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17

18 Also Present:

19 John Highfield, Videographer

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1 S T I P U L A T I O N S

2 It is hereby stipulated and agreed by

3 and between the parties hereto, through their

4 respective attorneys, that the deposition of

5 RONALD KEITH GADDIE, Ph.D., may be taken on

6 behalf of the Plaintiffs on March 9, 2016, in

7 Oklahoma City, Oklahoma, by Susan Narvaez,

8 Certified Shorthand Reporter for the State of

9 Oklahoma, pursuant to the Federal Rules of

10 Civil Procedure, by notice and subpoena.

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1 THE VIDEOGRAPHER: We are on the

2 record. Today's date is March 9, 2016, and

3 time is 9:09 a.m. We are here to videotape the

4 deposition of Ronald Keith Gaddie in the case

5 styled Whitford versus Gerald Nichol, et al.

6 Case Number 15-CV-421-bbc, filed in U.S.

7 District Court in the Western District of

8 Wisconsin.

9 We are at Dodson Court Reporting in

10 Oklahoma City. My name is John Highfield with

11 Dodson Court Reporting located in Oklahoma

12 City, Oklahoma. Our court reporter is Susan

13 Narvaez with Dodson Court Reporting.

14 Will our attorneys please introduce

15 themselves for the record?

16 MR. POLAND: This is Doug Poland of

17 Rathje & Woodward on behalf of the Plaintiffs.

18 MR. EARLE: Peter Earle of the law

19 offices of Peter Earle on behalf of the

20 Plaintiffs.

21 MR. KEENAN: Brian Keenan from the

22 Wisconsin Department of Justice on behalf of

23 the Defendants.

24 MR. GLIDEWELL: Jason Glidewell on

25 behalf of Dr. Gaddie.

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1 RONALD KEITH GADDIE, Ph.D.  
2 of lawful age, being first duly sworn, deposes  
3 and says in reply to the questions propounded  
4 as follows:  
5 \* \* \* \* \*  
6 EXAMINATION  
7 BY MR. POLAND:  
8 Q. Good morning, Dr. Gaddie.  
9 A. Good morning, Mr. Poland. How are  
10 you?  
11 Q. I'm well. Thanks. And yourself?  
12 A. Doing well.  
13 Q. Good. Would you please state your  
14 full name and spell it for the court reporter?  
15 A. Ronald Keith Gaddie, R-o-n-a-l-d,  
16 K-e-i-t-h, G-a-d-d-i-e.  
17 Q. Dr. Gaddie, is it okay if I refer to  
18 you as Dr. Gaddie or would you prefer Professor  
19 Gaddie?  
20 A. Whatever you're comfortable with,  
21 Counselor.  
22 Q. Very good. Now, Dr. Gaddie, you have  
23 been deposed before, correct?  
24 A. Yes.  
25 Q. And several times in the past?

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1 A. Yes.  
2 Q. Including in the Baldus versus Brennan  
3 case in 2012, correct?  
4 A. Yes.  
5 Q. So you're not a stranger to having  
6 your deposition taken, I assume?  
7 A. No.  
8 Q. All right. Let's just run through a  
9 couple of the basics so we get on common ground  
10 here. You understand that you are under oath  
11 today and you do need to testify truthfully?  
12 A. Yes.  
13 Q. Do you understand that your deposition  
14 may be played in court during the trial of this  
15 case, which is titled Whitford versus Nichol?  
16 A. Yes.  
17 Q. If you don't understand a question  
18 when I ask it, please let me know that and I  
19 would be happy to restate it for you so that  
20 you can understand it and answer it.  
21 A. I understand.  
22 Q. And I don't know exactly how long  
23 we'll go today, but if you do need a break at  
24 any time, please let me know. We won't break  
25 while a question is pending, but otherwise we

