonal residents and many people who didn't answer questions and lots of other things cumulatively create a situation where one has to exercise caution in interpreting the data and understanding where one can draw a conclusion of confidence and where one can draw conclusion but with little or only marginal confidence.
Q. Have you ever relied on ACS data in determining the minority Citizen Voting Age Population in a given district in any previous cases?
A. I do it all the time.
Q. Can you name any of those cases?
A. I'm working on a few right now. I'm working on one in Gainesville, Georgia, another one in Orange County, Florida. I certainly have used ACS data, that would be in
it. But the margin of error is only one aspect of the ACS data that concerns me and it's not, it's not the principal concern that I have with the ACS data.
Q. In the cases in which you've relied on ACS data to determine the Citizen Voting Age Population or the minority Citizen Voting Age Population of a district, have you reported the same kinds of concerns that you've reported here regarding citizenship misreporting, imputed citizenship and things like that?
A. No, I have not. They were not really an issue in those cases.
Q. Why not?
A. Because the margins were not so slender as they are here or razor thin to be an issue.
Q. So in paragraph 17 of your report, Exhibit 2, I
think you might have just addressed this where you said you are now in the process of calculating the margin of error?
A. Yeah.
Q. Did you ever complete that process?
A. I haven't completed it, no. I stand ready to do it if it's needed but I don't, I don't see it as necessary at this point. At least I haven't been told it's necessary.
Q. But you began the process?
A. I have the data to do it. It will be quite a
tedious process and it will consume more than a trivial

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amount of resources. And I don't see it as being necessary
at this point, but if it does become necessary, one could
compute it.
    Q. So on this same page of your report on page 7, you
have a section entitled Logical Inconsistencies; is that
right?
    A. Yes.
    Q. You point out }15\mathrm{ census bloc groups in which the
CVAP data seems to indicate a larger CVAP that there is
voting age population?
    A. Correct.
    Q. And we're talking absolute numbers here, right, not
percentages?
    A. That's correct.
    Q. Do you believe that Mr. Cooper has accurately
calculated the absolute number of Latino Citizen Voting Age
Population in his demonstration District 1 in the
illustrative plans?
    A. The absolute number of Latino, I have not come
across any errors in that calculation, no.
    Q. And if you turn to paragraph 4 of Exhibit 3, your
supplemental report
    A. Yes
    Q. You specifically say there that, "Mr. Cooper has
correctly estimated the absolute number of Latino CVAP in
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into account.
It's as though you see the data infected with the problem and while you've seen the infection on a part of the body that doesn't matter, you say there's an infection there and it could be anywhere, I just haven't noticed it yet and I need to take it into account. I need to somehow make an allowance for it or at least circumvent its effects on my calculations and my conclusions so that I can say I drew a conclusion. And while the data have this inconsistency, my conclusion would be immune to that inconsistency because have acknowledged it and worked around it in terms of the logic of how I drew my conclusion. And that is where I believe that Mr. Cooper simply has not -- you know, I don't think he's up to the job. I don't think he has the intellectual horsepower to understand and appreciate how profoundly important it is to see these inconsistencies and work around them.

Again, I just don't think that he sees -- he doesn't seem to be able to grasp the significance of what happens when you have data that are inconsistent and you just proceed on to say well, these inconsistencies crop up in a third of the bloc groups in the United States. They're very common. They're not infrequent. So if you see it all over the place, I guess it doesn't matter for me. You see it all over the place, it matters for everyone
each version of District 1."
A. Correct.

MR. FLOYD: It's actually in paragraph 4. Did you say 3 or 4?

MS. KHANNA: I thought I meant to say 4.
MR. FLOYD: I misheard you, I'm sorry
Q. Do you believe that these logical inconsistencies that you're speaking about in your first report are unique to Mr. Cooper's calculations?
A. No, they're not unique to his calculations. They are, they are an attribute of the ACS data that are troubling, and the inconsistencies ultimately are not anything that is his fault. They are the numbers that they are, but the problem becomes one needs to look at them and say what kind of a red flag are these inconsistencies raising and what do I need to take into account that might lie beneath the surface of, you know, the numerals that I see on the table. I have one number and I have another number and the numbers are the numbers but they are, if one interprets them literally, they are logically inconsistent. That logical inconsistency in turn mandates judgment as to how the numbers should be used. And my concern with those numbers, which I realize are without exception all outside of his District 1, nonetheless tell me that there is a troubling inconsistency with the data that one must take

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Q. But do you acknowledge that the inconsistencies do not arise in the bloc groups contained in District 1 in the illustrative plan?
A. That's correct.
Q. And did you research that before you wrote this initial report, where those bloc groups are located, the 15 bloc groups that you talk about?
A. Yes, yes, I did and I was aware of the fact they were not in his District 1 but that was irrelevant to the point. The point is not that they would somehow invalidate his District 1 calculations, it's that they could invalidate all the calculations everywhere. Because if one doesn't account for the inconsistency and devise a methodology that circumvents these things, wherever they may crop up, one really hasn't deal with the problem.
Q. So in paragraph 19 of your report, I'm looking at the last sentence now.

MR. FLOYD: Which report, I'm sorry?
MS. KHANNA: Sorry, your initial report, Exhibit 2.

MR. FLOYD: Okay, thank you. Paragraph 19. MS. KHANNA: Paragraph 19.
Q. The last clause you say, "The magnitude," and you're referring to the magnitude of these logical inconsistencies, "are material relative to a razor thin Latino CVAP majority

| 1 | in a demonstration district of just 22 to 24 adult Latino |
| :--- | :--- |
| 2 | citizens." When you're talking about demonstration distric |
| 3 | there, are you referring to District 1? |
| 4 | A. Yes. |
| 5 | Q. And you considered, at the time that you wrote this |
| 6 | report you considered these logical inconsistencies to be |
| 7 | material to the demonstration District 1, whether or not it |
| 8 | has Latino Citizen Voting Age Population majority? |
| 9 | A. Yes. |
| 10 | Q. And you still believe that to be the case even |
| 11 | though the census bloc groups that have these logical |
| 12 | consistencies are nowhere located in District 1? |
| 13 | A. Yes. Just to go back to the analogy I used, we said |
| 14 | there's an infection in the outer limb but it doesn't affect |
| 15 | the rest of the body, the rest of the body corresponding to |
| 16 | District 1. And what I'm saying is it does affect the rest |
| 17 | of the body because we don't know what's going on in the |
| 18 | rest of the body that might be directly or indirectly |
| 19 | related to whatever is causing the infection. The infection |
| 20 | has manifested itself in an explicit way outside the |
| 21 | district, if I can carry the analogy forward. |
| 22 | The data -- there's no question that the data are |
| 23 | inconsistent in these areas outside District 1. There may |
| 24 | be other inconsistencies arising for the same reason that |
| 25 | are not immediately apparent in areas within District 1, |

they don't lend themselves to obvious detection with the way they stand out here like a sore thumb. But whatever is causing the inconsistencies appears to be something that could be causing -- something going wrong anywhere, even though it may not be immediately manifested the way it is here.

So that's why I say when you see a problem with the data in one area, you can't say well, that's not my area because it's the same data that you're using in your area. It's just you haven't seen an obvious manifestation of what might be causing the inconsistency. The inconsistency may still be there. And that's where I would say, you know, the judgment of a professional demographer who has worked with demographic data over many years and is trained to be skeptical of data on the surface comes into play. Without that kind of training and experience and without any experience with statistics such as I have teaching statistics, writing articles that appear in handbooks of how to do demographic analysis, without that kind of experience, you don't know what you've got here. And that's my kind of disappointment with the way Mr. Cooper has approached the problem, not specifically with the numbers themselves
Q. Let's talk about the CVAP methodology issue. You submitted a supplemental report on April 8th and I believe that's marked as Exhibit 3.
at the bottom line. I'm like how did this happen. And I discovered that what he had done was adopted I guess, you know, his -- he crafted his own method of doing this. I'm not aware of any, anyone who's done it this way anywhere else. And he did the two parts and then said well, l'll add the two parts together to get the whole, which is the total CVAP. And that's where I -- that's the point at which I discovered this problem. And I realized that it was a problem of fundamental significance because the correct method, my method, came out with a significantly lower Hispanic share of CVAP in District 1.
Q. And you believe that your method is in keeping with the standard demographic practice; is that right?
A. Correct.
Q. And what's the basis for that opinion?
A. I could refer you to the bible that I mentioned before, the Methods and Materials of Demography edited by Jay Segal and David Swanson. That's Dr. Swanson who I mentioned before who's the professor at UC Riverside.

When I talk about standard demographic practice, it derives from various parts of that manual. It also derives from my consultation with Dr. Swanson and with Tom Bryan, mentioned before, to assure myself that this is the way they would do it but also understanding why it was the way they would do it. And as I stated before, there is a fundamental
> reason, which is that if you can avoid violating the basic logical premise that the whole about which we're more reliable, we have greater reliability -- I'm sorry, the sum of the parts should equal the whole because we know with irregular liability we know what the whole is than either of the parts. That's a fundamental logical premise that should not be violated. And unless you have a reason to violate that, that is eclipsed by some other more prominent dictum, you would want to do it my way. You would not want to do Mr. Cooper's way.
> Q. So you say the sum of the parts should equal the whole. I'm going to ask you to turn in Exhibit 4 now, which is Mr. Cooper's supplemental declaration.
> (Exhibit No. 4 marked
> for identification.)
> Q. On page 4 there's a figure in a paragraph. And he concludes that there is virtually no difference, and I'm quoting now, "there is virtually no difference between the official ACS total," end quote, and the total derived from his methodology, and he says the difference is about ten persons when it comes to District 1 in illustrative plan 1. Do you see that?
> A. That was paragraph 4 you say?
> Q. I'm sorry, page 4.

> MR. FLOYD: I couldn't see where you're reading.
compare it with his way at the bloc level, the way each of us has allocated things the way we both agree we should allocate them for bloc group down to bloc, the fact that he wants to take the two parts, each of which have lesser certainty because they have greater confidence intervals, combine them to become the total which we already have a greater confidence, then that leads to a higher percentage, and it leads to a higher percentage because it has a systematic buy that's built into it. Why I don't know.
Q. So it has a meaningful difference when you have smaller jurisdictions with population or CVAP population dancing around 50 percent where you're splitting bloc groups, is that a correct characterization?
A. Yeah, that's where you run into problems. It surprises me that, you know, it makes that big a difference. But you do the computation and you say gee, I wouldn't have expected the difference to be this big, but when you do the computation it is. And it's all a function of these little gremlins that are floating around when you have to make certain assumptions. That you have a bloc group and you have to ultimately allocate the bloc group to the individual blocs and the logic behind how you do that has to be vetted and scrutinized and you have to consider alternative ways o doing it, weighing which one is better, which one might be less favorable.
Q. I'll start again. On page 4, I'm looking at both the figure and the paragraph. And if you read, the first sentence of the paragraph says, "Figure 1 shows that there is virtually no difference between the official ACS total and the method 1 calculated total." And he calculates that total as about a ten person difference when it comes to bloc groups in District 1 of illustrative plan 1, and that's the difference between the total as reported by the ACS and the total as calculated by his method.
A. But you see he's referring there to whole bloc groups, not individual blocs. He's not getting into the weaves of taking a bloc group and saying well, some of it is the district and some of it is not. If you do it at a higher level of aggregation, the problem is minuscule, and that's why it's not a problem in many context. You could do it either way and you'd come out with almost the same answer.

But when you do it in this particular context, when I do it my way and he does it his way and we come out, I come out with a low 40, 49 percent or 50 percent, whatever it was, and he comes out 50 point 0 something percent, that's a meaningful difference. And either -- I believe that the reason that it makes no difference is because he's only comparing at this higher level of aggregation. But I have convincing evidence that when I do it my way and

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And in this case the logical inconsistencies that arise when you take Hispanics and nonHispanics and add them together and it exceeds what the ACS says is the total, you've got a problem because somebody will look at the ACS number and say but that's not the total. And you have no way of explaining first of all why it's not the total -- well, you have a way of explaining it which is there's all sorts of error built in but you don't have any justification for saying. But nonetheless I'd rather have the two parts that don't add up to the total rather than use the total which I have greater confidence in, and just get involved with the total and the Hispanic and not have any involvement with the nonHispanic, just get that off the table. I deal with one good number and one better number instead of two good numbers that add up to something, that's the problem. I don't see how anyone contemplating this could not find themselves forced to reach the conclusion that I have, which is that of the two methods, one is preferable.
Q. Is splitting bloc groups unusual in drawing districts?
A. I wouldn't say it's unusual. You'd rather not do it but you have to do it in small jurisdictions.
Q. And you've read Mr. Cooper's supplemental
declaration in which he characterizes your method, method 2

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as he calls it, as conceptually flawed.
    A. I didn't follow what he meant by conceptually
    flawed. The statement l've just made about the, violating
    the logical premise seems to me to really point the finger
    of conceptually flawed at his method, not mine.
    Q. And you reviewed the hypothetical example that he
includes?
    A. I did.
    Q. Explaining the conceptual flaw that he sees.
    A. Yeah.
    Q. Did you understand that hypothetical?
    A. I did. It was an extreme hypothetical. I'm
    positive there is no such actual situation in the city of
    Yakima, and that's not to say that under any method you use
    there isn't a scenario that you could conjure up a set of
    numbers where you could say, you know, if you imagine
    something this extreme, the method ends up with something
    that's logically inconsistent. I don't dispute that that
    would be the case with my method. But I can tell you that I
    would have no doubt that I could present an illustration of
    the same phenomena arising with his method if I sat down for
    an hour or two and played around with some numbers and saic
    well, the same thing happens with his method. And it is a
    problem that is inherent in the need to make assumptions
    about how bloc group data are allocated to blocs. You're
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getting into a dark continent. You don't have anything to go on. You can only make a reasonable set of assumptions based on, as I say, standard demographic practice and we do that all the time in demography. We say here's the data we don't know something, we have to make an assumption. Let's think about the assumption we want to make. Let's think about the logic of it. Let's test it in every which way and let's find out where the weaknesses are, where the strengths are and let's try to come up with an assumption that is as defensible as can be, and that's where the judgment comes in. It's not an area where demographers like to be where they have to make that assumption but we have to deal with the reality that some assumption has been made and that's where the judgment comes in that comes from experience.
Q. So you don't dispute the actual totals in the hypothetical example that he had?
A. No.
Q. You don't dispute in his hypothetical example your method would result in an undercount of the percentage of Latinos CVAP in ward A?
A. I don't have any reason to dispute anything in that hypothetical. I think you can conjure up a hypothetical that will show that for my method and show that for his method. It's just the hypothetical will be different.
Q. So Mr. Cooper, when Mr. Cooper says that your metho

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is systematically biased toward understating the LCVAP in areas with split bloc groups where the population is segregated along ethnic lines, and l'm reading from paragraph 19 of Mr. Cooper's supplemental report.
A. Well, I don't buy that conclusion because he's gone from saying I can find -- I can conjure up an extreme hypothetical that says, you know, if you go into this extreme hypothetical area that does not exist in the real world, the method does -- it creates something that is logically inconsistent. And having shown that I will then conclude that it's biased all over the place, it's uniformly biased, that's not true. Any more than if I were to simply take his method, apart from all the other considerations that l've said, to say, well, here's the method. The only thing I know about it is I can conjure up a hypothetical that shows it blows up in the corner here. I couldn't draw a conclusion from that hypothetical that his method was biased. I'd say there are contexts in which it would generate a bias but I can't say that it's biased across all context. It's just that one that l've dreamed up, and in the same way I wouldn't agree with his conclusion.
Q. Have you reviewed Mr. Cooper's hypothetical plan A in his supplemental report?
A. Yes, I have.
Q. And do you agree that according to his method he hypothetical plan A to be 52.17 percent; is that right?
A. Tell me what page you're on.
Q. Sure. I'm looking at page 12 of the Exhibit 4.
A. Okay. I'm sorry, could you repeat, 52.17.
Q. 52.17 percent, that's the calculation using his method of the Latino CVAP in District 1?
A. That's the number he's showing right.
Q. The calculation using your method is 51.8 percent.
A. Right.
Q. Do you agree with that calculation?
A. I'll take it on -- I'll assume that he's done the calculation correct, yes.
Q. So would you agree that District 1 in hypothetical plan A exceeds 50 percent for the LCVAP under either calculation?
A. Doing the calculations without interpreting whether the 50.18 or the 52.17 truly allows us to conclude that there's a majority, I would not agree with. The number on the face of it is over 50 percent, yes. There is no account taken of all the reasons why there are likely to be fewer Latino CVAP than the ACS shows, which I think I made the statement in the last paragraph of my report. And I want to emphasize this, that I remain convinced that there are likely to be fewer Latino citizens in District 1 than the

ACS data present. Based on the technical limitation set forth in my first report, citizenship that is imputed or misreported or both, different residence rules, et cetera, and that statement in paragraph 14 of my supplemental report would apply to any percentage that is shown for District 1. Those limitations need to be taken into account.

And as I say when you deal with these razor thin majorities, 50.18, I don't have any confidence that I could conclude that it is a majority. The number is, on the face of it, exceeds 50 percent but the judgment that goes into interpreting what the number truly tells us, allowing for all the other factors that I enumerated in my report about the limitations of the data, don't provide me with a basis for concluding that that is a majority.
Q. Did you calculate those technical limitations for hypothetical plan A?
A. I didn't do it for hypothetical plan A. I did it
for the Citizen Voting Age Population and also for some of the limitations the Citizen Voting Age Population in the area where District 1, which District 1 encompasses. So I know I have numbers of people who are under a cloud of doub as being truly Latino voting age citizens. And I have layer after layer after layer of concern based on all of the Census Bureau's data which they used to document the limitations, the people who didn't answer the question, the
drawing a conclusion that it's a majority, even though the number exceeds 50 percent.
Q. Correct me if I'm wrong, but I believe in your initial report you calculated something along the lines of 41 people who had what you call a cloud of doubt citizenship.
A. Yeah, something like that, yeah.
Q. In illustrative plans 1 and 2, District 1.
A. Right.
Q. But you did not calculate a number similar to that or analogous to that for hypothetical plan A?
A. Well, that number would apply to plan $A$ because the District 1, you have to understand, what it is is a concentration of Latinos, and you can draw the boundaries slightly different, but in each of these plans District 1 is picking up where the Latinos are heavily concentrated. Slightly different in each plan but definitely picking up the concentration. Where the Latinos are heavily concentrated is typically where Latino noncitizens of voting age are concentrated and that is where the issue of measurement becomes most prominent.

So I don't need to -- this does not have to apply to each and every bloc within the district. It has to be that part of town. That part of town is where the problem is going to be concentrated. So if you got 40 people, whateve
people who had to guess, I shouldn't say guess, they had to make an informed inference as to whether they were citizens, all of these factors talking about 1800ths of a percentage point here. If somebody said would you bet your life, I'd say I would not at all bet my life that this was a majority. I would say I'm -- if I could quantify all of those effects, I would bet that it's less than 50 percent, but I can't quantify it.
Q. You have not quantified all this?
A. There is no way to quantify it based on the numbers you have. You have to make a judgment based on the magnitude of the problem. These are the nonsampling errors that I referred to.
Q. But you did at least attempt to quantify it with respect to illustrative plans 1 and 2?
A. I did. No, I didn't do anything different for illustrative plans 1 or 2 . I'm saying that in this part of Yakima you got a lot of people who are listed who are classified as Latino voting age citizens and many of them were classified as noncitizens, and there is a real, a substantial number for whom the alleged citizenship count can be questioned. And if the number here were, you know, 58 percent, I'd say it's not a problem. You know, it doesn't make any difference. 50.18 , even 50.56 to the left of it, it's in the zone where I'd say I'm not confident
the number was, under a cloud of doubt, I'd say a lot of them are going to be in that part of town, whether it's 20, $25,30,35$, I don't know, but it's going to be a lot of them and it's going to be on the order of $20,25.20,25$ people wrongly classified would knock this 51.8 below 50 . And it's only one of three or four factors that I look at and say this means that the number probably isn't as big as, or this number surely means that the number is not as big as ACS says. I just don't know how much smaller it is. I can't tell how much more. I can only make a judgment.
Q. So you see a lot of those 40 people are located in District 1 in hypothetical A?
A. That would be a reasonable assumption, yes.
Q. So does that mean it would be less than 40 ?
A. Yeah, less than $40-$ I wouldn't say that all of 40 , or whatever the number is, that every single one of them is in that district, but they would, they would tend to be -- the kinds of people with this problem would tend to be in that part of town. So it's like that's where the infection is concentrated on the body. How concentrated, I don't know, but that's where the data are infected.
Q. If you take a look at hypothetical plan A, the drawing itself on page 18. Do the districts in hypothetical plan A compact?
A. Again I would say compactness is a relative term.
Certainly in this plan I'd say this plan is less compact than the illustrative plans 1 or 2.
Q. Are any districts -- I'm sorry, I didn't mean to interrupt.
A. Let me just -- again the eyeball test. If one looks at the map for illustrative plan 1 and compare plan $A$ with it, hypothetical plan A, it's clear that District 1 is less compact in hypothetical plan A than it is in plan 1. Relative to comparing hypothetical plan A with illustrative plan 2, I'd say it's kind of a tossup there. In both plan 2 and hypothetical plan A District 1 is less compact. I'm not sure what the compactness measure would show about Distric 1. My suspicion is District 1 in both of these plans would probably be less compact by about the same degree. Compactness is beginning to erode.
Q. Do you describe any districts in hypothetical A as bizarrely shaped?
A. No.
Q. Are the districts in hypothetical plan A contiguous?
A. Yes.
Q. And hypothetical plan A has an overall deviation of under ten percent; is that right?
A. I'll take your word for that. I know it says it somewhere.
Q. I believe on page 14, paragraph 31, Exhibit 4 says

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> it has an overall deviation of 9.55 percent.
> A. Correct.
> Q. Do you have any other criticisms or critiques of hypothetical plan A other than what we've already discussed?
A. Well, I would have the same concern about electoral imbalance. I mean that would be a criticism of, more generally of how have the various traditional redistricting criteria been balanced, how was the balance accomplished. And one might say here, you know, you got an ideal, a deviation from ideal of 9.55 that's pushing right up against the ceiling. There must be a reason for that and I'd like to know well, okay, 9.55, you let it go that high because you were trying to make something better with respect to some other traditional redistricting criterion, what was it that was better. Did it narrow this or reduce that. I mean what was the reason for it. So that's my criticism. I don't know why the deviation is so high.

I don't know if, perhaps incumbency plays a role here. Maybe there's something an incumbent was being picked up in one of these districts. And I haven't really done the calculation about the electoral imbalance, so again I'm kind of in the dark here. Mr. Cooper hasn't told me how specifically he's balanced these criteria and he hasn't at least made a nod toward saying the reason it's 9.55 , I had to let it get that high because I was trying to do something
else. I don't know what the something else was.
Q. Any other criticisms or concerns about hypothetical plan A?
A. No.

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MS. KHANNA: It is 11:52.
MR. FLOYD: How much longer are you going to bep
MS. KHANNA: Total?
MR. FLOYD: I mean if we could finish in the next half hour, that's fine.
MS. KHANNA: Not the next half hour.
MR. FLOYD: Why don't we take a break for lunch.
How long do you want to take?
MS. KHANNA: 45 minutes.
(Lunch Recess taken 11:52 a.m.)
(Lunch Recess taken 11:52 a.m.)
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## AFTERNOONSESSION 12:46 p.m.

## EXAMINATION (Continuing)

BY MS. KHANNA:
Q. Back on the record. Dr. Morrison, I want to go back briefly to one issue in the CVAP methodology issue. Your method would allocate Latino CVAP to the census bloc level and then determine the nonHispanic CVAP by using the total CVAP from the ACS estimate; is that right?
A. By subtracting the Hispanic from the total, yes.
Q. So would the outcome of your method, would the result be the same if you were to allocate the nonHispanic CVAP first and then determine the LCVAP by subtracting total CVAP minus NHCVAP?
A. No, it would not.
Q. What would the difference be?
A. Well, I can't tell you what the difference would be, but I can tell you that the difference would arise from the fact that the margin of error around the Hispanic component subtracted from the total would very likely not be identical to the margin of error around the nonHispanic component for some particular aggregate of blocs. In other words, it could swing one way or another depending on, you know, whic
component you used.
Q. I'd like to turn to page 9 of Exhibit 4, which is Dr. Cooper's supplemental report, and I'm looking specifically at figure 3.

And Mr. Cooper points out that when allocating nonHispanic CVAP, the nonHispanic CVAP would also be a minority using your method 2 .
A. Uh-huh.
Q. So your method would allocate Latino CVAP and arrive at a minority, a less than 50 percent district; is that right?
A. That's what he shows in his table, yeah.
Q. And so using your method 2 both the Latino CVAP and the nonHispanic CVAP would both be under 50 percent?
A. That's what the table shows, yes.
Q. Does that suggest another, some kind of inconsistency or flaw in method 2 ?
A. It doesn't suggest an inconsistency but what it does is illustrate what can happen when you have to work at the bloc level with a total that has one margin of error and a component that has a larger margin of error, you could get results like this that don't seem to add up. And all I can say is that you have to choose among the methods and of the -- if the objective is to know what the Latino share is, you only need to talk about the total in the Latino. If talk about the nonLatino and the total, and in both instances you have to acknowledge that there are margins of error around both the total and the component. And it is leading to results like this where if you look at Hispanics, you come up with a number, if you look at nonHispanics, you come up with a number, and in each case it would appear that both, each group is a minority in the district when one of them by definition should be the majority. And this is a function of the confidence intervals around both of those things.

So if you have, if you have your choice, you wouldn't want to use -- you wouldn't want to calculate Hispanic and nonHispanic, both of which have large confidence intervals and then add them together in a context where clearly confidence intervals are throwing you off for some, you know, to some degree no matter which one you use You take the one -- you'd favor using just one of the okay components and then work with the total, which is a better overall total than the two components put together. That would be my answer.

I mean I agree, I see what the inconsistency is, but there's no way -- you did it either way. And one of the dilemmas you have here is in looking at figure 3 and figure 4, there's no basis for saying which one is wrong, which
component is wrong.
Q. So --
A. If not both. Both of them could be in error.
Q. So both method 1 and method 2 ?
A. No, both the components. I'm saying there's a problem with both Latino and with nonLatino and it could be that those two problems compound to create this incongruert situation. But going in what we know is that if there is anything that's error prone or that's going to mislead you to a greater extent, it's each of the components, whereas the total CVAP is the one thing that you have anchored with more data that you can have more confidence in. So you'd want to use the total CVAP and then the question is which o the components would you use. And the question is what percentage are Hispanics of CVAP, look at Hispanic, look at CVAP and you're done. Don't touch the nonHispanic.
Q. But you would agree that in this incongruent situation that you just discussed in figure 3, the total does not equal the sum of the parts, if both Latinos and nonLatinos are considered minorities, minority, less than 50 percent?
A. Yes, I agree. The sum of the parts does not add up to the total.
Q. That was your dispute with Mr. Cooper's methodology as well?
A. Well, I'm not summing the parts. He's pointed out that if you do it one way or you do it another way, they don't add up but I'm not using the nonHispanic. My method says for reasons like this, stay away from one of the components if you can and that's what l've done.
Q. So you've discussed the practical limits of what the published ACS data can reveal about the Latino share of th voting, voting age population. Are you aware of any other way to determine the Citizen Voting Age Population of a given district?
A. Well, I can imagine principal ways of doing but no practice way, no.
Q. Are you aware of any other way to determine whether Latinos form a majority of a single member district?
A. Well, there is an indicator of it that could be developed from the registered voters in the district under a set of assumptions. I mean that's another indicator that is sometimes cited.
Q. And why is that an indicator as opposed to a measure like the CVAP?
A. Well, registered voters with Spanish surnames are an indicator of the presence of Latino eligible voters, but the two are not synonymous.
Q. Have you ever relied on voter registration to determine the minority voter majority in a given district?
A. I've always favored using the census data, and that would be my first choice because it really reflects the concept that you want to get at, which is not just, you know, how many people have Spanish surnames, which itself is a proxy for Latinos and also, which also is a reflection of how many of the eligible voters have chosen to register in both the Latino and the nonLatino population.

But it's a common -- you know, it is a commonly used metric and I've used it myself, not necessarily to show that there is -- as the primary basis for establishing a Latino majority in a district, I always favoring using the census data. And up until this latest round of redistricting, I've always had access to, you know, using the 2000 census, there was always the long form data.
Q. So you've never used voter registration data or advocated for the use of voter registration data in lieu of census or ACS data to determine --

MR. FLOYD: Object to the form of the question. Compound.
A. Could I excuse myself for two minutes because I have
sort of an urgent text message from my wife.
MR. FLOYD: Sure.
MS. KHANNA: We'll go off the record.
(Discussion had off the record.)
(Question on Page 105, Lines 15
through 17 , read by the reporter.)
A. No, that's not what I said. What I said was my first choice is census data, but I have in some situations used both sources of data in order to draw a conclusion. And I have -- I'd say the word advocate doesn't apply to anything I've done. I've simply reported what the facts are and what my conclusion is.
Q. Have you ever indicated to a court a preference of voter registration data over census data?
A. Not to my recollection, no.
Q. Have you ever indicated to a court a preference for voter registration data over ACS data in determining Citizen Voting Age Population?
A. Not to my recollection.
Q. Do you agree with Mr. Cooper's assessment that the registered voter data geo coded to the bloc level is more geographically precise and more accurate in evaluating present day Latino voting strength?
A. More than what?
Q. Than the ACS.
A. Under some conditions it could be but I wouldn't make a blanket statement that it always is. I see the two as being complementary. They're kind of two readings on a
phenomenon, and you take the two readings and you form a opinion based on them. So I would say sometimes yes, but not invariably.
Q. How would you take the two readings and form an opinion based on them?
A. It's very situation specific. I can't give you a general set of rules. You have to look at it, you have to look at the history. You have to look at each measure in the context of what it was the last time it was measured, what direction it was trending, what kinds of errors there might be in each source of data. How it is you're defining Latino voters, whether this is by surname or whether it is a variable that the election's office has inserted based on some kind of a self report that they got. It all, it all depends on the quality of the data and you have to just kind of look at everything before you make a judgment.
Q. And you've reviewed Mr. Cooper's report of registered voter data for illustrative plans 1 and 2 ; is that right?
A. Yes.
Q. Do you dispute the methodology used in determining registered voter determination?
A. The only question I have that still troubles me is the matter of identifying as Latino some registered voters who presently, whose present surname is not on the Spanish
surname list. I don't know whether any of those, I'll called them transformed names, have found their way into the count. From what I heard him saying yesterday, I think the answer is that they did not get included, but I'm not 100 percent confident because I didn't get a clear answer.
Q. So you're referring to individuals with Anglo surnames who may be counted as Latino?
A. Not Anglo surnames. Persons with surnames that are not on the Spanish surname list whose maiden names were on the Spanish surname list and who have been carried forward since a marriage and counted as Latinos without -- first of all in violation of the use of the Spanish surname list and secondly on the assumption that someone who had a Spanish surname let's say 20 years ago and now has an Anglo, no longer has a Spanish surname would still self identify in the same way on a census. That's another layer of assumptions that are built in.

But the most important point I would make is that when you use the list of Spanish surnames, you don't get to change some people because they got married in one direction because getting married can go in the other direction. That is to say a person whose name was not on the Spanish surname list could marry a person who's, and take the last name of a Spanish surname person and you would not, you know, you would not go in and start tinkering with that and say well,

|  | 109 |  | 111 |
| :---: | :---: | :---: | :---: |
| 1 | you used to not be on the Spanish surname list, so you're | 1 | Q. What paragraph? |
| 2 | not really Hispanic even though you married one. If you do | 2 | A. Paragraph 36. "I matched the January 2013 |
| 3 | at you are undermining the logic of the Spanish surname | 3 | registered voter list to the Spanish surname list using |
| 4 | st and it invalidates the application | 4 | Microsoft Access Routine," and then the sentence after that |
| 5 | nd you said it was your understanding th | 5 | ys, "This match includes a few persons with surnames that |
| 6 | Mr. Cooper did not include those individuals in | 6 | in part match Spanish surnames" -- wait a minute, hold on. |
| 7 | gistered, in his matching of the registered voter rate? | 7 | here's a later place where he says this. It's not |
| 8 | A. From what he said I think that's what I heard but | 8 | agraph 36. It's paragraph 42, that's the one that's |
| 9 | m not 100 percent sure. I'm not entirely sure. I think | 9 | inconsistent. |
| 10 | eard the question asked once in a way that was, did any | 10 | ually you have paragraph 42 in Exhibit 1 versus |
| 11 | ese change | 11 | tnote 7, page 17 in Exhibit 4, and I'm now going to read |
| 12 | individuals reflected in any of the data in some place and I | 12 | says in paragraph 42 which is adding the apparent |
| 13 | think his answe | 13 | tency. "In addition the attorneys gave me a file |
| 14 | n you turn to page 17 of Exhibit 4 to Mr. Cooper's | 14 | d by the Yakima County Department of Elections that |
| 15 | supplemental declaration. I'm looking at footnote 7. Here | 15 | entifies Latino voters who cast a ballot in the November |
| 16 | Mr. Cooper says, "The result in Spanish surname registered | 16 | 11 general election. This voter turnout list includes a |
| 17 | voter list does not include | 17 | few persons with nonSpanish surnames, for example, quot |
| 18 | nty Election | 18 | Colby, close quote. I understand that the Yakima County |
| 19 | has classified as Latino." | 19 | Board of Elections," and then he goes on to explain why |
| 20 | A. Okay, let me see where that comes in. Okay | 20 | there would be names like Colby coded that way. And then |
| 21 | I answered the question | 21 | say |
| 22 | MR. FLOYD: This only relates to claims 1 and 2 | 22 | identify additional Latino voters not matched with the |
| 23 | and no | 23 | surname method described in paragraph 36 |
| 24 | Q. I believe my qu | 24 | So to summarize the inconsistency, in paragraph 32 |
| 25 | about the methodology used for determining registered voters | 25 | of Exhibit 1, Mr. Cooper's first report, he says that he |
|  | 110 |  | 112 |
| 1 | in plan | 1 | used the file to identify additional Latino voters not |
| 2 | A. So that footnote answers | 2 | atched with the surname method described in paragraph 36 . |
| 3 | Q. So does that alleviate any concerns you | 3 | dd then in Exhibit 4, his supplemental declaration, in |
| 4 | Mr. Cooper's methodology | 4 | otnote 7 on page 17 he says, "The result in Spanish |
| 5 | registered vot | 5 | rname registered voter list does not include a number of |
| 6 | 1 and 2? | 6 | ters with nonSpanish surnames that the Yakima County |
| 7 | A. Yes. | 7 | Elections Division has classified as Latino." |
| 8 | Q. | 8 | e registered voter |
| 9 | registered voter population in illust | 9 | list or the voter turnout list? |
| 10 | A. Do I dispute -- could | 10 | A. The registered voter list. |
| 11 | MR. FLOYD: Excuse me, one second. I'm going | 11 | Q. And is paragraph 42 in Exhibit 1 talking about the |
| 12 | object because if you look | 12 | registered voter list or the voter turno |
| 13 | report, which is Exh | 13 | A. Paragraph 42 is talking about the voter turnout |
| 14 | statement than footnote 7 on page 17 of Exhibit 4 | 14 | list. But if one has looked at the voter turnout list, |
| 15 | think you're mischaracterizing, if you look at both of them | 15 | presumably that is a subset of the registered voters at that |
| 16 | in total. | 16 | time. So I will, I will have to say I don't consider myself |
| 17 | A. I see wh | 17 | to be well enough informed to say either there is no |
| 18 | interject. I do see an in | 18 | inconsistency or to claim with certainty that there is one. |
| 19 | exactly how it's resolved. | 19 | This is an area that needs to be resolved. |
| 20 | Q. Can you explain what the inconsistency that you see | 20 | dd at a minimum, it casts in my mind some doubt on |
| 21 | A. Yeah, I mean he says | 21 | procedure because it suggests that Mr. Cooper was on the |
| 22 | Exhibit 4 that the Spanish surnam | 22 | one hand using the list -- he was using a file that was |
| 23 | does not include a number of voters with nonSpanish surname; | 23 | properly coded, but then in another instance he apparently |
| 24 | that the Yakima County Election Division has classified as | 24 | rew in some more people with names like Colby that didn't |
| 25 | Latinos. And then he says in Exhibit 1, page 16. | 25 | belong there. So if -- at a minimum he is not adhering to a |