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1 can take a break for your convenience when you  
2 request one. Okay.  
3 A. Very good. Thank you.  
4 Q. For the sake of the court reporter and  
5 for the clarity of the record, we'll both need  
6 to try not to talk over one another. I know  
7 from previous experience that you're a little  
8 bit more deliberate in your answers than I am  
9 in my questions in terms of the speed. So  
10 please wait to answer a question until I finish  
11 it, and I'll do my very best not to talk over  
12 you until you're fully complete with your  
13 response.  
14 A. Very good.  
15 Q. Now, Dr. Gaddie, you're appearing  
16 today pursuant to a subpoena, correct?  
17 A. That's correct.  
18 (Exhibit No. 30 marked.)  
19 Q. I'm going to ask the court reporter --  
20 oh, she's already marked it as Exhibit Number  
21 30. I'm going to hand a copy of that to you.  
22 Dr. Gaddie, have you seen Exhibit 30  
23 before?  
24 A. Yes.  
25 Q. When did you see Exhibit Number 30?

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1 A. It was served on me sometime in  
2 February. I don't remember the exact date. I  
3 believe it was on a Sunday.  
4 Q. Very well. Now, you have counsel  
5 representing you here today, correct?  
6 A. Yes.  
7 Q. And did you retain your counsel?  
8 A. Yes.  
9 Q. Are you paying for your counsel  
10 yourself?  
11 A. Counsel is a long-time colleague and  
12 friend, and he is appearing here on my behalf.  
13 Q. Very good. So there's no one else who  
14 is paying for your counsel's time today?  
15 A. That is correct.  
16 Q. Now, attached to the subpoena that you  
17 received in February is a rider or a document  
18 attachment. Exhibit "A" it's called. Do you  
19 see that?  
20 A. Yes, I'm looking at that now.  
21 Q. And you see that it asks you to  
22 produce certain designated materials in  
23 response to the subpoena, correct?  
24 A. Yes.  
25 Q. Now, did you in fact look for and

Page 10

1 produce documents in response to the subpoena?  
2 A. I have exhaustively produced  
3 everything in my possession in response to the  
4 subpoena.  
5 Q. Very good. So I'm going to start out  
6 by asking you where you looked for materials  
7 and then we'll talk about how they got produced  
8 and we'll mark that as an exhibit. So where  
9 did you look for materials in response to the  
10 subpoena?  
11 A. I looked on all the computers in my  
12 possession and then examined my e-mails.  
13 Q. How many computers do you have in your  
14 possession?  
15 A. Oh, my goodness. Several. Several.  
16 Several laptops, desktop machine, notebooks, so  
17 on and so forth. So two primary computers that  
18 I use, though, two laptops.  
19 Q. Do you still have the computers that  
20 you used when you participated as a consultant  
21 working with the Wisconsin state senate and  
22 assembly with Michael, Best & Friedrich in  
23 2011?  
24 A. No.  
25 Q. I'm going to come back to that in just

Page 11

1 a second. Let me ask you another question  
2 first. Are you appearing here today in your  
3 capacity as a fact witness?  
4 A. As a fact witness, yes.  
5 Q. Have you been asked to provide any  
6 kind of expert opinions in this particular  
7 case, Whitford versus Nichol?  
8 A. No.  
9 Q. I think that we can agree, and we had  
10 a little colloquy about this before the  
11 deposition started. We are not seeking to take  
12 any discovery of you as an expert witness.  
13 You've not been tendered as an expert witness,  
14 and so this is strictly a fact deposition here  
15 today. I want to make that clear.  
16 Nonetheless, there are some questions we're  
17 going to have that arise out of the work that  
18 you did as an expert back in 2011. Okay? Just  
19 to make sure you understand that. I'm not  
20 going to ask you opinion types of questions,  
21 but I may ask you facts about the work that you  
22 did while you were an expert.  
23 A. Yes.  
24 Q. When did you lose possession or  
25 custody of the computers that you used in your