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consistent practice of using Spanish surname list.
Once again, this raises in my mind a concern about his approach to analyzing data and his meticulousness in adhering to the proper standards in dealing with administrative record data which are notoriously complicated and have, you know, have all sorts of problems. Remember registered voter data and voter turnout data from election departments are not designed for the needs of researchers. They're designed to record an official event that occurred and one has to always approach them with a degree of cautior and understand what one has. And at a minimum I would say that this is an indication of Mr. Cooper's failure to recognize that he should not have used any file in which people with the name Colby were called Latino.
Q. Is it your understanding that he used, when he's determining the registered voter population he included people with the last name Colby? I believe you mentioned earlier that he was using the file that was properly coded, was that right?
A. From what he says in footnote 7 , if I were to believe what he said in footnote 7, the answer to your question would be yes, he used it in a proper fashion. If I read paragraph 42, I would conclude that he used the voter -- he had a voter turnout file that was improperly coded. And I know that when you work with these files, what

## file.

A. Well, from what he says, he says in his report here, "I understand" --

MR. FLOYD: Where are you referencing?
A. I'm sorry, in paragraph 42 of his first report he says, "I understand that the Yakima County Board of Elections records these voters, et cetera and then he says, "I used this file."
Q. For what?
A. "To identify additional Latino voters not matched with the surname method."
Q. Do you know for what purpose it was --
A. I don't know. He said he used the file.
Q. Assuming for the moment that Mr. Cooper did not include what you call improperly coded individuals in the voter registration files that he examined, would you say looking solely at his determination of voter registration, that his calculation of Latino registered voters is correct?

MR. FLOYD: Object to the form of the question.
A. I would say under the hypothetical you posed, yes.
Q. Did you raise any objections or any, sorry -- strike that -- any dispute with Mr. Cooper's methodology for determining the number of Latino registered voters in your first report?
A. No, I did not

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you have is a single file of registered voters and then you have a variable that is telling you whether or not that registered voter turned out and was a, a turnout voter in a particular election. So the record would be a single record.

And what he seems to be saying is if it was a registrant, I didn't have any Colbys, but when I went through the registrants and I picked out the subset of registrants who turned out in an election, I included the Colby. And I'm trying to figure out how you would do it -- not do it in one case but do it in the other when you've only got one record. Colby is there and in the file you've either said I'm going to count Colby as a Spanish surname person, even though it's not Spanish surname or not And then if I say it's Colby, did he turn out in an election, either he did or he did not but it's the same record.
Q. So I believe you would testify then that the voter registration file was properly coded, and I believe that was the word that you used.
A. That's what he says in footnote 7. What he says, he doesn't say it was properly coded. He says I did not use the improperly coded voter.
Q. So it seems to be that you take issue with his use what you call improperly coded voters in the voter turnout
Q. Did you raise any dispute in your second report?
A. Not to my recollection. I know that this has been a concern. The only thing I can't be sure of is whether I mentioned it in my report. I know I wanted -- what I do recall is wanting to have clarification on the issue because I really didn't know what he'd done. And so it wasn't that I had said I'm troubled but because I don't know what he did, I simply said I don't know what he did and I'm kind of waiting to hear the answer in his deposition.
Q. Did you discuss the voter registration numbers at all in either of your reports?
A. No.
Q. Did you say that I'm concerned that I don't know what Mr. Cooper did when it came to calculating voter registration in his reports?

MR. FLOYD: Object to the form of the question and argumentative.
Q. You can answer the question.
A. No, I did not.
Q. Did you understand that Mr. Cooper's calculations o the number of Latino registered voters in District 1 in his illustrative plans was relevant to his conclusion regarding Gingles 1?
A. Well, it added an additional element of information and it could be interpreted in any of several ways. I would
say I'd rather have the number than not have the number in this context simply because it gives us more information about what might be going on.
Q. Did you understand Mr. Cooper to believe that his determinations of voter registration data was relevant to his conclusions regarding Gingles 1 ?
A. I think he sees it as relevant, yes.
Q. And you understood that when you first read his initial report?
A. Yes.
Q. Turning to page 22 of Mr. Cooper's original report, Exhibit 1. Do you dispute that the number of Latino registered voters or the percent of Latino registered voters in District 1, in illustrative plan 1, is 51.66 percent?

MR. FLOYD: Object to the form of the question. Compound. Go ahead and answer
A. Do I object to --
Q. Do you dispute that number?
A. No, I don't dispute that. With the caveat that I'll assume for the moment that there are none of the -- that the column to the right in figure 9 , the 51.6 does not include any registrants without Spanish surnames.
Q. So assuming that no Colbys are included in the Latino registered voter count?
A. Right.
Q. And do you have any reason to dispute that District 2 in hypothetical plan A has percentage of Latino registered voters at 50.1 percent?
A. No, I do not.
Q. Move on to page 11 of your report -- sorry, on Exhibit 2, yeah, your report.
A. First report?
Q. Your first report. On page 11 you discuss the difference between current residence and usual place of residence. Can you explain this difference as it's used between the census and the ACS?
A. Sure. The census, the decennial census asks you on April 1st, as of April 1st what is your usual place of residence, which is interpreted to mean where do you ordinarily reside or sleep. And the ACS question is where do you live now, where have you lived for at least two months, or as I recall intend to live for two months. So there's kind of a two month to four month time frame.

Now, this may sound like a fine distinction, but these two different residence rules are extremely important under certain circumstances. One circumstance would be obvious to us as snowbirds in the Midwest who spend some number of months in Arizona every year and it's the same months and if you ask them what their usual place of residence is, they might say Minnesota. And if you sent the
Q. And so do you dispute that District 2 in
illustrative plan 1 has a percentage of Latino registered voters of 51.03 percent?
A. No, under the same set of conditions, no.
Q. Under the same set of assumptions on page 24, looking at illustrative plan 2. Do you dispute that the percentage of Latino registered voters is 51.86 in District 1?
A. No.
Q. And do you dispute that the percentage of Latino registered voters is 50.56 in District 2?
A. No.
Q. I'm going to turn to page 12 of Exhibit 4, which is Mr. Cooper's supplemental declaration.
A. All right.
Q. Assuming that Mr. Cooper used the same methodology
to determine the number of Latino registered voters in each district, do you have any reason to dispute that the percentage of Latino registered voters in District 1 in hypothetical plan A is 54.56 percent?
A. Under the same, with the same caveat, that assuming there are no -- what was that surname we're working with. Q. Colby.
A. No Colbys as we're using the term. No Colbys involved, no, I do not dispute it.

ACS out to their Arizona residence and they happened to be in the way that was being surveyed every December or January, they might say I live, I've lived here for -- I've been here for two months and another two months in Arizona

The former residence typically will be the basis on which a resident would be registered to vote. The latter would not. Now, a less obvious one, but one which is directly applicable in Yakima, has to do with seasonal workers, not just who are in Yakima for one season but who are there regularly from year to year during the same season and who might regularly occupy the same place of residence year after year. So in a sense they have two residences. One their usual place of residence which is where they live when they're not in Yakima and then another place where the may be in residence for some period of time while they are temporarily employed in that region. And those individuals would in the case of the Yakima valley be typically Latino, although not exclusively so and they also would be individuals who could conceivably be residing in the most heavily Latino part of the city of Yakima and might well be correctly enumerated as Latinos on the ACS, yet they would not be actually eligible voters even they were voting age citizens.
Q. So your concern is that the existence of Latino migrant farm workers in the city of Yakima could mean that

|  | 121 |  | 123 |
| :---: | :---: | :---: | :---: |
|  | the Latino CVAP counts by the ACS are actually overstated ${ }^{p}$ | 1 | Q. But you have not investigated it? |
| 2 | A. No, not that the Latino CVAP counts are overstated. | 2 | A. No, I have not. |
| 3 | Simply that there are some Latino, voting age Latino | 3 | Q. Have you been to Yakima? |
| 4 | citizens who are being assigned Yakima as their, as though | 4 | A. I have not been to Yakima yet. |
| 5 | it were their usual place of residence which would imply | 5 | Q. To your knowledge is there migrant housing in |
| 6 | that they are eligible voters in Yakima. Whereas, in fact | 6 | Yakima? |
| 7 | their usual place of residence might be in some other state | 7 | A. I don't have any basis for answering that question. |
| 8 | or some other place, and that it is that latter place where | 8 | I would assume there is. |
| 9 | they in fact would on the basis of it being their usual | 9 | MR. FLOYD: What do you mean by migrant housing |
| 10 | place of residence would be signing up to register to vote | 10 | s that like subsidized housing? |
| 11 | if they were citizens. | 11 | MS. KHANNA: Are you deposing me? |
| 12 | So there's nothing wrong with the ACS data. The ACS | 12 | MR. FLOYD: I'm objecting in stay, sorry. |
| 13 | handbook for researchers which one really needs to have, | 13 | Q. In paragraph 31 of your report you quote Census |
| 14 | you know, some familiarity with before you even begin to | 14 | Bureau publication saying that "appreciable differences may |
| 15 | the ACS data, that handbook specifically cites the instance | 15 | occur in areas where large proportions of the total |
| 16 | that I'm describing of seasonal workers. And it's not a | 16 | population spend several months of the year in what would |
| 17 | fault of the ACS data, it's simply that the Census Bureau | 17 | be considered their residence under decennial census |
| 18 | emphasizes that there is an important meaningful difference | 18 | rules," is that right? |
| 19 | between residency rules that can have profound implications; | 19 | A. That's correct. |
| 20 | under certain circumstances and in Yakima that is precisely | 20 | Q. Have you conducted any research into whether large |
| 21 | the circumstance that arises. | 21 | portions of the total population in the city of Yakima spent |
| 22 | Q. Have you analyzed the percentage of the city of | 22 | several months of the year in what would not be considered |
| 23 | Yakima population that consists of migrant farm workers? | 23 | their residence under decennial census rules? |
| 24 | A. I have no data with which to do that. | 24 | A. I have not conducted any research to see |
| 25 | Q. Have you analyzed the percentage of migrant farm | 25 | whether -- how large the proportion is in Yakima. My only |
|  | 122 |  | 124 |
| 1 | workers in the city of Yakima are Latino? | 1 | point with respect to that quote would be that this is a |
| 2 | A. Again I don't have any data on migrant farm workers. | 2 | mmunity in which this could be problematic from a |
| 3 | Q. Have you conducted any research on the Yakima | 3 | easurement standpoint. And any discernable proportion |
| 4 | migrant farm worker population? | 4 | uld well have an impact on the razor thin Latino |
| 5 | A. I've only read about it in terms of the narratives | 5 | ajorities that are shown in Mr. Cooper's District 1 of his |
| 6 | that recount the fact that it | 6 | ustrative plans 1 and 2 |
| 7 | the Yakima valley. And the fact that there are strong | 7 | Q. And you list several ethnic populations that |
| 8 | concentrations of Latinos in certain parts of Yakima, the | 8 | Qmprise the migrant population, migrant worker population |
| 9 | ones that you pointed out to me earlier in the deposition | 9 | in Yakima in paragraph 29 of your report; is that right? |
| 10 | and shown in the maps, suggests to me that they could well | 10 | A. Yes. |
| 11 | be populated by some number of such workers. I don't know | 11 | Q. And one of those is the Mexican population? |
| 12 | how many there are, but I would be surprised if there were | 12 | A. Yes. |
| 13 | no such workers in those areas of the city and that all such | 13 | Q. And in paragraph 37C of your report you note, quote, |
| 14 | workers, especially the ones who come back season after | 14 | he possibility that demonstration District 1 may not be |
| 15 | season on a regular basis, all lived outside of the city | 15 | e usual place of residence for every single one of the |
| 16 | Yakima. | 16 | 17.91 Latino voting age citizens whom the ACS counts a |
| 17 | Q. So you're assuming that there is some population of | 17 | rrent residence of demonstration District 1 based on the |
| 18 | Latino migrant farm workers in the city of Yakima? | 18 | ACS current residence rule." Is that right? |
| 19 | A. I'm saying that there is, seems to me a distinct | 19 | A. Yes. |
| 20 | possibility and one that one should investigate insofar as | 20 | Q. Are only Latinos affected by this usual place of |
| 21 | possible because it has a downward effect on the concept | 21 | residence issue? |
| 22 | that we have in mind in evaluating District 1 , which is is | 22 | A. No. Any, any person -- I shouldn't say that they |
| 23 | there a Latino majority among eligible voters. If some of | 23 | affected by the usual place of residence. What is |
| 24 | the people really are eligible to vote but not in Yakima but | 24 | affected is Mr. Cooper's count of the Citizen Voting Age |
| 25 | back in their usual place of residence. | 25 | Population members of a group who are in fact entitled to |


|  | 125 |  | 127 |
| :---: | :---: | :---: | :---: |
|  | vote in Yakima as opposed to their usual place of residence. | 1 | A. Or students. We're talking about District 1. |
| 2 | this issue has -- it is impartial to any group. | 2 | OYP: Hold it. One of you at a time. |
| 3 | true of any segment of population | 3 | A. I'm sorry. If they are not snowbirds in the heavily |
| 4 | So you mentioned earlier snowbirds. So for all w | 4 | panic part of town, District 1. If you told me that |
| 5 | know there could be snowbirds in the city of Yakima who | 5 | was a college in that district, then I would say now |
| 6 | spend their fall and winter in Arizona and the same problem | 6 | e got a population where there might be some people like |
| 7 | would arise? | 7 | s. And if you tell me that there is an institute |
| 8 | at's correc | 8 | gher education that attracts students from outside the |
| 9 | Q. Those snowbirds could be nonHispanics? | 9 | city to that particular piece of geography encompassed by |
| 10 | A. Absolutely | 10 | District 1, then I would say there's some basis for |
| 11 | Q. And there could be, for instance, nonHispanic | 11 | nsidering the possibility or envisioning the possibility |
| 12 | students who spend part of the year attending school in the | 12 | that there could be some people like you described. But |
| 13 | city of Yakima who would also fall under this problem? | 13 | sed on what I know right now, I'd say I don't see, I don't |
| 14 | A. Correct. Well, it's not problem. It's a | 14 | e the basis for thinking that there are any such |
| 15 | classification matter. And you're correct, the student | 15 | dividuals. Although one, you know, I never say there are |
| 16 | population is a major population where the question of where | 16 | none. There might be one single person. |
| 17 | they live is important. Of course many students are | 17 | Q. At the time of your initial report had you analyzed |
| 18 | not -- well, it depends also on where they're living, and | 18 | any data regarding Latino household mobility in Yakima? |
| 19 | I'm focusing on simply District 1 which is the more heavily | 19 | A. No, I had not. |
| 20 | Latino concentration area of the city. So I'm not aware | 20 | Q. Have you reviewed Mr. Cooper's assertion in his |
| 21 | that there is any college in that area, whether there would | 21 | supplemental declaration that Latino households in Yakima |
| 22 | be a large number of students that might also interact with | 22 | are relatively stable relative to nonHispanics households? |
| 23 | this | 23 | A. I have, and it comes down to his use of the word |
| 24 | Q. But you did not research any pockets of nonHispanic | 24 | stable. When he says they're relatively stable what he's |
| 25 | populations who might also not have District 1 as their |  | saying is they're not moving around at any higher rate than |
|  | 126 |  | 128 |
| 1 | usual place of residence? | 1 | any other group, but that has nothing to do with what we're |
| 2 | A. No, I did not. | 2 | talking about here which is a residency rule. So you can |
| 3 | Q. Do you think it is likely that every single one of | 3 | ave normal rates of mobility, or in fact no rates of |
| 4 | the nonHispanics in District 1 in the illustrative plans | 4 | bility. You can have a population that according to the |
| 5 | have District 1 as their usual place of residence? | 5 | data no one moved at all and you still could have this |
| 6 | A. Based on what I know about the residency rules, I | 6 | residence rule problem. And the way it would work is you |
| 7 | would be surprised if every single one of them, were they | 7 | uld have a seasonal resident who last season was asked o |
| 8 | administered the decennial census questionnaire, would say | 8 | the ACS where do you live now in the last two months and |
| 9 | Yakima is not only where I live according to the ACS | 9 | that person would say I live at 123 Smith Street. 12 months |
| 10 | question but it is also my usual place of residence. I | 10 | later they come back and they say to the same individual who |
| 11 | would anticipate that some number of those 2217.91 would | 11 | has come back again for the season, that is to say has gone |
| 12 | answer differently on the census than they would on the ACS. | 12 | back to his usual place of residence and he's now back this |
| 13 | Q. I'm actually talking about everyone other than the | 13 | season in his place of residence in Yakima and the same |
| 14 | 2217.91. Do you think it is likely that every single one of | 14 | question elicits the answer I live in the same place I did |
| 15 | the nonHispanics in District 1 in the illustrative plans has | 15 | last year. |
| 16 | District 1 as its usual place of residence? | 16 | Q. Turn to page 12 of your report, Exhibit 2. Here you |
| 17 | A. Um, I'm less confident that there would be a single | 17 | have a section entitled Citizenship Misreporting. |
| 18 | person who would say my usual place of residence is | 18 | A. Yes. |
| 19 | elsewhere. I wouldn't be surprised if there was one or two. | 19 | Q. You say that the ACS data counted approximately 33 |
| 20 | But the fact that these are nonLatinos would, would mean | 20 | foreign born Latinos of voting age in Yakima as naturalized |
| 21 | that I would have to envision how many, how many people are | 21 | citizens even though they reported having lived there for |
| 22 | residing in Yakima as though they were snowbirds moving to | 22 | less than five years; is that right? |
| 23 | Yakima to get away from the bad weather. That's kind of the | 23 | A. Yes. |
| 24 | way the logic has to go. | 24 | Q. And they would need to live there for at least five |
| 25 | Q. Or students or for any other reason not having -- | 25 | years to qualify for naturalization. |


|  | 129 |  | 131 |
| :---: | :---: | :---: | :---: |
| 1 | A. With certain exceptions. |  | naturalized citizens because they're all becoming citizens |
| 2 | Q. And one of those exceptions is one has gained legal | 2 | by virtue of marriage. It's unlikely that they are |
| 3 | permit residence status by marrying a U.S. citizen, right? | 3 | noncitizen men who are finding themselves becoming citizens |
| 4 | A. Correct. | 4 | by immediately getting engaged to females who are citizens |
| 5 | Q. And you acknowledge that some of those people might | 5 | during the season that they're there. And so I'm putting |
| 6 | have fallen under that category? | 6 | -- I'm overlaying a body of research with an |
| 7 | A. Correct. | 7 | assumption that leads me to conclude that certainly a |
| 8 | Q. In which case they'd only need three years of | 8 | significant number, probably most of the 33 , given the |
| 9 | continuous residence | 9 | infrequency of marriage as a way of becoming a citizen, are |
| 10 | orrect | 10 | going to be people who have misstated their citizenship. |
| 11 | Q. But you conclude in paragraph 33 , and it's the last | 11 | Q. So you're assuming that most of these individuals |
| 12 | sentence I'm reading, "Most of these 33 cases though are | 12 | are |
| 13 | instances of citizenship misreporting by foreign born adult | 13 | A. I'm assuming that most of them are men. |
| 14 | Hispanics in the city of Yakima." | 14 | Q. And you're assuming that most of these individuals |
| 15 | A. Correct. | 15 | are not there throughout the whole year? |
| 16 | Q. What's that conclusion based on? | 16 | A. I'm assuming that they are -- no. What I'm assuming |
| 17 | A. That conclusion is based first of all on my | 17 | simply, it has nothing to do with whether they're here for |
| 18 | assumption that the majority, that the majority of the 33 | 18 | the year or not. It is simply an assumption that they have |
| 19 | persons referred to here are not individuals who fell into | 19 | misstated their citizenship status on the ACS form. |
| 20 | the special category of I was a naturalized citizen because | 20 | Q. Because they would have a motivation to do so? |
| 21 | I got married. When you consider the fact that the foreign | 21 | A. Because the research has established that that is, |
| 22 | born persons who are drawn to Yakima are not going to be | 22 | that that understandable motivation is actualized in the |
| 23 | predominantly females who are marrying citizens but are | 23 | behavior of people and has been documented in the past. |
| 24 | going to be, predominantly are going to be single males. | 24 | Q. They have a motivation to marry a U.S. citizen? |
| 25 | The second and more important element is there is a | 25 | A. They certainly would have a motivation to marry a |
|  | 130 |  | 132 |
| 1 | well-established research literature that has shown there is | 1 | U.S. citizen. But we know that the frequency of citizenship |
| 2 | a propensity that has been documented for Latinos, Latinos | 2 | acquired through marriage is very small relative to the |
| 3 | who are not naturalized citizens, when presented with a | 3 | frequency of citizenship acquired through the normal |
| 4 | questionnaire rather than facing an enumerator face to face, | 4 | naturalization process |
| 5 | to check the citizen box, naturalized citizen box for | 5 | Have you done any research on the percentage of |
| 6 | motivations that should seem obvious to anyone who | 6 | individuals in the city of Yakima who obtained naturalized |
| 7 | understands the certain that a person would have with a | 7 | citizenship through marriage? |
| 8 | federal agency that is sending you a questionnaire saying | 8 | A. No, I have not. |
| 9 | are you a naturalized citizen or are you a noncitizen. If | 9 | Q. Have you done any research on the percentage of |
| 10 | you check the box naturalized citizen, there is a | 10 | uralized citizens elsewhere who maintain -- who establish |
| 11 | reason -- I should say there's an intuitively obvious reason | 11 | citizenship through marriage? |
| 12 | why one might anticipate that people would more often | 12 | A. I've looked at the national data just to see whether |
| 13 | report -- it would more often be the case that a noncitizen | 13 | naturalization through marriage is a very common phenomen |
| 14 | would say yes, I'm a naturalized citizen than a person who | 14 | and it's not a common phenomenon. I wanted to assure mys |
| 15 | is a naturalized citizen would say no, I'm not a naturalized | 15 | that -- you know, a lot of the times people who become |
| 16 | citizen. And it has been documented that this is what | 16 | naturalized are becoming naturalized in less than five years |
| 17 | occurs on census forms. There has been no study of the ACS | 17 | by getting married and that's not the case. It's not a |
| 18 | directly. And there has been a substantial amount of | 18 | large number. It's a very small number. |
| 19 | research that documents the fact that citizenship | 19 | Q. Did you cite to or note any of that literature in |
| 20 | misreporting occurs. The only thing we don't know is how | 20 | your report? |
| 21 | extensive or pervasive it is in today's world. | 21 | A. I have not cited the literature, but what I've |
| 22 | And so l'm forming my opinion on the basis first of | 22 | looked at is tabulations from the American Community |
| 23 | all on the Census Bureau research that shows the phenomena | 23 | Survey -- let me see. The American Community Survey PUM\$ |
| 24 | occurs, and secondly, on my premise that it can't be the | 24 | tabulations but there also is a document I cited -- \| think |
| 25 | case that most of these 33 people really could be | 25 | I cited here. I did. It's in footnote 13 on page 12 where |


|  | 133 |  | 135 |
| :---: | :---: | :---: | :---: |
| 1 | I said, I gave the details here, eligibility for | 1 | that correct? |
| 2 | naturalization, and then the citation I gave is U.S. | 2 | A. Correct. |
| 3 | Department of Homeland Security, A Guide to Naturalization. | 3 | Q. So this suggests that the PUMA data that you were |
| 4 | But in addition to that guide to naturalization, | 4 | relying on is actually from the 2000 census data, right? |
| 5 | that was kind of my point of understanding how it works, I | 5 | A. No, the PUMA data are from the American Community |
| 6 | actually tabulated the American Community Survey PUMS data | 6 | Survey PUMS file. |
| 7 | to see what the numbers were for the single piece of | 7 | Q. So it's not from the URL that we printed out right |
| 8 | geography that corresponds most closely with the city of | 8 | here |
| 9 | Yakima which is that PUMA district that I mentioned. | 9 | A. No, the URL is for the map that shows the piece of |
| 10 | Q. It's the PUMA 0902? | 10 | geography referred to as this PUMA for the PUMS file itself. |
| 11 | A. Yeah, right. So I do have data -- I may be | 11 | Q. So the map would show where the city of Yakima is |
| 12 | correcting what I said before. I do have data for a piece | 12 | located and what PUMA file is located? |
| 13 | of geography that closely approximates the city of Yakima | 13 | MR. FLOYD: Which map are you talking about? |
| 14 | and l've tabulated the data and that's where the count came | 14 | Q. Let's turn to the fifth page of the document. And |
| 15 | from of the, however many it was. | 15 | as I read this it shows that using -- as of the 2000 census |
| 16 | Q. The 33 people? | 16 | data the city of Yakima is located in PUMA 0902? |
| 17 | A. Yeah, I actually have hard data for that piece of | 17 | A. That's my understanding. |
| 18 | geography. | 18 | Q. Is your understanding that the city of Yakima |
| 19 | Q. You attended Mr. Cooper's deposition yesterday; is | 19 | remains in PUMA 0902 after the 2010 census data? |
| 20 | that right? | 20 | A. Wherever it may be after the 2010 census data is |
| 21 | A. | 21 | immaterial because the ACS PUMS file refers to 2000 PUMA |
| 22 | Q. And do you recall when Mr. Cooper was asked whether | 22 | geography. In other words, the data with the ACS, even |
| 23 | or not he agreed with paragraph 33 of your report he stated | 23 | though it is after the 2000 census, have not yet been |
| 24 | that he did not because it used the wrong geography? | 24 | tabulated for 2010 PUMA geography. That will come sometim |
| 25 | A. I heard that and I would dispute that. | 25 | in the future. But my data that I analyzed, the only data |
|  | 134 |  | 136 |
| 1 | Q. So you didn't know what Mr. Cooper was referring to? | 1 | that are available, the latest available are still saying if |
| 2 | A. Well, he said it's the wrong piece of geography and | 2 | you want to know about -- if you want to pick out the PUMS |
| 3 | that's not correct. It's the right piece of geography, | 3 | records for a particular piece of geography, we're still |
| 4 | although it doesn't perfectly correspond with the city. But | 4 | working with the 2000 map and all we can tell you is 0902 |
| 5 | there is no other piece of geography that would be the right | 5 | and that's the 2000 delineation. Come back in a few years |
| 6 | piece of geography or a better piece. PUMA 0902 is the | 6 | and we'll have it updated with the 2010 stuff but we don't |
| 7 | right piece of geography, not the wrong one | 7 | have it yet. |
| 8 | Q. What does PUMA stand for? | 8 | Q. So it would be immaterial if under the 2010 census |
| 9 | A. Public Use Microdata Area. | 9 | PUMA 0902 does not encompass the city of Yakima at all? |
| 10 | Q. Looking at the URL in paragraph 33, do you see the | 10 | A. It would be totally immaterial, yes. |
| 11 | portion of the URL that says PUMA 2K? | 11 | Q. Turn to page 9 of your report, and this is a section |
| 12 | A. Yes. | 12 | entitled Imputed Latino Citizens. And here in paragraph 22 |
| 13 | Q. What does the 2 K refer to? | 13 | you note that there are 182 foreign born persons in Yakima |
| 14 | A. I think that's probably referring to the PUMA as of | 14 | who had their citizenship imputed, 35 of whom reside in |
| 15 | 2000, used on the 2000 census. | 15 | District 1 in the illustrative plans; is that right? |
| 16 | (Exhibit No. 5 marked | 16 | A. Correct. |
| 17 | for identification.) | 17 | MR. FLOYD: Are you reading paragraph 22? |
| 18 | Q. Exhibit 5 is a printout of the URL that you note in | 18 | THE WITNESS: 23. |
| 19 | paragraph 33. | 19 | MS. KHANNA: My apologies, 23. |
| 20 | A. All right. | 20 | Q. Is it your contention that all of these 35 people |
| 21 | Q. If you look at just the first page of Exhibit 5, do | 21 | are not in fact citizens? |
| 22 | you see the margin along the side -- | 22 | A. No. |
| 23 | A. Left side or right side? | 23 | Q. Do you have any information about who those 35 |
| 24 | Q. On the left side, under the word Public Use | 24 | people are? |
| 25 | Microdata Sample it says U.S. Census Bureau census 2000; is | 25 | A. By who what do you mean? |


|  | 137 |  | 39 |
| :---: | :---: | :---: | :---: |
| 1 | Q. Where do they live. |  | an answer from them. We had to make our best guess. |
| 2 | A. No, there's no residence information. One can only | 2 | y're reporting on the limitations of the data. I'm |
| 3 | start with the 182 and then make some assumption about where | 3 | taking into account limitations of the data. Trying to fold |
| 4 | they might live. If one looks at where foreign born persons | 4 | best I can as to an overall judgment as to whether |
| 5 | for whom -- let's start with where foreign born persons are | 5 | the ACS estimate of Latino CVAP is actually as high as it is |
| 6 | likely to be residing within the city of Yakima. I would | 6 | or whether I should be envisioning the possibility th |
| 7 | submit that they are likelier, that there is a tendency for | 7 | ere might not be quite as many as they estimate. |
| 8 | them -- it is reasonable to assume that there will be | 8 | Q. But you have no actual information that these people |
| 9 | disproportionate concentration of the 182 in areas of high | 9 | are Latino? |
| 10 | Latino concentration. That's a reasonable assumption. | 10 | A. I have no actual information. I only have a strong |
| 11 | one then adds in the question of persons who failed to | 11 | basis for inferring that many of them ar |
| 12 | answer or answered inconsistently the question on nativity | 12 | Q. And you have no actual information that these people |
| 13 | and citizenship, a reasonable assumption would be that those | 13 | live in District 1? |
| 14 | individuals would be disproportionately concentrated in the | 14 | A. Correc |
| 15 | more he | 15 | Q. Have you done any research regarding the percentag |
| 16 | One can arrive at a way to allocate that by simply | 16 | of imputed citizens that are actually citizens in Yakima? |
| 17 | looking at the proportions of some index group that would | 17 | A. No, I have no |
| 18 | say well, under those assumptions something on the order of | 18 | Q. Have you done any research on the percentage of |
| 19 | 35 are probably in that district. And again that's a way | 19 | muted citizens that are actually citizens nationwide? |
| 20 | it's a form of allocation similar to allocating blocs with | 20 | A. No, I have not because there are no data. If there |
| 21 | bloc groups. You make a reasonable set of assumptions. | 21 | -- if the data existed, then they wouldn't have been |
| 22 | so I'm | 22 | puted |
| 23 | Q. And you're assum | 23 | MR. FLOYD: Would this be a good time for a |
| 24 | 1? | 24 | eak? |
| 25 | A. Roughly, yeah. They live -- roughly 35 would be | 25 | MS. KHANNA: Give me five minutes. |
|  | 138 |  | 140 |
| 1 | found in District 1. Not 182, not three but somewhere | 1 | Q. On page 13 of your report, in quantifying these |
| 2 | around 35 | 2 | technical limitations -- that's the title you use there |
| 3 | Q. And you're assuming that those 35 people are Latino? | 3 | You conclude in paragraph 35D that each demonstration |
| 4 | A. I'm making the assumption that they are Latino | 4 | district is likely to include on the order of 41 foreign |
| 5 | because I know that persons about whom citizenship might be | 5 | born persons whose citizenship status is dubious; is that |
| 6 | a question are likely to be Latinos not some | 6 | right? |
| 7 | African Americans, not Hispanics Whites | 7 | A. Correct |
| 8 | Q. Persons about whom citizenship is to be a question. | 8 | Q. What do you mean by likely |
| 9 | You mean persons who for one reason or another did not fill | 9 | A. Likelier than not |
| 10 | out the information | 10 | Q. Do you have a probability? |
| 11 | A. | 11 | A. No. There's no way to estimate a probability. |
| 12 | Q. And that equates to somebody whose citizenship is in | 12 | Q. What do you mean by dubious? |
| 13 | question? | 13 | A. In doubt. Where there are, there are ample grounds |
| 14 | A. I would think that there's a reasonable basis for | 14 | for questioning whether the person classified as a citizen |
| 15 | assuming that people who are citizens and have no question | 15 | actually is |
| 16 | about it won't have any trouble answering the question, | 16 | Q. So it is likelier than not that 41 people have a |
| 17 | won't have any reluctance to answer it or won't fail to | 17 | citizenship status that is called into question in some way? |
| 18 | answer it. But again it's a set of assumptions. That's why | 18 | A. Correc |
| 19 | I use the word roughly, roughly 35. | 19 | Q. Is it likely that all 41 are not citizens? |
| 20 | Q. Do we know for sure that anyone who had to have | 20 | A. I have no way of knowing if it is -- how likely it |
| 21 | their citizenship imputed for some reason had to do so | 21 | is. My feeling is, my judgment is that it could be that the |
| 22 | because of a reluctance to answer a question? | 22 | vast majority of those 41 are not citizens simply because |
| 23 | A. There's no basis for knowing why it was imputed. | 23 | there is a dubious aspect to the answer to such a simple |
| 24 | Simply the Census Bureau reports there were 182 of these | 24 | uestion. It's not a tough question to answer. If you have |
| 25 | people. We just want you to know that we didn't really get | 25 | naturalized, it's a very important event in your life and |

it's not something you'd say well, gee, I don't really remember did I do that. It was five years ago. It's not something that one who has done it would take lightly. As though if you were asked are you married, you say well, let me think a minute. I can't remember.

So on that basis I would say people who haven't answered and people who have given inconsistent answers are all part of a group where something is wrong with the measurement, and one has to infer whether it was just a random accident but they really were citizens and you shouldn't worry about it. They just didn't fill out the form right, which is always a possibility. But I would say it could be anywhere from, you know, 41 on down but I wouldn't rule out 41 as a possibility.
Q. Can you say for certain that District 1 in
illustrative plans 1 and 2 includes 41 people who are wrongly classified as citizens?
A. I can't say that with any certainty, no.

MS. KHANNA: I think we can go ahead and take our break.