Page 12

1 role as a consultant with the Wisconsin  
2 legislative redistricting in 2011?  
3 A. Not so much a loss of possession.  
4 University computers turn over over time. So  
5 the machine -- it's been four years since I did  
6 that work. And one of the machines that I used  
7 for that job was a former university machine, I  
8 believe, that actually had a metadata code on  
9 it CAS. When I change over computers I  
10 transmit any files that I have from computer to  
11 computer. I have a university -- I have a  
12 university IT guy that transfers files over.  
13 Sometimes all files don't migrate. I hope that  
14 they do. But I'm working entirely on an Apple  
15 Pro Book now, which is the second Pro Book that  
16 I've been using. I was using one back during  
17 the -- back during the Wisconsin redistricting  
18 as well. That one had its memory cleaned and  
19 was given to my daughter after the university  
20 turned possession over to me.  
21 So what happens is, as these machines  
22 have failed, I've migrated on to new machines.  
23 Q. Okay. And so I believe you did --  
24 your consulting work that you performed was in  
25 2011, correct?

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1 A. That is correct.  
2 Q. And so we'll just separate that out  
3 from the work that you performed as a  
4 testifying expert on behalf of the government  
5 accountability board in late 2011. I'm sorry.  
6 Yeah, late 2011, 2012, correct?  
7 A. Okay. Very good.  
8 Q. Were you able to confirm whether all  
9 of the files that you had and the metadata from  
10 your work as a consultant on the Wisconsin  
11 redistricting in 2011 was migrated over to  
12 computers that you now have in your possession?  
13 A. I don't know.  
14 Q. Do you know when those computers that  
15 you used for the redistricting in Wisconsin in  
16 2011, when those computers were decommissioned  
17 or used for other purposes?  
18 A. I don't recall. I've had turn over of  
19 several machines in the last five years.  
20 Q. Do you believe it was after the Baldus  
21 versus Brennan litigation was concluded?  
22 A. I believe so, yes.  
23 Q. So in terms of responding to the  
24 subpoena that was served on you in this case,  
25 you looked at the computers that are in your

Page 14

1 possession now, correct?  
2 A. Yes.  
3 Q. All right. Are there any other places  
4 where you looked for materials responsive to  
5 the subpoena?  
6 A. No.  
7 Q. Do you ever use any kind of cloud  
8 storage?  
9 A. As a general rule, no.  
10 Q. And do you know when I refer to cloud  
11 storage, I mean things like Drop Box or  
12 Box.com?  
13 A. Yeah, I've started using Drop Box and  
14 Base Camp only in the last couple of years.  
15 Q. And Drop Box I'm familiar with. You  
16 said Base Camp?  
17 A. It's a Drop Box style file project  
18 managing system. I use it for my university  
19 work.  
20 Q. Okay. Did you use Drop Box or Base  
21 Camp or any other types of cloud storage for  
22 the work -- in connection with the work that  
23 you did in 2011 on the Wisconsin redistricting?  
24 A. No.  
25 Q. Did you use any other kind of

Page 15

1 electronic media for storage of materials that  
2 were associated with the work that you did in  
3 2011 as a consultant? For example, flash  
4 drives, CD-ROMs, DVDs, anything like that?  
5 A. Nothing in my possession. Honestly,  
6 I'm trying to remember if we used any flash  
7 drives for the transmission and movement of  
8 data. I just don't recall. Everything I kept,  
9 I kept on the hard drive.  
10 Q. And that was the hard drive of your  
11 computer?  
12 A. Yes.  
13 Q. What about paper files? We've talked  
14 a little bit about electronic materials. What  
15 about paper files? Did you look through your  
16 office at all, file cabinets, anything like  
17 that for any paper files you may have?  
18 A. I don't have any paper files left from  
19 that re-map. In fact, the remarkable thing was  
20 I set aside a banker's box for that trial, and  
21 I think the only thing in there might have been  
22 my retention letter, and I don't even have that  
23 box anymore. I remember remarking on how empty  
24 it was when we got done with litigation because  
25 everything was electronic.

Page 16

1 Q. Do you remember what you did with  
2 anything that would have been in the banker's  
3 box when you were done with the litigation?  
4 A. No.  
5 Q. Do you have it with you anymore?  
6 A. No.  
7 Q. Now, you did produce documents or  
8 materials in response to the subpoena served on  
9 you in this case, correct?  
10 A. Yes.  
11 Q. And you produced those a week ago, on  
12 March 2, correct?  
13 A. Yes, I did.  
14 Q. Do you have with you what you produced  
15 a week ago on March 2?  
16 A. (Witness indicates.)  
17 Q. All right.  
18 A. This flash drive.  
19 Q. Flash drive. For the written record  
20 -- the video will pick that up. For the  
21 written record, it's what we call a flash  
22 drive, a USB drive, a thumb drive. It goes by  
23 various names, correct?  
24 A. Correct.  
25 Q. Now, Dr. Gaddie, if you would hand

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1 that to me, I'm going to have the court  
2 reporter mark this as Exhibit Number 31.  
3 (Discussion off the record.)  
4 MR. EARLE: For the transcript, where  
5 we attach exhibits to the transcript, when we  
6 have an electronic file like this, is this  
7 something we could produce onto a CD that we  
8 would have in a pocket in the back of the  
9 transcript?  
10 MR. POLAND: I think we probably  
11 could.  
12 (Exhibit No. 31 marked.)  
13 Q. (By Mr. Poland) Dr. Gaddie, the court  
14 reporter -- we will mark this as Exhibit Number  
15 31, but we're going to do some alterations of  
16 the exhibit sticker so it fits and it doesn't  
17 impede our access to the flash drive. But I'm  
18 going to hand you the flash drive.  
19 And Exhibit Number 31, the green Lexar  
20 flash drive, does that contain all the  
21 materials that you produced in response to the  
22 subpoena?  
23 A. Yes.  
24 Q. And you can identify this flash drive  
25 in front of you as the one that you produced on

Page 18

1 March 2, correct?  
2 A. Yes.  
3 MR. POLAND: Now, we've also made two  
4 copies of the flash drive for counsel as well.  
5 And the caveat with the copies that we made is  
6 I can't guarantee that the metadata is  
7 identical to the metadata on the original copy  
8 that Dr. Gaddie provided. If we reach -- if  
9 anything comes up on this that raises questions  
10 about the metadata, we'll take a look at the  
11 original result that way, if that's fair enough  
12 for everyone.  
13 Q. (By Mr. Poland) We're going to get  
14 into the substance of the flash drive in a  
15 short time here. I want to go through  
16 preliminary matters first.  
17 Now, you understand that the subpoena  
18 that was served on you is in a case called  
19 Whitford versus Nichol and it's pending in the  
20 United States District Court for the Western  
21 District of Wisconsin?  
22 A. Yes.  
23 Q. All right. Great. And you were not  
24 engaged in any manner by the Defendants in the  
25 Whitford case to provide any kind of consulting

Page 19

1 services during the Whitford litigation,  
2 correct?  
3 A. I have not been engaged in this  
4 litigation by anybody.  
5 Q. And so as we've talked about before,  
6 your testimony today is as a fact witness, not  
7 an expert witness, correct?  
8 A. That is correct.  
9 Q. Dr. Gaddie, what did you do to prepare  
10 for your deposition today? And I'm referring  
11 to other than what you did to respond to the  
12 subpoena-produced documents.  
13 A. I prepared the response to the  
14 subpoena-produced documents and I showed up  
15 today.  
16 Q. All right. Did you talk to anybody  
17 about your deposition today in preparation for  
18 it?  
19 A. No.  
20 Q. You didn't talk to any -- to Mr.  
21 Keenan at all?  
22 A. No.  
23 Q. You didn't talk to any of the experts  
24 who have been retained by the Defendants?  
25 A. No.