MR. FLOYD: Thank you.
(Recess taken 2:04 p.m. to 2:18 p.m.)
BY MS. KHANNA:
Q. In paragraph 37A of your initial report, Exhibit 2 you state that the odds are 56 to 44 that District 1 in
for coming up with an estimate is a methodology that we are refining and trying out in different context to see how it works and to see that it does work and gives plausible results that are not inconsistent. And when I said this calculation we were not as far along with the paper as we are now. We are getting ready to submit it to a journal. And so what I am saying is I would stay with 56 to 44 for now as my preliminary estimate of odds and I would say that all that matters is that the odds are better than 50/50 but not by a lot.
Q. What are the odds that District 1 in Mr. Cooper's hypothetical plan A is actually majority Hispanic?
A. I think that's what these odds are.
Q. I believe these are out of illustrative plans 1 and 2.
A. I'm sorry, you're talking hypothetically.
Q. Hypothetically.
A. I'm sorry, I haven't calculated that.
Q. District 1 in illustrative plan 1 has a Latino CVAP population percentage of 50.25 percent using Mr. Cooper's methodology; is that right?
A. Which page are you on?
Q. I'm on page 22 of the original report, Exhibit 1.
A. I'm sorry, you say it's 50.25 .
Q. 50.25 is District 1 in illustrative plan 1.

Mr. Cooper's illustrative plans is actually a majority of Hispanics district. How did you calculate those odds?
A. It's very, very complicated to explain how you calculate this. I was referring to another plan with the district that had a margin that was approximately that thin and the odds are in the vicinity of 56,44 , but the calculation itself entails a procedure that actually my statistician colleague and I have been working on and writing a paper about. And I simply couldn't explain it to you, you wouldn't understand it and I only understood it recently after he showed it to me. But basically there is a way to do it and it's in the vicinity of 56 to 44, to say plus or minus a few percentage points. And I wouldn't want to say that's exactly what it is, but the odds are -- from a legal standpoint the odds are sort of in the range of likelier than not but not beyond a reasonable doubt.
Q. So you would determine that likelier than not?
A. Yeah.
Q. But not beyond a reasonable doubt?
A. Yeah.
Q. And so you said that you're in the process of working on a paper. Is that what you meant by your preliminary calculations?
A. That's part of what I meant. But I'm just saying
the method itself is one that we are actually -- the method
A. That's what he shows, yes.
Q. You say there's a 56 to 44 odds that that is a majority Hispanic district?
A. Yes.
Q. Page 24, the same report.
A. Yeah.
Q. District 1 in illustrative plan 2 has a Latino CVAP
of 50.13 percent.
A. Uh-huh.
Q. That's using Mr. Cooper's calculations?
A. Right.
Q. His methodologies?
A. Yes.
Q. And you say there's a 56 to 44 percent -- the odds are 56 to 44 that's actually a majority Latino district?
A. Oh, I see. You're saying that I'm applying 56 to 44 to both of those, to each of the plans.
Q. I'm asking if that's the case.
A. Yeah, yeah, I would say that's a reasonable preliminary estimate for each of them. The odds will be closer to 50/50 for the plan 2 than plan 1 but they're in this range. I'd say -- the way I would characterize the odds -- the meaningful conclusion that would come out of this is not that it's exactly 56,44 because that could go up or down a percentage point or two or three, but what if

|  | 145 |  | 7 |
| :---: | :---: | :---: | :---: |
|  | says is the odds are better than 50/50 but not by much. |  | Q. And how would you characterize the odds that that is |
| 2 | Q. So looking now at the supplemental, Mr. Cooper's |  | actually a majority minority distri |
| 3 | supplemental declaration, Exhibit 4, page 12 and I'm looking | 3 | A. The odds are even more likely that it is a majority |
| 4 | hypothetical plan A | 4 | district than hypothetical plan |
| 5 | A. | 5 | So in paragraph 34 of your report, that's Exhibit 2, |
| 6 | Q. District 1 in hypothetical plan A has a Latino CVAP | 6 | second sentence you say, "Plaintiff's entire case for |
| 7 | of 52.17 using Mr. Cooper's CVAP methodology |  | the first Gingles factor hinges on 22 to 24 Latino citizens |
| 8 | A. Right | 8 | of voting age." Do you still believe that to be the case |
| 9 | Q. Could you guess at whether the odds are better or | 9 | after reviewing hypothetical B and C ? |
| 10 | worse than 56 to 44? | 10 | . Um, I was referring here in this report of course to |
| 11 | A. The odds would be better than 56 to 44 simply | 11 | the only, the two plans that were on the table at the time, |
| 12 | because the percentage is higher. How much higher they | 12 | illustrative plans 1 and 2 . I am not persuaded that the |
| 13 | would be, I don't know. I understand that the odds here, | 13 | other plans, other hypothetical plans are actually, all of |
| 14 | e referring to the odds that reflect exclusively th | 14 | m are actually relevant. I know that -- I'm not sure |
| 15 | ertainty associated with margins of error. It has | 15 | ich one it is. Hypothetical D and E I believe are the |
| 16 | nothing to do with the other nonsampling error concerns tha: | 16 | ones that are based on, are drawn based on citizen |
| 17 | I have. | 17 | population. So hypothetical $D$ and hypothetical $E$ are not |
| 18 | Q. Please turn to page 22 of the supplemental report, | 18 | really plans. I mean they're exercises in what a plan would |
| 19 | Exhibit 4, hypothetical plan B. And you see District 1 in | 19 | look like if you allocated, if you drew district boundaries |
| 20 | hypothetical plan B has a Latino CVAP percentage of 52.12 | 20 | based not on the total population, which is what you're |
| 21 | percent? | 21 | supposed to do, but on some other unit. And so I don't |
| 22 | A. Yes. | 22 | really view them as plans that pertained to Gingles 1. |
| 23 | Q. What would you say are the odds of this being | 23 | They're irrelevant exercises. |
| 24 | actually minority district? | 24 | MS. KHANNA: Can you please read back the |
| 25 | A. The odds would be much better. I haven't calculated | 25 | question. |
|  | 146 |  | 148 |
| 1 | them but there's no question that they would be much better | 1 | (Question on Page 147, Lines 5 |
| 2 | MR. FLOYD: You're talking about 37A odds? | 2 | through 9, read by the |
| 3 | You're not talking about general odds? | 3 | reporter.) |
| 4 | MS. KHANNA: I'm talking about the same criteria | 4 | A. Well, if I take at face value the number on, in |
| 5 | used in 37A. | 5 | paragraph 52 , page 23 of Mr. Cooper's supplemental report |
| 6 | A. Yeah, the odds here would be well above $50 / 50$ for | 6 | where he says the Latino citizen advantage of more than 500 |
| 7 | figure 11, District 1. Again, just exclusively counting | 7 | persons, clearly 500 persons exceeds the 22 to 24 that I was |
| 8 | for, you know, sampling error | 8 | referring to earlier, and of course I was making that |
| 9 | Q. So previously you said that the odds for | 9 | statement in my first report. I still am not clear how many |
| 10 | illustrative plans 1 and 2 are more likely than not but not | 10 | additional persons who are counted as Latino CVAP might no |
| 11 | beyond a reasonable doubt? | 11 | be, should not be counted based on the combination of all |
| 12 | A. Correct. | 12 | the other methodological factors I noted. I would agree 500 |
| 13 | Q. How would you characterize that same odds for | 13 | persons here on the face of it is a large margin. How many |
| 14 | hypothetical B? | 14 | of those would be attributable to, you know, problems in |
| 15 | A. For hypothetical plan B I don't want to give a firm | 15 | measurement, I don't know. I don't have any way of |
| 16 | conclusion. But one has a much stronger confidence of a |  | measuring that. But I would concede my estimate of 22 to 24 |
| 17 | majority when you have it as high as 56.12 before you start | 17 | is a lot smaller than the 500 before one starts to deal with |
| 18 | to account for errors in the data. Based purely on sampling | 18 | the problems that one has with 500, and I have no way of |
| 19 | error, you know, 56.12 would be, you know, would be, would | 19 | answering the question by saying I would definitely concede |
| 20 | leave not much doubt in my mind that there was a majority. | 20 | this or that. I just say there's an unresolved issue here, |
| 21 | Q. Can you turn to page 25 of Exhibit 4. Here we have | 21 | unresolved question. |
| 22 | hypothetical plan C . District 1 in hypothetical plan C has | 22 | Q. When you said that plaintiff's entire case for the |
| 23 | a percentage of Latino CVAP, or the Latino percentage of the | 23 | first Gingles factor hinges on 22 to 24 citizens, Latino |
| 24 | CVAP is 57.74 percent; is that right? | 24 | citizens of voting age, do you believe that is still the |
| 25 | A. Correct. | 25 | case in light of hypotheticals B and C? |

MR. FLOYD: The question's been asked and answered.
A. I think I have answered it. I answered it with respect to hypothetical plan B.
Q. I'm sorry, is that a yes or a no?
A. The answer is it depends.
Q. So you think it depends. It might still be the case that plaintiff's entire case for the first Gingles factor hinges on 22 to 24 Latino citizens of voting age?
A. It's conceivable.
Q. And could you explain what does it depend on?
A. Well, it would depend on the cumulative effect of
all the limitations I have enumerated with the data starting with the misreported citizenship, the numbers of people who did not answer the question as to whether they were citizens or not and for whom an answer had to be manufactured as best as it could by the Census Bureau. And I still have some doubts as to how Mr. Cooper has calculated the Latino registered voters. I guess this is one of the major factors. These numbers that you're asking me to render a judgment on are calculated using his method rather than my method in terms of allocated population, allocating Citizen Voting Age Population.

The one time I checked my method versus his I saw a striking difference in the numbers. It was not just a
Q. But you didn't think you should after reading Mr. Cooper's hypothetical -- sorry, Mr. Cooper's supplemental declaration?
A. Well, actually I didn't have time to and I really -- I would do it if asked to do it, if it was necessary, but I will have to get -- I would have to get some of the data from Mr. Cooper, which I don't have now So I have to begin by requesting the data.
Q. What data would you need from Mr. Cooper?
A. I would need to know the exact bloc, the exact blocs that are contained within District 1 of each of the hypothetical plans. I'd have to know which blocs are part -- which are the blocs that compose that hypothetical plan.
Q. Would that be included in the equivalency files for this map?
A. I don't know. I'd have to check. It's conceivable that they are but I have not looked at that. But that's what I would need to have first and then I would be able to go back and do the lengthy calculations, but l've not done them.
Q. Are you aware that Mr. Cooper has provided the equivalency files for all of the hypothetical plans?
A. If you tell me he has, I'll take your word for it.

I've not looked at them. If he has provided them, would
percentage point or so, it was quite a bit of a difference. I don't know how that difference plays out when you get up into the range of $55,56,57$ percent. So I would say -- I guess I would revise my statement. I would no longer say that I can say that it hinges on 22 to 20 -- the entire case hinges on 22 to 24 Latino citizens. I would say that I am not at all confident that I could conclude with scientific certainty that the numbers if calculated, if recalculated using my method and allowing for all of the technical deficiencies in the data were taken into account would certainly come out to be a majority. I think that remains an open question.

So I'm not willing to concede that I can reach a firm conclusion about that and say that the whole case no longer hinges on 22 to 24 . It hinges on some number. I don't know what that number is. But I'm unwilling to say that I have -- that I can say with any confidence that there is a majority in hypothetical plan C or B based on not having, not having been able to take account of all of these things and not yet having recomputed the number using my method rather than his method.
Q. So you have not recomputed your methodology?
A. Not for the hypothetical plans, no.
Q. Do you intend to?
A. If I'm asked to, I will.
they have been provided a long time ago or only recently?
MR. FLOYD: I think they were provided Friday
afternoon, for the record. I think that's when we requested it.
A. Okay. Well, in that case --

MR. FLOYD: Plus we've requested them and they were provided Friday afternoon.
A. I don't believe I've received them yet.

MR. FLOYD: No.
A. I didn't recall receiving them.
Q. So in the illustrative plans 1 and 2 the difference between Mr. Cooper's CVAP method and your methodology ended up being about one to two percentage points; is that correct?
A. I don't remember the exact amount but it was more than just a fraction of a percent. It was a meaningful amount, enough to cause the Latino share to fall well below 50 percent.
Q. So Mr. Cooper's illustrative plan 1 has a Latino

CVAP using his methodology of 50.25 percent. That's correct?
A. I'll take your word for it.
Q. I'm on page 22 of Exhibit 1, his declaration.
A. All right.

MR. FLOYD: I think you should ask for the data.

|  | 153 |  | 155 |
| :---: | :---: | :---: | :---: |
| 1 | Q. Page 22. |  | had a District 1 Latino CVAP of 57.74 as demonstrated on |
| 2 | A. Page 22, right. And you said it was 50.25. |  | ge 25 |
| 3 | Q. 50.25 using his methodology. | 3 | A. Yes. |
| 4 | A. Correct. | 4 | Q. And you've not calculated the CVAP using your |
| 5 | Q. And using your methodology as reported in your | 5 | methodology for hypothetical plan C |
| 6 | supplemental expert report, Exhibit 3, it's 48.31. And I'm | 6 | A. Correct. |
| 7 | looking right on the first page of paragraph 3 in bold. | 7 | Q. And can you estimate what your CVAP calculation |
| 8 | A. That's correct | 8 | would arrive at? |
| 9 | Q. So that's a difference of less than two percentage | 9 | A. For the same reason I gave you for hypothetical plar |
| 10 | points, corre | 10 | B, no, I cannot at this point. I'd have to do the |
| 11 | A. It's almost two percentage points. It's just barely | 11 | calculation. I can't generalize from the illustrative plans |
| 12 | below two percenta | 12 | 1 and 2 to this. |
| 13 | Q. Do you believe that the difference betwee | 13 | Q. Do you have any reason to believe that it would be |
| 14 | Mr. Cooper's methodology and your methodology would hove | 14 | more than seven percent different? |
| 15 | around two percentage points regardless of how large the | 15 | A. I don't have any basis for knowing what it would be. |
| 16 | percentag | 16 | Q. Is there any number of Latino CVAP in a given |
| 17 | A. Not necessarily. It could be scaled in a different | 17 | district, using Mr. Cooper's method for calculating CVAP, |
| 18 | way. It could come out differently because of th | 18 | that would be high enough to give you confidence that it is |
| 19 | particular blocs that are involved. There's no obvious | 19 | in fact a Latino majority district? |
| 20 | basis for generalizing that it's about two percentage points | 20 | A. I can't set a threshold for that. Although |
| 21 | here, move it up a scale and it will be two percentage | 21 | obviously, you know, one could say well, 100 percent. My |
| 22 | points here because the geographies are different. It could | 22 | approach to a question like this is not to say well, you can |
| 23 | be amplified because a different piece of geography was | 23 | guess that if it's this high, you know it's a majority |
| 24 | in | 24 | because it is a guess. I don't have any empirical basis. |
| 25 | not be prepared to generalize from my correct estimate and | 25 | So if you're saying could you guess, I could say, well, I |
|  | 154 |  | 156 |
| 1 | its departure from his estimate based on plan 1 or 2 to any | 1 | could guess but I don't have any firm scientific threshold |
| 2 | of the other plans without doin | 2 | My approach would be to say if you want to know what |
| 3 | Q. Back to page 22 of Exhibit 4. Looking aga | 3 | e answer is, let me calculate it. If you want to know |
|  | hypothetical plan | 4 | hat my expectation is, I don't have an expectation because |
| 5 | A. All rig | 5 | not, I'm not sure that one can generalize. That these |
| 6 | Q. Mr. Cooper reports that the percent of Latin | 6 | things have a funny way of behaving in a nonlinear fashion. |
| 7 | registered voters in District 1 is 58.92 | 7 | hey don't always work out the way you think they would. |
| 8 | A. You said which paragraph? We're talking | 8 | Ithough I would concede that the higher it goes, the more |
| 9 | Exhibit 4? | 9 | ely it is that my calculation is going to show that it's |
| 10 | Q. Page | 10 | a majority, but I don't know what the threshold is where I |
| 11 | A. Page 22, sorry, okay. Could | 11 | could say well, I'm sure it's majority of this. |
| 12 | question. | 12 | Q. Your report does speak of likelihoods, correct? |
| 13 | Q. Sure. Mr. Cooper reports that the Latino percentage | 13 | A. Yes. |
| 14 | of the registered voters is 58.92 percen | 14 | Q. Is there number which you could say it's very likely |
| 15 | A. Correct | 15 | that the district is in fact a majority Latino CVAP |
| 16 | Q. Do you have any reason to dispute that? | 16 | district? |
| 17 | A. Well, I still have this question about whether this | 17 | A. Only with respect to the estimate itself and |
| 18 | includes the nonSpanish surname individuals. What's the | 18 | accounting for the margin of error. That is to say if you |
| 19 | label we're using for these? | 19 | said can you give me an estimate of likelihood excluding all |
| 20 | Q. Colby | 20 | e problems that you have, the technical measurement |
| 21 | A. The Colby people. I would only dispute it if there | 21 | problems you have, and assuming that number is in fact a |
| 22 | were Colby names present. If you said with the caveat that | 22 | true representation of the underlying reality, which I'm |
| 23 | ere are no Colby names in that file, then I would agree | 23 | saying I cannot accept, with that caveat I could say |
| 24 | that it's 58.92. | 24 | hypothetically there is a margin I can calculate using |
| 25 | Q. And we said earlier that the hypothetical plan C has | 25 | statistical theory, the margin of uncertainty around any of |

these percentages. But it would be a hypothetical in the sense that I've not accounted for the problems with the data.
Q. Illustrative plans 1 and 2 you said there were 41 people who are likely to have citizenship status that is dubious.
A. Yes.
Q. In hypothetical plan B do you believe it is likely that there are more than 500 people who have citizenship status that is dubious?
A. No.
Q. Were you asked to opine in this case about whether it is possible to draw a district in which Latinos form the majority of a single member district?
A. Yes, I was.
Q. Did you analyze whether that could be done?
A. No, I did not.
Q. Do you dispute that it is in fact possible to draw a district that is, where majority of voters are Latino?
A. I have said so far that I'm not entirely sure, it's possible, when I take into account all the measurement problems with nonsampling error involved in the data and al the things that l've uncovered.
Q. At any time in either of your reports do you say that it is not possible to draw such a district?
A. No, I do not.
Q. Do you dispute that it is possible to create at least one district in the city of Yakima in which Latinos comprise a majority of registered voters?
A. Again with the caveat that the surname issue that we were -- the Colby problem is absent, I would not dispute it, no.
Q. With that same caveat, do you dispute that it is possible to draw at least two districts in the city of Yakima in which Latinos form a majority of registered voters?
A. I know I saw one here somewhere. If you could direct me to the plan that shows that.
Q. If you can turn to page 22 of Exhibit 1.
A. Right.
Q. Illustrative plan 1.
A. No. With that caveat, no, I would not dispute.
Q. Move on to the section of your report entitled Unequally Weighted Votes in Different Districts. We've already talked about this issue a fair bit, so I'll try to move through this kind of fast.
A. Sure.

MR. FLOYD: Which report?
MS. KHANNA: Sorry, this is his initial report, Exhibit 2.
Q. So your position in this section is that the votes eligible voters in District 1 may be more heavily weighted than those in the surrounding district; is that right?
A. Correct.
Q. Did this issue go to whether or not plaintiffs can satisfy Gingles 1 ?
A. It goes to it in the sense that subordinating this particular criterion of avoiding extreme imbalance in the weight that a vote carries depending on the district one lives in, subordinating that criterion to race, ethnicity to me renders the district one that could not be used under the law, at least it raises that question.

So I wouldn't say that the problem of grossly malapportioned eligible voters has nothing to do with a district's capacity to satisfy Gingles 1 if it is so grossly malapportioned that it could not satisfy some other legal requirement. I'm raising that as an issue and I think it's a legal question. It's not one for me to resolve. But I'm saying that would be the basis of my doubt in answering your question that I do have doubts about it, about the plan being able -- about a plan being able to satisfy Gingles 1 when there is such a severe malapportionment of eligible voters.
Q. Page 6 of your report, paragraph 14.
A. All right.
Q. Second sentence says, "Even if it were possible to form one such district as part of a seven district plan as of 2010, doing so would pose a central concern," and then you go on to discuss the equal protection concern that you raise; is that right?
A. Yes.
Q. So this sentence assumes satisfaction of Gingles 1 and then says that this would raise a new legal issue; is that right?
A. Right.

MR. FLOYD: Objection. Hold on. Satisfying Gingles 1 is a legal conclusion and I'm going to object. You can go ahead and answer.
A. Those are the words that I wrote, yes.
Q. So assuming for the moment that you're correct, you're correct on the legal issue posed by unequally weighted votes, does that disprove that Latinos are geographically concentrated or geographically compact and sufficiently numerous to form a majority in a single member district?

MR. FLOYD: Object to the form of the question. Legal conclusion and compound.
A. It doesn't negate the reality that the numbers would show if they were correct about whether there was a voting -- whether there was a Latino majority. The fact

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that there was a Latino majority in the district is a
mathematical question. And whatever is going on with
respect to the law about whether that plan can or cannot be
used or is or is not a plan, the question is there a Latino
majority in that district is purely a function of the
numbers and what the numbers mean. So I would say those are
two disconnected issues.
Q. This portion of your report raises two questions.
MR. FLOYD: Which portion?
MS. KHANNA: The portion about unequally weighted votes.
MR. FLOYD: Thank you.
Q. I think there are listed several points throughout your report. I'm looking specifically at paragraph 44 where you summarize those two questions.
A. All right.
Q. Here you say, "Even if these technical issues with the underlying data could be resolved, the unavoidable electoral imbalance that would result poses two questions: 1 , is it constitutional to undersize the citizen population in one Latino district while oversizing the citizen population in another district," and then I'll jump to 2, "would this electoral imbalance cause the unlawful dilution of votes cast by one or more protected groups." I'm going to tackle the first two questions first. Does your report
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provide an answer to this question?
A. To question 1?
Q. Question 1, is it constitutional to undersize the citizen population in one district while oversizing the citizen population in another.
A. I'm not a lawyer, so I can't say whether it's constitutional.
Q. So you have no opinion on the answer to this question?
A. I'm posing it as a question. But my opinion is that it is my understanding that it may raise a constitutional issue, but I defer to lawyers and judges to confirm that.
Q. So the reason that Mr. Cooper's illustrative

District 1 has fewer voters is because there are more noncitizens in that district?

MR. FLOYD: Did you say fewer voters?
MS. KHANNA: I believe so.
Q. Is that right? The reason that Mr. Cooper's illustrative District 1 has fewer voters than other districts is because there are more noncitizens?
A. It's because -- it's really because of the
demography of that area. It could be because there are more noncitizens or it could be because there are more persons under 18 who are nonLatinos. There are several reasons why that could be the case but I would say that they are all

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demographic reasons. The population structure, the genera statement I would make is the population structure in terms of age, ethnicity and citizenship together are what bring about the situation. And the situation is -- the underlying demography gives rise to the problem for the immediate reason that the person who drew the district boundary -- the person who drew the boundaries of this district subordinated all other, subordinated certain other traditional redistricting criteria to the criterion of race and ethnicity. That is to say race or ethnicity was the predominant motivating factor in drawing those boundaries and that is what conspired to bring about the effects of these various demographic factors manifesting themselves in this particular way.
Q. I believe you mentioned earlier that over the last ten years you've seen this potential problem with respect to Latino districts across the country?
A. I've seen it in a number of settings, yes.
Q. So the same issue would be raised when drawing or trying to draw an LCVAP district anywhere; is that correct?
A. Not anywhere, but it's something that can arise in a situation that has the demographic ingredients that you have here.
Q. So not just in Yakima?
A. Correct.
Q. Does this caution against drawing an LCVAP district for purposes of section 2 of the Voting Rights Act?

## A. Not at all.

Q. Would this same issue be posed in any districting
plan in which some districts have fewer eligible voters than others?
A. The district -- the issue -- did you characterize it as an issue or a problem in the question?

MS. KHANNA: Would you read the question back.
(Question on Page 164, Line 4 read by the reporter.)
A. The issue would present itself in varying degrees in magnitude in a lot of places. And the issue is not the presence or absence of this imbalance but the magnitude of the imbalance and the extreme, the degree to which votes carry grossly different weights. And I use the word grossly different weights as opposed to slightly different or moderately different.
Q. So it's the magnitude of the imbalance?
A. It's the magnitude of the imbalance, that's correct.
Q. So if, for example, I had one district that was populated primarily by nursing homes and an adjoining district it was populated primarily by large young families with lots of children under the age of 18 , would such a situation pose the same issue, the same question that you
raise here?
A. That would depend on a lot of factors. It would depend first of all on -- are you thinking of this in a race neutral?
Q. Exactly. Race neutral way.
A. Everybody is the same race.
Q. In one district I got a lot of people who are older and over the age of 18 and a lot of people in the adjoining district who are younger in age.
A. I don't think that that issue has ever, to my knowledge presented itself in that fashion, but I would regard it as the same category of issue. And I'm not sure what the law would have to say about that in a race neutral context. That is to say if one were drawing district boundaries and an issue like that cropped up, um, I would think that the approach I would take would be to say among the traditional redistricting criteria are avoiding severe imbalances in the weight that the votes carry depending on the districts you're in, and I would say it probably would be prudent to try to reduce the magnitude of the imbalance, whatever level it was. Not eliminating it necessarily but avoiding the most extreme imbalance as one of the factors that one would want to weigh, even though it has nothing to do with race. And I, I'm not sure what the law has to say about that, but it is the same mathematical problem.

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Q. Is it your understanding that one person, one vote requires absolute voter equality?
A. No, it does not.
Q. It's the magnitude that concerns you?
A. Yes.
Q. How would you define the term electoral imbalance? Is it a question of magnitude?
A. Yes. Electoral imbalance is a scale that goes from very little to a whole lot.
Q. Is there a number at which electoral imbalance can be found? What is the tipping point for a magnitude that is unacceptable?
A. I don't envision it as a tipping point. I envision it as how avoidable is the extreme, or how much -- how avoidable is the magnitude. That is to say however big it could be, how far away from that maximum are you or however big is it, can you make it smaller while respecting other traditional redistricting considerations. In other words, it's something that one would prefer would be smaller but if it has to be larger for some legitimate reason, then it has to be larger in the same sense that the deviation from ideal should be smaller but it could be larger if one is balancing some other redistricting consideration.

In the case of the nursing home example you gave, it might be that elderly people in that part of town constitute
a community of interest and one could say well, you could split it in half in order to reduce the magnitude of some other problem but then you'd be dividing a community of interest, so you'd have to balance those considerations.

So it's all a matter of recognizing the traditional redistricting criteria, all of them, and trying to achieve some reasonable balance among them. And it requires on the part of the person doing it first of all recognizing them all, which I have said Mr. Cooper has overlooked several and seems to be, seems not to understand what they are, and secondly, achieving some balance among them in a way that one can articulate what the balance is and what the rationale was. And again that is another step where I haven't seen any evidence that that occurred in what Mr. Cooper did.
Q. Just to clarify, you said Mr. Cooper overlooked several of these traditional redistricting criteria. The ones that you noted so far are I believe the electoral balance issue and the communities of interest; is that correct?
A. Those are the two that stand out most to me, yes.
Q. And your issue with the communities of interest is you just did not know what, if any, communities of interest he was respecting other than the Latino population?
A. He said that they were communities of interest but I
only know what one of them is. There apparently were others, at least one other.
Q. And you said these were the two primary redistricting criteria he overlooked. Were there others?
A. Not that come to mind. I don't know if there are other criteria that would be an issue in this context. But my sort of wholistic concern is not that he got most of them but missed two, but that he seemed to be almost ignorant of what they were and what you were supposed to do with them He didn't seem to recognize their importance and he didn't seem to recognize how much -- how important it was to recognize the misweighting of votes and at least to acknowledge it and say it's a bad problem and you can't get it much smaller than this or it had to be this large because of something else. He doesn't seem to have acknowledged them and described -- even if he couldn't solve the problem he didn't describe the problem in a way that you could say yeah, he got the problem, he didn't do anything about it or he didn't do enough about it. He didn't even seem to recognize it.
Q. Have you ever presented this issue regarding unequally weighted votes in the context of an LCVAP district to a court?
A. Yes, I have. I can't remember exactly where but I know l've done it in at least one instance somewhere, and I
know that I have presented scientific papers at professional meetings about this issue.
Q. Do you recall how the court in which you presented it to addressed the issue?
A. I don't. I'm trying to think back where it was. I
know I've brought it up but I haven't checked back to see how -- I mean I'm not aware of any court that immediately did something about it, if that's what you're asking.
Q. And just to clarify, you're not advocating for the use of anything other than total population at the apportionment base; is that right?
A. That's correct.
Q. Skipped through a bunch of my questions. You say in paragraph 42 of your report that it is unnecessary to tolerate this degree of imbalance. What would be your proposed solution?
A. My proposed solution would be to try to adjust the boundaries of District 1 and I guess to some extent District 2 in a way that would accord with his desire to concentrate Latinos in a district but that would have the effect of perhaps reducing the degree of imbalance somewhat. And the starting point would be to look at not just District 1 but to look at some of the other districts. Just as District 1 has very few eligible voters, there will be at least one other district that tops the list in terms of too many
eligible voters. And if you look at just those two extremes and say -- there's a lot of unevenness here, but if we take the two extremes and we bring them a little bit closer, reduce it by whatever we can without destroying whatever other redistricting criteria are at play here, give some weight to that, perhaps trading off an exclusive emphasis on race, ethnicity to say that race and ethnicity are one important factor, let's reduce it from being the predominant factor to being just an important factor, reduce the imbalance and come up with a plan where you have concentrated Latinos in a district but you don't have anything else going terribly wrong and you have the prospec that very possibly the Latino share will increase over time.
Q. Turn to the second of the questions that you pose. I'll refer you back to paragraph 44 where I was getting these two questions.
A. Sure.
Q. That question is, "Would this electoral imbalance cause the unlawful dilution of votes cast by one or more protected groups, for example, American Indians or Asians whose numbers are disproportionately concentrated outside demonstrated District 1." Wait for the question.
A. All right. And what's the question?
Q. The question is, first question is -- I'm looking at paragraph 43 now, the paragraph previous to that. Do you
provide any analysis regarding this question other than what's contained in paragraph 43?
A. I haven't presented the data that support my statement that the effects of this imbalance would fall unequally on Latinos in one district and nonLatinos in all other districts but I have the data. I analyzed the data and I looked at them and it's obvious that that would be the effect. I anticipate that at trial I would have an exhibit showing that, demonstrating it in detail.
Q. But you did not actually support this assertion with any data in your report?
A. Not in the report. But I have the data and I would say that the data are there. I made the statement because know the data support it. I haven't shown the data for every single statement I make in the report, but there's no question using Mr. Cooper's data demonstrates without any question that the imbalance does fall unevenly on Latinos in one district and nonLatinos in all other districts.
Q. How does the data show that?
A. By simply -- well, I can't describe verbally what the arithmetic shows, but simply looking at the distribution of Latino voting age citizens across districts and nonLatino voting age citizens across districts and then distinguishing them by, in terms of race, that's my recollection when I eyeballed the table, it's obvious that the districts other
than District 1 have a disproportion, to varying degrees have a disproportionate concentration of nonLatino eligible voters; that is to say the victims of District 1's boundaries.

There are in varying degrees too many of them to share one-seventh of the power and in some cases way too many. So it's really a matter of looking at each row of his table and saying each row corresponds to one-seventh of the political power in the city and that political power is being shared by how many eligible voters. And the answer is more than there should be among nonLatinos and actually mor than there should be among even the Latinos in those districts.

So everybody is being disadvantaged, not just, not just nonLatinos. It's nonLatinos, Latinos and then one can do other calculations to show what proportion of the entire community of let's say African Americans is being affected by this imbalance. And it could well be that, you could make the statement for group X , most of group X in the city will be disadvantaged by the effort to empower Latinos in District 1 by making race, ethnicity the predominant factor in drawing the district. That's how it works.
Q. Did you analyze the percentage of American Indians citywide versus the percentage of American Indians in the various districts in Mr. Cooper's plan?
A. I looked at the American Indian population as just one of several protected minorities. I mean I didn't pay any special attention to them and I don't know that the case was strongest among American Indians, but I certainly noticed it was the case among African Americans and Asians and I think American Indians also were affected to some degree as well as nonHispanic Whites and also as I state Latinos.
Q. What is the percentage of the citywide population of American Indians?
A. I don't know it offhand. I know that the numbers are about, if I remember correctly, about the same as Asians and African Americans, if I remember correctly. You know, it's a small group but nonetheless it is a community of interest and it is a group that is distributed in other districts.
Q. But you don't recall the citywide percentage of this group?
A. No.
Q. Do you recall the citywide percentage of the Asian group?
A. I don't recall any of these percentages but I know exactly where to look for them. They're actually somewhere in some of our reports. It's an easy question to answer. If you tell me which table, I'll look at it and tell you

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what it is.
Q. Do you recall whether the citywide percentage of any of these groups was more or less than the percentage of that group in District 1, in the illustrative plan?
A. It may well have been. It could be more in District 1 than it is across the rest of the city but it also could be more in one or the other district where those people are being disadvantaged. So the answer is it could be that they are, that any particular group has a disproportionate concentration in District 1 but that's not the only district where it is disproportionately concentrated.
Q. But it could be, in your words, that one of these groups has a higher concentration in one district of Mr. Cooper's plan than it does citywide?
A. Correct.
Q. How would one approve of a dilution claim?
A. That is a question that depends on the law. And I would ask -- I would say the answer from my perspective would be a lawyer would say one approves a vote dilution claim by showing that the numbers demonstrate $X$, and $I$ don $t$ know what $X$ is yet in the context you're asking about. I know what it means in terms of cracking, packing, et cetera, the traditional process. If you're talking about the context here of underweighting, overweighting votes, that's an arena where I think I would need guidance from a lawyer.

It seems to me that the concept -- my application of the concept of dilution, it seems to me would be applicable to the situation where you have grossly malapportioned voter, eligible voter populations because you are in effect disenfranchising a group when the power of the vote that it carries is lessened by its concentration in a particular district.