Page 20

1 Q. You didn't talk to any of the experts  
2 who have been retained by the Plaintiffs?  
3 A. No.  
4 Q. You didn't talk to me or to Mr. Earle,  
5 correct?  
6 A. That is correct.  
7 Q. Did you review any materials to  
8 prepare for your deposition other than looking  
9 for the documents that you produced on the  
10 flash drive that's Exhibit Number 31?  
11 A. No.  
12 Q. And you didn't meet with anybody other  
13 than -- well, strike that question.  
14 You didn't meet with anybody to  
15 prepare for your deposition?  
16 A. No.  
17 Q. Did you meet with your counsel prior  
18 to the deposition?  
19 A. We talked briefly and he asked me if I  
20 was prepared for my deposition and I said yes.  
21 Q. Okay. Very good. I'm not going to  
22 ask you any more about that.  
23 Have you ever spoken with Kevin St.  
24 John before?  
25 A. I don't believe so. If I have, I

Page 21

1 don't recall that name.  
2 Q. All right. Have you spoken with a  
3 Kevin St. John since July of last year?  
4 A. Not that I can recall.  
5 Q. No one has asked you to come to  
6 Wisconsin to testify in the Whitford case?  
7 A. No.  
8 Q. Correct? Do you know when the trial  
9 is scheduled to occur?  
10 A. I have no idea.  
11 Q. Now, you did testify as an expert in  
12 the Baldus versus Brennan case four years ago  
13 in 2012, correct?  
14 A. That's correct.  
15 Q. And your deposition was taken in that  
16 case in January of 2012, correct?  
17 A. Yes.  
18 Q. This is Exhibit Number 32.  
19 (Exhibit No. 32 marked.)  
20 Q. Dr. Gaddie, I'm going to hand you a  
21 copy of what the court reporter has marked as  
22 Exhibit Number 32 and ask you to take a look at  
23 it.  
24 A. Yes.  
25 Q. Can you identify Exhibit Number 32 for

Page 22

1 the record, please?  
2 A. Yeah, this is my deposition from  
3 January 20, 2012, which I believe was taken in  
4 Milwaukee.  
5 Q. And that's a transcript of the  
6 deposition, correct?  
7 A. Yes.  
8 Q. Did you have a chance to read your  
9 deposition transcript in the Baldus case?  
10 A. Ever?  
11 Q. Ever.  
12 A. I'm sure I read it in preparation for  
13 trial four years ago.  
14 Q. To the best of your recollection, was  
15 your deposition testimony that you gave in  
16 Exhibit Number 32 true and correct?  
17 A. Yes.  
18 Q. Are you aware of any testimony that  
19 you gave in your deposition in the Baldus case  
20 in Exhibit Number 32 that is not correct or is  
21 not accurate?  
22 A. Based upon the testimony I gave at the  
23 time, no.  
24 Q. Is there anything that you've become  
25 aware of that you testified to at your

Page 23

1 deposition since the time of the deposition  
2 that you don't believe is accurate any longer  
3 or true?  
4 A. Not that I recall.  
5 Q. Now, you also testified in the trial  
6 of the Baldus case in February of 2012,  
7 correct?  
8 A. Yes.  
9 (Exhibit No. 33 marked.)  
10 THE VIDEOGRAPHER: Please make sure  
11 all devices are muted.  
12 Q. (By Mr. Poland) Dr. Gaddie, the court  
13 reporter has handed you a copy of a document  
14 that's been marked as Exhibit Number 33. Do  
15 you have that in front of you?  
16 A. Yes, I do.  
17 Q. Can you identify Exhibit Number 33?  
18 A. This appears to be the trial  
19 transcript of my testimony in Milwaukee from  
20 February of 2012.  
21 Q. Now, in Exhibit Number 33 do you see  
22 that there is, on Page 556 of the transcript,  
23 there's an indication of where your examination  
24 appears in the transcript?  
25 A. Yes.