I don't know if the legal term vote dilution would apply to that but it looks to me like it would be diluting the voting strength. I guess one might say not the voting strength, but it would be diluting the strength of the individual votes cast by the voters of the group, and one might say that that is collectively vote dilution. But again, that's a legal question. I'm just offering my conceptualization of it and it may have nothing to do with the law.
Q. But you do understand that when it comes to minority vote dilution one way of proving minority vote dilution is by establishing the Gingles factors?
A. Correct, I understand that.
Q. As far as you know is the American Indian population in the city of Yakima geographically compact and sufficiently numerous to form a majority in a single member district?
A. I haven't looked at it but I doubt it is.
Q. How about the Asian population?
A. Same answer.
Q. And the African American population the same?
A. The same answer.
Q. Have you had an opportunity to review Mr. Cooper's analysis of the nonLatino minority population in Yakima in his supplemental declaration?
A. Yes, I have.
Q. Do you agree that Districts 1, 2 and 4 each have a larger concentration of the various minority groups that you identified than the city as a whole?
A. Um, I'd have to look at the particular place where these data appear. I can't tell you off the top of my head whether that's true. Is there a table where Mr. Cooper is showing that?
Q. I don't believe I see a table. He does state in paragraph 80 that District 4 is also a majority minority district in addition to Districts 1 and 2, in that it has a total minority population that exceeds 50 percent.
A. Okay, by minority there he means everybody who is $\approx$ protected minority.
Q. Yes.
A. I read that and I don't have any basis for saying it's true or false. When you start to add up the different groups, it's a whole different calculation. I didn't do the
calculation. But if he says it's so, I know he knows how to add, subtract, multiply and divide. So I would venture to guess it's probably correct.
Q. But you said you have the data available and you intend to create an exhibit perhaps at trial about this data.
A. The exhibit that I plan to create has nothing to do with a minority majority district, that is to say an aggregation of all minority groups as though they were a single cohesive minority. My contemplated exhibit would show the effects of malapportionment of eligible voters on the weight carried by votes cast by each voter who is a member of a particular minority such as Asians

So my exhibit would be focusing on if you are an Asian in Yakima, is your vote carrying the same weight as that of a Latino in District 1 or of anyone in District 1. So it would be a question of malapportionment of eligible voters with respect to each particular protected minority. So that it would emphasize the point that when you try to concentrate one group in one district, you may be disenfranchising another group in several other districts in doing so. That's where I see the tension in the law
Q. If an Asian group is more highly concentrated in a single member district than it is citywide, are members of that group worse off or better off under a districting
system in terms of being able to elect candidates of their choice?
A. You mean on a citywide basis or just in this district?
Q. In that district.
A. Well, it would depend on whether they voted cohesively. One could certainly say that they would carry -- they would be a stronger coalition if they voted cohesively in that district than they would be citywide. On the other hand, it might be that the voting strength that they would thereby enjoy in that one district would have to be offset on the balance sheet by the fact that other Asians in other districts would be rendered less significant to candidates who are seeking people's votes. They would be easier to overlook by a politician who might not care about two percent of the electorate that was Asian in a city that was five percent Asian and in another district where ten percent of the electorate was Asian. You see what I mean, it has a -- it's a two edge sword depending on whether you're talking about Asians citywide or Asians in one district
Q. So even though some Asians may be better off, other would not be?
A. Well, I wouldn't use the term better off. I would just say it's -- we're talking about two alternative ways of
empowering a particular group. And this is really a political scientist question. So I'm just telling you the arithmetic is that the more -- the higher a percentage a group constitutes among eligible voters, the more attention that group will be paid by candidates who are running for office. If the candidate is running in a particular district where the concentration is high, that candidate will pay more attention to that group and that group will have more leverage as part of a multiracial coalition.
Q. Is it your opinion that Mr. Cooper gave exclusive emphasis to Latino ethnicity in drawing District 1 in his illustrative plans?
A. That appears to be the case to me, yes. Did you say exclusive emphasis?
Q. Yes.
A. I would say -- I'm not sure about exclusive but I would say it appears to have been the predominant factor.
Q. Paragraph 42 of your report, Exhibit 2. Page 15, paragraph 42.
A. All right.
Q. You say here, "However, Mr. Cooper does so by giving exclusive emphasis to Latino ethnicity in drawing each District 1." Would you modify that now to say predominant and not exclusive?
A. Um, I guess I would say I don't know whether it was
exclusive or predominant. I can't say with certainty that it was exclusive because he may have said I could have included one more bloc that would have boosted Hispanics even more but I decided not to because it would look ugly. So I cannot say with certainty that it was exclusive but I am certain -- it certainly has the appearance of being predominant and I wouldn't rule out exclusive. I think he would be the one who could answer that most accurately.
Q. Is it your understanding that Mr. Cooper sought to maximize Latino voting strength in drawing illustrative plans 1 and 2?
A. Given that I've seen the other plans he's drawn, I don't think he sought to maximize in plans, illustrative plans 1 and 2 because he was able to get the percentage, the measured percentage even higher in some others. So obviously 1 and 2 were not maximums.
Q. How do you know he gave predominant emphasis or maybe even exclusive emphasis to Latino, to Latino ethnicity in drawing District 1?

MR. FLOYD: Object to the form of the question. Compound and argumentative. Go ahead and answer.
A. Well, I'm thinking in terms of a pyramid of priorities where one has a concept of you need to balance the traditional redistricting criteria and then I'd like to know well, which criteria were most important, which
criterion was most important and it appears to me that ethnicity was the most important criterion. What was next in importance I don't know. I wouldn't be surprised if it was compactness. It may have been compactness, it may have been something else.

But if Mr. Cooper gave exclusive emphasis to Latino ethnicity as I said in paragraph 42, it's possible that the boundaries would look just as they do. It would have just kind of lined up that way and very often there are streets, highways that serve as social -- that delineate social boundaries in neighborhoods. So sometimes it is a straight line. You know, one side of the street is Latino, you cross the street and that's where the Latino neighborhood ends. So it's not out of the question that relatively straight boundaries are consistent with the fact that he still was giving exclusive emphasis to the, as is said in the court cases, race, I mean hereby ethnicity.

Certainly there is every indication that he gave predominant emphasis in the sense that I don't see any evidence of any other factor that was given equal importance. Certainly not compactness. It could have been much more compact. If he said I want it to be compact and I also want to have a concentration of Latinos and I'm going to weigh those equally, I wouldn't expect to see the boundaries the way they are. They'd be a lot cleaner.

So my -- if I had to discern his motive without his admitting what it was, I would say he gave predominant emphasis to ethnicity, and then what other criteria he used, moving down the pyramid of the hierarchy, I'm unclear on because he hasn't articulated it.

MR. FLOYD: Is this a good time to break? Are you getting close to being done?

MS. KHANNA: I'm getting close to finishing up on the last couple of sections of his report which should go pretty fast. I think we could have a good hour left.

MR. FLOYD: Let's take a break then.
(Recess taken 3:29 p.m. to 3:44 p.m.)
BY MS. KHANNA:
Q. Your report also addresses the second and third Gingles preconditions; is that right?
A. Yes.
Q. What were you asked to do with regard to the second and third Gingles preconditions?
A. I wouldn't say that I was asked. I think it's correct to say I suggested that what I do is assemble the data that a political scientist would need to do a thorough analysis of whether Latinos vote cohesively and whether White bloc voting usually prevents Latinos from electing candidates of their choice. So I proceeded to assemble the data and I did some preliminary analysis of it from the
standpoint of evaluating how -- evaluating the quality of the data for the purposes of a political scientist analysis using statistical techniques. I myself did some preliminary tabulations that showed a few things of interest that I put into my report but I realized that the, you know, the analysis was one that would be done by Professor Alford.
Q. Were you asked to respond to Dr. Engstrom's report in any way?
A. No, I was not.
Q. What are the various statistical techniques used to determine voter cohesion in terms of Gingles 2 and 3?
A. Well, there are -- basically there are statistical techniques that are detailed in a number of publications, one of which is Gary King's book that go into detail about ecological inference, and this is not an area that I got into in this case. I mean I know what the methods are and know how they work. I don't do the analysis myself. I usually look to a political scientist to do that analysis and particularly to do the results. That's what I know about it and I'm conversant.
Q. So you're familiar with the ecological inference methodology?
A. Yes.
Q. You're familiar with the ecological regression analogy?
A. Correct.
Q. You're familiar with the homogenous precinct methodology?
A. Yes. The homogenous precinct analysis is kind of the point of departure that I use because it's simple to do. You can almost eyeball the data and say this is what we have to work with. The political scientist will torture the data with techniques that they use and the data are either adequate for them to use or inadequate.
Q. So you mentioned that homogenous precinct is simpler to use. Is any one technique more reliable than another?
A. I know that the ecological inferences, I believe that's generally the preferred method. The methodology has evolved over the years and homogenous precinct analysis is just one of several methods. It is by no means the most sophisticated or definitive one. It is simply a method you use when the data are deficient and you don't have much els€ to go on or if you have very few precincts, it gives you some basis for making an inference.
Q. Do all of the techniques require a jurisdiction to have precincts that are mostly Latino?
A. No, they don't. What they require is a set of precincts that covers in spectrum ranging from mostly nonLatino to mostly Latino, or at least a good part of that spectrum. The more of a spectrum that's covered, the more
definitive the results and that really is kind of the deciding factor as to how, how much you can know from the statistical results. It's kind of a signal versus noise problem. If you have some situations where it's 90 percent noise and ten percent signal and the statistical technique essentially says there's a signal out there but it's hard to figure out exactly what it is. When it's 90 percent signal, 10 percent noise, the technique says there's a signal and it's very clear and this is what it says.
Q. Just to clarify, it's your position that all three techniques require that the Latino, I'm quoting now from paragraph 45 in your report, "that the Latino share of voters or registrants in those precincts must span a sufficiently broad range extending from precincts that are mostly nonLatino to precincts that are mostly Latino."
A. Yes, I said that.
Q. All three statistical techniques require this condition?
A. Well, they require it to have a definitive analysis. That's not to say that they will not yield results. But the results become progressively more difficult to interpret, or I shouldn't say difficult to interpret but they become progressively less definitive. Faint I would say would be the proper term. Insofar as the range that's covered, the range spans a progressively narrow range.
that has to go into quality control with the data.
Q. So this portion of your report, while it does not conduct homogenous precinct analysis, it does discuss homogenous precincts?
A. It does, yes.
Q. And you know there are no homogenously Latino precincts in Yakima; is that right?
A. Correct.
Q. Did you know that before you chose to discuss homogenous precinct analysis to the exclusion of the --
A. No, that's precisely why I discussed it. I said when it comes to homogenous precincts, you don't have any on the Latino side, you only have them on the nonLatino side. So what that said to me right away was that homogenous precincts are going to tell half the story really well but there will be another half of the story that they don't tell any story. But one then comes back with the more sophisticated ecological inference techniques that Professor Alford would use and those allow him to tease out some conclusions that would not come out of just a homogenous precincts analysis and that is the rationale for him using that technique. It would have been very easy if there had been homogenous precincts for both groups because I then could have looked at it and said well, I can tell you how your analysis is going to come out because I got the anchor

For example, if it covers the range zero to 30 percent, one has to make inferences about precincts that are much more heavily Hispanic that do not exist but one has to infer what let's say a 90 percent Hispanic precinct would be, how they would vote if there were such a precinct based on precincts that only range from zero to 30 percent. Now, there's a statistical technique that could do that and then there are statistical measures for gauging the reliability of that estimate.

Sometimes the data line up in a way that you can make the inference without much doubt but you run into a danger zone where the data may not line up in a way that supports a confidence level that you might want to have. You might say there's an indication of something but you can't say with a high degree of scientific certainty that something is the case, for example, that there is polarized voting or that -- well, I'll leave it at that.
Q. But you did not conduct a racially polarized voting analysis using any of these techniques; is that correct?
A. No. I just kind of tip-toed into the data to see whether the data were going to be adequate to the task. I'm in a position to judge that. And then I was able to say yes, this is definitely the kind of data that a political scientist will need and I proceeded to prepare data matrices for Professor Alford to use because there's a lot of effort
points and you're just going to have a more refined conclusion than I could conclude, which is either yes, there is or no, there isn't.
Q. In your experience when drawing LCVAP majority districts are there always homogenously Latino precincts?
A. In my experience sometimes there are and sometimes there aren't. I would say more often there are not.
Q. In your experience has a court in which -- or occasion which you testified as an expert witness found that the Gingles 2 and 3 preconditions had been met without the existence of homogenously Latino precincts?
A. Well, I myself have not testified as to these issues based on homogenous precincts. I've heard others testify to them and I know how the technique works, but I can't answer that question based on my own experience.
Q. Is it your position that without homogenously Latino precincts, there's no way to reliably determine who the Latino preferred candidate is?
A. No.
Q. In this section you discuss one election, the

Ettl/Rodriguez election in 2009?
A. Yes.
Q. What decisional criteria did you use to discuss this election and not any others?
A. The only reason I discussed this one was because I
wanted to first of all give a representative example of what the precincts looked like for looking at election data, not just for this one but just to say you got a whole bunch of precincts that range from just about zero Spanish surname up to maybe, you know, 30 percent or something. So that most of the precincts are down in the bottom third. So that's the world that we'll be dealing with. And then secondly I just called attention to the fact that there was an ambiguity in the fact that voters, the same individual voters were simultaneously in one case favoring a -- I'm sorry, the nonLatino voters based on the homogenous precincts I have in the same election favoring a Latino candidate in one race and a nonLatino candidate in another.

So it was kind of a first step in saying well, if nonLatinos always vote against Latino candidates, here we have a situation, one instance in which the same voters were voting in two contests and they said in this contest I want to vote for the non -- the nonLatino is going to vote for the Latino candidate but in the next contest they're going to vote for the nonLatino. So that seemed to me to be an interesting example of behavior that did not accord with the notion of racially polarized voting because it said at least in these two instances half the time what one would think of as white bloc voting certainly did not exist and in the other instances it might have existed. And I kind of laid
that out as a foundation well, this is a point of departure from a political scientist, don't forget to look at this and figure out what's going on. That's all I meant by that.
Q. I just want to clarify. You're talking about two instances and I think you talked about one race versus another. There's only one election that you've analyzed here, right? I think you have analyzed several --
A. Two contests. Oh I'm sorry, I'm sorry. Yeah, I misspoke. In this one there were some homogenous -- you're right. There were some homogenous precincts that seemed to say gee, if you had to conclude based on their experience, then it looks like there was no racial bloc voting. And then if you looked at the voters in other precincts, you could say well, it looked like there was, and so my conclusion was that you kind of didn't know where you were at. And I meant that to be as a point of departure.

This is at a fairly early stage in the analysis and it was before I had seen anything of what the political scientist in this case was even intending to look at. And I wanted to call attention to one situation where I said here, here's what the data look like, here's what you'll have to work with and here's an interesting situation. Don't forget to look at it.
Q. So you really are looking at some precincts versus other precincts in the same context?
A. Correct. I misspoke on this one. I was thinking of another instance where I saw something else that was of interest.
Q. So in paragraph 47 you include a sentence that says, "In the Ett//Rodriquez contest for position 5 a Latino favored candidate cannot be identified unambiguously."
A. That's correct.
Q. Is that true regardless of the statistical technique used?
A. Well, based on the technique that I used this is really a simple first cut at trying to figure out what's going on. Based on homogenous precincts that statement would be justified. Now, using a more sophisticated statistical technique that was applied later on, a political scientist might say no, I got it figured out, you can in fact identify. And I wouldn't, I wouldn't say that there's any conflict between what I did.

This is a very, a very -- I wouldn't say a blunt instrument but it's a very elementary kind of way of pointing out that the data are not perfectly consistent. And one might find doing a statistical analysis that it really is -- there is no unambiguous evidence of a Latino favored candidate. That's a possibility that could come out in the statistical analysis. Whether it came out in Professor Alford's analysis, I don't know. I haven't really
to, as kind of a placeholder for him to be sure to look at this and see what he made of it using his more sophisticated techniques.
Q. You're generally familiar with Dr. Alford?
A. I have never met the man but I talked to him on the phone.
Q. Do you generally consider his conclusions to be reliable?
A. I do, yes.
Q. Is it your opinion that racially polarized voting analysis is conducted on a precinct by precinct basis generally?
A. That's my understanding, yeah, that's the normal way it's done. I should say the usual way it's done.
Q. So you would determine whether there is white bloc voting in precinct $X$ versus precinct $Y$ ?
A. Not $X$ versus $Y$. It's really a statistical technique that takes account of all of the information in all of the precincts.
Q. On page 19 you include a table that's called Latino Share of Registrants By Precinct. Is that meant to mean Latino share of voters?
A. No, it's actually of registrants and voters. You see the column, the third column from the left it says registered voters, that's registrants. And what I could

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have said is Latino share of -- I'm sorry, let me see.
You're correct, it should say the Latino share of owners by precinct, yeah.
Q. And you note that there are six what you call homogenously nonLatino precincts that voted for Rodriguez is that right?
A. That's what I said.
Q. I think you identified that in paragraph 47.
A. Right.
Q. How many homogenously nonLatino precincts were there?
A. More than twice -- six I know that. You can count them up. I can count them up right now. The question is how many nonhomogenous?
Q. Homogenously nonLatino.
A. Homogenously nonLatino, okay. 22.
Q. So if six voted for Rodriguez, does that mean 16 voted for --
A. Yes. They voted for the other candidate, right.
Q. So in paragraph 47 where you say, "This voting pattern in six homogenously nonLatino precincts is strong evidence that Rodriguez was the candidate who nonLatinos favored." Do you mean only in those six precincts?
A. Correct.
Q. In paragraph 48 in the last sentence you say that,

Alternative explanations such as party affiliation or each candidates' position on salient issues may fit the fact better than an artificial characterization of voting patterns as purely racial.

MR. FLOYD: You left the word out explanation.
MS. KHANNA: I believe that's a typo, is it not? Is it used twice.

MR. FLOYD: I guess, yeah. You left it out. You corrected the typo I guess.
Q. Did you do any analysis of these alternative explanations?
A. No, I didn't.
Q. Has someone in this case characterized voting patterns in Yakima as purely racial as far as you know?
A. Um, no.
Q. On page 21 you include a section called Facts Pertaining to the Senate Factors.
A. Yes.
Q. Was this meant to reply to anything in Mr. Cooper's report?
A. I don't remember doing this in reply to anything in his report. I remember doing it in reply to the figure that I saw in some of the documents that were turned over and don't know if they were turned over as part of Mr. Cooper's report or they simply turned over, but I saw it and I
assumed that it was going to be used for some purpose. And so I wanted to be on record to say what's going on in this figure is really this, not just, you know, what appears in the chart.
Q. But this figure did not appear in Mr. Cooper's report?
A. I don't recall it appearing there.
Q. Or Dr. Engstrom's report?
A. I don't think it was in either.
Q. Any expert report that you've seen?
A. I don't think so, no.
Q. What senate factors are you addressing in this section that's entitled section 5, Facts Pertaining to Senate Factors?
A. I'm not sure which senate factor it is but it has to do with the concept of the, the concept of lingering effects of discrimination that would suppress voter participation. And what I assumed this chart was trying to show or was intended to show was that voter turnout among Spanish surname registrants was noticeably lower than that of nonSpanish surname registrants and the recorded numbers are shown in the chart.