Page 24

1 Q. And so you see that your examination  
2 begins on Page 558 and concludes on 576 of the  
3 transcript?  
4 A. Yes.  
5 Q. Have you ever had an opportunity to  
6 read your trial testimony that you gave in the  
7 Baldus case?  
8 A. No.  
9 Q. Never have?  
10 A. I have never read my testimony in the  
11 Baldus case.  
12 Q. Okay. To your recollection, was your  
13 testimony, trial testimony in the Baldus case,  
14 true and correct?  
15 A. Yes.  
16 Q. Have you ever become aware of any  
17 testimony that you provided in the Baldus trial  
18 that was not true or not correct?  
19 A. No.  
20 Q. Since the time that you testified at  
21 trial in the Baldus case in 2012, have you been  
22 engaged by the State of Wisconsin or any  
23 individual or entity associated with the State  
24 of Wisconsin to provide consulting services  
25 with respect to legislative redistricting?

Page 25

1 A. No.  
2 Q. Have you kept in touch with Joe  
3 Handrick?  
4 A. Yeah, socially.  
5 Q. When was the last time you spoke with  
6 Mr. Handrick?  
7 A. I spoke with Joe sometime last year.  
8 Periodic contact on social media, but we've not  
9 had any telephone conversations in some months.  
10 Q. Have you spoken with Mr. Handrick  
11 since the time that the Whitford case was filed  
12 in July of 2015?  
13 A. We probably have spoken, yes.  
14 Q. Have you spoken about the Whitford  
15 case at all?  
16 A. Only that it exists.  
17 Q. Didn't discuss any of the allegations,  
18 the claims in the case?  
19 A. No.  
20 Q. Did Mr. Handrick tell you anything  
21 about his views or his impressions of the  
22 Whitford case?  
23 A. No.  
24 Q. Have you spoken with Adam Foltz since  
25 the conclusion of the Baldus trial in 2012?

Page 26

1 A. No.  
2 Q. Have you spoken with Tad Ottman since  
3 the conclusion of the Baldus trial in 2012?  
4 A. No. Mr. Ottman and I have run across  
5 each other on social media, but we've not  
6 spoken. To the extent we interact, it's about  
7 literature. He wrote a review of my novel.  
8 Q. When did you publish a novel?  
9 A. Actually probably about the same time  
10 -- it was just before this trial in 2011.  
11 2010, 2011.  
12 Q. I probably asked you about that at  
13 some point in your deposition.  
14 Okay. So just social media then with  
15 Mr. Ottman?  
16 A. Yes.  
17 Q. Have you conversed with Mr. Ottman on  
18 social media about the Whitford case or the  
19 claims in the case at all?  
20 A. No.  
21 Q. Have you seen any postings by Mr.  
22 Ottman on social media about the Whitford case  
23 or the claims asserted in the Whitford case?  
24 A. No.  
25 Q. What about Jim Troupis? Have you

Page 27

1 spoken with Mr. Troupis since the conclusion of  
2 the Baldus trial in 2012?  
3 A. No.  
4 Q. What about Eric McLeod? Have you  
5 spoken with Eric McLeod since the conclusion of  
6 the Baldus trial in 2012?  
7 A. No.  
8 Q. Has anyone contacted you, whether by  
9 phone, by mail, social media, et cetera, to ask  
10 you about the Whitford case?  
11 A. Other than being subpoenaed to appear  
12 here, no.  
13 Q. Fair enough. Now, back to your  
14 deposition in Baldus. In Baldus you produced a  
15 flash drive with materials that were responsive  
16 to the subpoena and other discovery requests  
17 that were served in that case, correct?  
18 A. Correct.  
19 Q. And we have one of the flash drives  
20 that you produced in the Baldus litigation and  
21 we're going to mark it as an exhibit here  
22 because we are going to look at some files on  
23 it. So let's have it marked as Exhibit Number  
24 34.  
25 (Exhibit No. 34 marked.)

Page 28

1 Q. Dr. Gaddie, for the record I'm handing  
2 you a copy of what was marked in the Whitford  
3 case as Exhibit Number 34. This was Number 57  
4 to your deposition in the Baldus case.  
5 A. Yes.  
6 Q. I also have copies of the flash drive  
7 for counsel. These, I believe, do preserve all  
8 the metadata from that flash drive.  
9 Now, we are going to get into looking  
10 at some of the flash drives. So do you want to  
11 take a break here for just a minute and set it  
12 up?  
13 A. Sure.  
14 Q. Can we do that?  
15 THE VIDEOGRAPHER: Going off the  
16 record. The time is 9:33 a.m.  
17 (Recess.)  
18 THE VIDEOGRAPHER: We are back on the  
19 record. The time is 9:41 a.m.  
20 Q. (By Mr. Poland) Now, Dr. Gaddie,  
21 during the break we set up a computer here, a  
22 Macbook Air and we put into the USB ports on  
23 the Macbook Air two different exhibits. One is  
24 the flash drive that you produced to us in the  
25 Whitford case, which is, I believe, Exhibit

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1 Number 31.  
2 A. Okay.  
3 MR. EARLE: Oh, in the Whitford case?  
4 MR. POLAND: Yes.  
5 Q. (By Mr. Poland) And we also put into  
6 one of the other USB ports a flash drive that  
7 you produced in the Baldus case, which is  
8 Exhibit Number 34?  
9 A. Yes.  
10 Q. And so you have those both -- those  
11 are both in the computer in front of you there?  
12 A. Yes, I see them.  
13 Q. And can you confirm that the flash  
14 drive that has been marked as Exhibit Number 34  
15 is in fact a copy of the Baldus Deposition  
16 Exhibit 57, the flash drive you produced in  
17 that case?  
18 A. I can assume so. It's been four  
19 years. But looking at the -- is this the  
20 content in that drive over here? This looks  
21 like the content that would have been on that  
22 drive, yes.  
23 Q. Now, comparing the content of the two  
24 flash drives that you produced, the one in the  
25 Baldus case and the one in this case, there's a



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1 difference in the number of files on each of  
2 those flash drives, correct?  
3 A. Yes, it appears so.  
4 Q. All right. And can you see how many  
5 files were on the Baldus flash drive, which is  
6 Exhibit Number 34?  
7 A. I can't tell exactly how many. There  
8 are many. I can't tell you how many, but there  
9 are many.  
10 Q. And there are fewer on the flash drive  
11 that you produced in this case, the Whitford  
12 case, correct?  
13 A. Give me just a moment and let me  
14 examine. Yes.  
15 Q. Can you explain why there are fewer  
16 files on the flash drive that you produced in  
17 this action, the Whitford action, than in the  
18 Baldus case?  
19 A. I would assume -- again, in this case  
20 I produced all the files I had in my  
21 possession. So these files that I didn't --  
22 the discrepancy in the files produced has to do  
23 with migration from machine to machine. I just  
24 don't have those files in my possession  
25 anymore.

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1 Q. Now, we also noticed as we looked at  
2 what was on the flash drive that you produced  
3 in Baldus and the flash drive that you produced  
4 in the Whitford case that there are several  
5 files that you produced in the Whitford case  
6 that were not produced in the Baldus case that  
7 had to do with legislative redistricting. Were  
8 you aware of that?  
9 A. No.  
10 Q. Let's talk about each one of those.  
11 A. Okay.  
12 Q. All right. So what I'm going to ask  
13 you to do is to pull up the directory with the  
14 flash drive that you produced in the Whitford  
15 case. All right? In this case. And that  
16 should be Exhibit Number 34. That's the green  
17 flash drive. And do you have that up in front  
18 of you?  
19 A. Yes.  
20 Q. All right. Now, the first one I want  
21 to ask you about is Wisconsin election data.  
22 So that's Wisconsin and then there's an  
23 underscore, an empty space, election, and then  
24 underscore, empty space, election, and then  
25 underscore, empty space and then data.xlsx.