And I wanted to simply go on record as noting that they had to be interpreted not just in terms of the raw numbers themselves, but they had to be some way standardized
by age structure. So that one could understand that the true comparison, if one used an age standardized approach o one standard population would afford a correct, a correct comparison which I set forth on the top of page 22 where I said, the differential, that the actual gap in voter turnout rates shown in figure 2 exists but it's only three-fifths as wide as it's shown in the raw comparison once one accounts for differences in age structure between the two populations.
Q. Is it your understanding that plaintiffs created figure 2?
A. I don't know who created it but plaintiffs provided it so, presumably they provided it for some reason. They intended to use it for some purpose.
Q. You assume the plaintiffs intended to use this for some purpose?
A. Yeah, my assumption was that it was -- it pertained
to one of the senate factors. And even if plaintiffs didn't intend to use it, I would still take the opportunity to say with respect to senate factor, whatever it is that might bear on the lingering effects of discrimination as evidenced in differential voter turnout, the difference isn't as big as it looks.
Q. Do you dispute the accuracy of figure 2 itself?
A. No, I don't.
Q. You say in paragraph 49 that, "A plaintiff may cite a comparatively low rate of voter registration or turnout by the minority group to support a claim that past discriminatory policies continue to deter participation by that minority." Were you referring to plaintiffs in this case?
A. No. I was just stating generally that that is generally the use that is made of data like this by a plaintiff in a case. And then I state in the next sentence here plaintiffs have furnished the exhibit shown in figure 2. So generally a plaintiff might do $X$ with a figure like this. Here plaintiffs furnished the figure. What they're going to do with it, I don't know but I have something to say about it.
Q. Is voter turnout relevant to a Gingles 1 analysis?
A. It has a bearing on Gingles 1 insofar as if one forms a district in which Latinos are a majority of the eligible voters but turnout is very low, is differentially low among Latinos, it may still be the case that the candidate who was elected is determined by nonLatinos, no Latinos. So it does -- it has a bearing on how a majority Latino district would function in an actual election.
Q. Have a bearing on whether a plaintiff could satisfy Gingles 1?
A. Whether they could satisfy Gingles 1. I know that
in some cases it has had a bearing on satisfying Gingles 1 where there was no direct information on the Citizen Voting Age Population. So if one is left with -- if one is in a situation where one has no Citizen Voting Age Population or possibly even no voting age population, the only alternative may be to look at who is it that is turning out and saying well, if you have a place that is 55 percent -- if you have a district in which all you know is 55 percent of all the people of all ages and all citizenships are group $X$ and you know that group $X$ doesn't turn out, or it turns out at a relatively low rate, you might, you might want to know what group X's share is of registered voters so that you would have some sense of how much higher the concentration would need to be in order to get a rough estimate of when half of those who actually turn out would be members of group $X$. S it has a bearing on judging the likely effectiveness of a district. How it bears on whether a district satisfies Gingles 1 from a legal standpoint, I don't think I'm qualified to say.
Q. So you noted that the actual gap in voter turnout is only three-fifths as wide after one controls for the difference in age structure between Hispanic and nonHispaniq populations, right?
A. Correct.
Q. But there still remains a gap; is that right?
A. That's right.
Q. What is the gap attributable to as far as you know?
A. It could be attributable to any number of things. I don't have any basis -- I would just say that there are all sorts of reasons that there could be a gap like that, but at least there one of them that I can standardize for and that's the objective demographic one of age. It could be a function of lots of other things. There's a whole literature on it that political scientists talk about it. That's really a question for a political scientist.
Q. You didn't examine any part of the gap that remains?
A. Correct, I did not examine any -- I didn't pursue that question any further.
Q. On page 23 of your report you include a section called Review of Certain Exogenous Elections. Was this section meant to inform the discussion on Gingles 1?
A. No.
Q. Was it meant to inform the discussion on Gingles 2 or 3 ?
A. It was a starting point for, as I say, you know, a point of departure for Professor Alford. And again I did this -- my recollection is I did this at a stage when I was not even aware who the political scientist would be, was going to pursue this. So in assembling the data my feeling was to look at a lot of the elections and see if the

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|  | political scientist, whoever he would be, would have to work | 1 | A. No. This has nothing to do with any analysis. It's |
| 3 | that I could here's a summary of all the different elections | 3 | map for what elections you might want to lo |
| 4 | that you might want to consider looking at for which we can | 4 | Q. Did you draw any conclusions as a result of this |
| 5 | get data. And l've lined up the data just so you can get a | 5 | table or the information |
| 6 | quick overview of what's out there and then you can decide | 6 | A. If I did, they'd be stated in the text. Let me see |
| 7 | what you want to do, and if you need the data to do | 7 | if I said anything here. Well, I don't know if it's a |
| 8 | statistic analysis tell me which elections so I can put the | 8 | conclusion. It's simply a statement of first of all that |
| 9 | data together. But you don't have to start out saying well, | 9 | the school district electorate is closely congruent with the |
| 10 | what kind of election data do they have in Yakima County, | 10 | city of Yakima electorate. So whoever is voting in these |
| 11 | logging on to the website, spending hours, searching around | 11 | elections, school board elections are virtually identical to |
| 12 | to see what's available, testing the quality of the data, | 12 | the people who are voting in other elections for city |
| 13 | checking the consistency of the data. I pursued all of | 13 | officials. |
| 14 | those in the sense of preparing the data so that they would | 14 | And then second I called attention to the fact that |
| 15 | be ready for anyone who wanted to use them. | 15 | if one was just looking for a gross, you know, summary |
| 16 | And in looking at the data I noticed -- I called | 16 | statement, it is a fact that since 2003 a Spanish surname |
| 17 | attention to some interesting things that I saw which I | 17 | candidate has won and retained a school board position for. |
| 18 | would want the political scientist to look at and say here's | 18 | So there has been a Hispanic candidate, at least a Spanish |
| 19 | an interesting thing I found out but it's up to you to | 19 | surname candidate in office, for whatever reason for a |
| 20 | decide what you think of it | 20 | prolonged period of time. It's not like there's never been |
| 21 | Q. Does this section pertain to the senate factors? | 21 | a Hispanic on the school board. That was my only point. |
| 22 | A. I don't know if it does or not. It may pertain to | 22 | Q. And according to your table, has a Latino won a |
| 23 | the senate factors but I don't, I don't have any intention | 23 | contested election to the school board since 2003? |
| 24 | of talking about the senate factors based on the data on | 24 | A. No. |
| 25 | pages 23 and 24 . I really believe that's something that is | 25 | Q. Are you familiar with how any of the Spanish surname |
|  | 202 |  | 204 |
| 1 | best testified to by Professor Alford. | 1 | individuals on this table initially received their |
| 2 | Q. The senate factors is best testified to by Professor | 2 | positions? |
| 3 | Alford? | 3 | A. No, I'm not. |
| 4 | A. By someone other than myself in this case and that | 4 | Q. Did you read Dr. Engstrom's reply report in this |
| 5 | would be Professor Alford or possibly Professor Thernstrom. | 5 | case? |
| 6 | Q. You include table 4 which is a list of school board | 6 | MR. FLOYD: Asked and answered. |
| 7 | elections. Why did you choose to examine the Yakima school | 7 | A. I have to say I scanned through it. I didn't read |
| 8 | board elections? | 8 | it thoroughly. |
| 9 | A. School board elections usually are relevant and | 9 | Q. So you did not research at any time how these people |
| 10 | informative because they typically have a greater presence | 10 | originally were -- |
| 11 | of Latino candidates running. So it's like if you don't | 11 | A. No. As I say this is simply a compilation of, you |
| 12 | have very many Latinos whoever run, if you're looking for | 12 | know, what has been the case without any analysis of why it |
| 13 | elections in which they do run, look at school board | 13 | is the case. |
| 14 | elections. | 14 | Q. You also include table 5 about two Washington state |
| 15 | Q. Where did this table come from? | 15 | house representatives elections; is that right? |
| 16 | A. It came directly off of my Brothers printer. But | 16 | A. Uh-huh, yes. |
| 17 | what went into it was my downloading data from the Yakima | 17 | Q. What was your decisional criteria in choosing these |
| 18 | County Elections Division with access at the website and my | 18 | elections to discuss? |
| 19 | matching the candidate surnames against the Spanish surname | 19 | A. In this case what I was interested in was the fact |
| 20 | list and then simply tabulating, I should say looking at the | 20 | that it was an election in which -- there was a Republican |
| 21 | summary tabulations of the data for these elections. | 21 | against a Democrat and a Republican nonLatino and a Democr |
| 22 | Q. So you compiled the data? | 22 | Latino. And what interested me here is while the Latino |
| 23 | A. Yeah, basically I compiled the table of data. | 23 | lost the election for the state House of Representatives, |
| 24 | Q. And you didn't perform a racially polarized voting | 24 | within the city, those voters just within the city |
| 25 | analysis of any of these elections? | 25 | precincts, the candidate Ybarra actually was the top vote |


|  | 205 |  | 7 |
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| 1 | getter. So that told me whatever was going on in the | 1 | the same voters who are saying on the one hand we'll vote |
| 2 | election, it was an election in which the voters of this | 2 | atino and on the other hand another contest we'll |
| 3 | city in this particular election favored a Hispanic Democrat | 3 | vote for the nonLatino instead. And what does that -- what |
| 4 | over a nonHispanic Republican. And I wanted to be sure that | 4 | might that reveal about racially polarized voting or about |
| 5 | any political scientist who was analyzing these elections | 5 | Latino cohesiveness, I don't know. But that was the obvious |
| 6 | didn't miss the point because it wouldn't be obvious unless | 6 | implication for the political scientist to look at it and |
| 7 | I tabulated the data this way to say there was a different | 7 | figure out what does it mean when you have the same voter |
| 8 | outcome among the voters of the city than among the voters | 8 | favoring the Latino over a nonLatino and in the same voting |
| 9 | of this larger district 14. | 9 | booth at the same time than doing the opposite in another |
| 10 | Q. I'm sorry, I may have missed it. How did you come | 10 | contest one minute later. Is there anything revealing about |
| 11 | across this selection? How did you decide to choose this | 11 | that. And I thought that it might be revealing. |
| 12 | election? | 12 | Q. But you didn't draw any conclusions based on these |
| 13 | A. Just from my general knowledge of what exogenous | 13 | elections? |
| 14 | elections are of interest to political scientists. I know | 14 | A. No. I drew no conclusions. I simply said here's |
| 15 | that anything where you have a contest that involves a | 15 | one to be sure to look at. It's a natural contrast. |
| 16 | Latino and a nonLatino in a case like this in which the | 16 | Q. So when you say in paragraph 56 that these elections |
| 17 | voters of the city that is involved are casting ballots, | 17 | contradicts the assertion that white bloc voting defeats the |
| 18 | even though it's a much larger piece of geography that's | 18 | Latino favored candidate, that's not a conclusion that |
| 19 | being voted on, you have an opportunity to see how those | 19 | you're drawing about Gingles 3? |
| 20 | voters in that city behaved. | 20 | A. Well, I'm not -- it's not a conclusion. I'm simply |
| 21 | And so my criterion was well, is how the voters in | 21 | saying that it contradicts the assertion. That doesn't mean |
| 22 | the city behaved of interest for any reason and in this | 22 | that one should conclude that there is no white bloc voting. |
| 23 | particular election I said that's an interesting point. | 23 | simply says here's an instance that contradicts it but |
| 24 | It's an interesting lineup of Republican versus Democrat, | 24 | her things that support it, and this is not |
| 25 | nonLatino versus Latino and it opens up the possibility | 25 | in and of itself enough to draw a conclusion from it. It's |
|  | 206 |  | 208 |
| 1 | first of all that voters may be favoring a Latino or | 1 | simply one element that would go into analysis. |
| 2 | possibly that voters may be favoring a Democrat, | 2 | Q. And you didn't do any racially polarized voting |
| 3 | irrespective of whether the candidate is Latino or not. So | 3 | analysis to determine who the Latino candidate of choice |
| 4 | again I was kind of pointing a direction for the political | 4 | was? |
| 5 | scientist saying you want to look at this, this is your area | 5 | A. No, I didn't. |
| 6 | of expertise. You want to maybe take a look at this and see | 6 | Q. You assumed that the person with the Spanish surname |
| 7 | what you make of it. | 7 | was in fact Latino candidate of choice? |
| 8 | Q. Did you determine the results -- did you determine | 8 | A. I didn't make any assumption about that. I simply |
| 9 | the number of city voters and how they voted for either | 9 | pointed out that this was an interesting contrast that I |
| 10 | candidate before you decided to include these elections in | 10 | felt a political scientist should analyze further. |
| 11 | your report? | 11 | Q. Well, you did say that this election contradicts the |
| 12 | A. Yes. I mean that was precisely the reason I | 12 | assertion that white bloc voting defeats Latino favored |
| 13 | included it was because there was this interesting | 13 | candidate. How did you determine who the Latino favored |
| 14 | difference between all voters and city voters. | 14 | candidate would be? |
| 15 | Q. So it was the results that made these elections | 15 | A. No, with the unstated premise that the Spanish |
| 16 | interesting to you? | 16 | rname candidate was the Latino favored one. If one made |
| 17 | A. Yes. | 17 | that assumption -- I mean I didn't state it explicitly. If |
| 18 | Q. You say in paragraph 54 that, "The 2008 State House | 18 | one made that assumption, then the contradiction is there. |
| 19 | of Representatives election offers another revealing | 19 | Q. Is it your understanding that in order to satisfy |
| 20 | comparison of electoral choices by city residence voters." | 20 | Gingles 3, a plaintiff must establish that white bloc voting |
| 21 | What does that comparison reveal? | 21 | always defeats Latino favored candidate? |
| 22 | A. It's a revealing comparison in that it shows that a | 22 | A. No. |
| 23 | Latino garnered more votes than a nonLatino among the same | 23 | MS. KHANNA: I think I am all done. |
| 24 | voters in position 1 and yet those same voters now looking | 24 | MR. FLOYD: We're done. Thank you. |
| 25 | at position 2 were favoring a nonLatino. So again you have | 25 | (Deposition concluded at 4:30 p.m.) |


|  | 209 |  | 211 |
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| 1 | STATE OF WASHINGTON ) | 1 | DEPOSITION ERRATA SHEET |
|  | ) ss | 2 | Page No.___Line No.___Change to: |
| 2 | County of KING ) |  |  |
| 3 | I, Mary W. Miller, a Washington Certified Court Reporter, pursuant to RCW 5.28.010 authorized to administer | 3 | Reason for change: |
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| 5 | oaths and affirmations in and for the State of Washington, do hereby certify: | 4 | $\mathrm{Re}$ |
| 6 |  | 5 | Page No._Line No.__Change to: |
|  | That the annexed and foregoing deposition of PETER MORRISON was taken before me and completed on May 9, 2013, and thereafter was transcribed under my direction; |  | Page No.____Line No.____Cnange to. |
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|  | I further certify that according to CR 30 (e) the witness was given the opportunity to examine, read and sign the deposition after the same was transcribed, unless | 7 |  |
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| 10 | indicated in the record that the review was waived; | 8 | Page No.___Line No.___Change to: |
| 11 | I further certify that I am not a relative or |  |  |
|  | employee of any such attorney or counsel, and that I am not | 9 | Reason for change: |
| 12 | financially interested in the said action or the outcome thereof; | 10 | Page No.___Line No.____Change to: |
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|  | I further certify that the witness before examination was by me duly sworn to testify the truth, the whole truth and nothing but the truth; |  | Reason for change: |
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| 15 |  | 12 | Reason for change: |
|  | I further certify that the deposition, as transcribed, |  | SIGNATURE: DATE: |
| 16 | is a full, true and correct transcript of the testimony, including questions and answers, and all objections, motions | 13 | PETER MORRISON |
| 17 | and exceptions of counsel made and taken at the time of the foregoing examination and was prepared pursuant to | 14 |  |
|  |  | 15 |  |
| 18 | Washington Administrative Code 308-14-135, the transcript preparation format guideline. | 16 |  |
|  |  | 17 |  |
| 19 | IN WITNESS WHEREOF, I have hereunto set my hand this 17th day of May, 2013. | 18 |  |
|  |  | 19 |  |
| 21 |  | 20 |  |
| 22 | Mary W. Miller | 21 |  |
|  |  | 22 |  |
| 23 | Certified Court Reporter in and for the State of Washington, residing at Issaquah. | 23 |  |
|  | 2425 |  | 24 |  |
|  |  |  | 25 |  |
| 210 |  |  | 212 |
| 1 | DEPOSITION ERRATA SHEET Our Assignment No. 431811 | 1 | Date: May 17, 2013 |
|  |  | 2 |  |
|  | Case Caption: ROGELIO MONTES v CITY OF YAKIMA |  | To: FRANCIS FLOYD |
| 3 | DECLARATION UNDER PENALTY OF PERJURY | 3 | Floyd Pflueger \& Ringer |
| 4 |  |  | 200 W. Thomas Street |
|  | I declare under penalty of perjury | 4 | Suite 500 |
| 5 | my Deposition taken in the captioned matter | 5 | Seattle, Washington 98119 |
| 6 | or the same has been read to me, and the same is true and accurate, save and |  | Case: ROGELIO MONTES v CITY OF YAKIMA |
|  |  | 6 | Cause No.: 12-cv-3108 TOR |
| 7 | the same is true and accurate, save and except for changes and/or corrections, if any, as indicated by me on the DEPOSITION |  | Deposition of: PETER MORRISON |
|  | ERRATA SHEET hereof, with the understanding | 7 | Date Taken: May 9, 2013 |
| 8 | that I offer these changes as if still under oath. | 8 | The above transcript must be read and the Correction Sheet |
| 9 | Signed on the <br> day of <br> 2013 | 9 | signed within 30 days of this notice or before the trial date. If the Correction Sheet is not signed within that time |
| 10 | Signed on the ____ day of ___ 2013. | 9 | period, signature will be deemed waived for all purposes. |
|  | - | 10 |  |
| 11 | PETER MORRISON | 11 | Please contact the witness and arrange a convenient time and |
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