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1 MR. EARLE: It disappeared. Could you  
2 repeat the name of that?  
3 MR. POLAND: Sure. It's  
4 Wisconsin\_election\_data.xlsx. It's a 10.7  
5 megabyte file.  
6 A. Yes.  
7 Q. (By Mr. Poland) Do you see that?  
8 A. Yes.  
9 Q. All right. Do you know, is there a  
10 way of telling from the metadata that you have  
11 on the flash drive when that document was  
12 created?  
13 A. It was created on -- there is a way to  
14 identify that. The creation date is April 15,  
15 2011.  
16 Q. And that is while you were working as  
17 a consultant on the Wisconsin legislative  
18 redistricting, correct?  
19 A. Yes.  
20 Q. All right. Now, as I mentioned, we  
21 looked at the Baldus flash drive and could not  
22 find it among the materials that were produced.  
23 And so I'll make that representation.  
24 A. Yes.  
25 Q. Do you know why that document would

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1 not have been produced in the Baldus  
2 litigation?  
3 A. I have no idea.  
4 Q. When you produced materials in the  
5 Baldus litigation and you put them onto the  
6 flash drive that's now Exhibit Number 34, did  
7 you do that yourself?  
8 A. Honestly, I don't remember. I pulled  
9 -- there was so much data moving around. Any  
10 data that I produced, any documents I produced,  
11 analysis I generated that would have been on my  
12 machines I turned over at the time of the  
13 litigation through counsel.  
14 Q. So at the time you were responding to  
15 the subpoena in the Baldus case in 2012, any  
16 data, documents, whatever materials you had  
17 that were responsive you gave to counsel for  
18 the Defendants at that time, is that correct?  
19 A. Yes.  
20 Q. And then counsel -- did counsel  
21 actually create the flash drive that was  
22 provided to the Plaintiffs in that case?  
23 A. I would assume so.  
24 Q. You did not personally create that  
25 flash drive, is that correct?

<p style="text-align: right;">Page 34</p> <p>1 A. I don't believe so, no.  2 Q. Did you do anything to double check to  3 see whether all of the materials that you gave  4 to the counsel for the Defendants in the Baldus  5 case was actually included on the flash drive  6 that is marked as Exhibit Number 34 in this  7 case?  8 A. No.  9 Q. Did you have any discussions with the  10 counsel in the Baldus case about materials that  11 should or should not be produced?  12 A. No.  13 Q. Just gave what you had to counsel and  14 you let them make those decisions, is that  15 correct?  16 A. I gave what I had to counsel, yes.  17 Q. All right. I'm going to ask you to  18 take a look at another file now that is on the  19 flash drive you produced to us last week. And  20 this one is Wisconsin_1.xlsx.  21 You're there? Okay. Sorry. Is there  22 a way of telling when that file was created,  23 Wisconsin_1.xlsx?  24 A. Yes. The metadata on the screen  25 indicates April 14, 2011.</p>	<p style="text-align: right;">Page 36</p> <p>1 A. I would have created this last file,  2 yes.  3 Q. The .sav file?  4 A. Yes.  5 Q. What about the excel files that we  6 looked at before?  7 A. I would have to look in them to be  8 sure, but these would probably be -- these  9 would look like files that I would have  10 created, yes.  11 Q. And we'll take a little bit of a  12 deeper look at that in a little while.  13 A. Right. Yes.  14 Q. I just want to kind of run through  15 what we have now.  16 A. Right.  17 Q. All right. The next one I would like  18 you to take a look at is Tad_1_05272011.xlsx.  19 A. Yes.  20 MR. EARLE: Could you read that again  21 for me?  22 MR. POLAND: Sure. It's Tad  23 underscore -- actually the underscore is  24 actually a space underscore. So  25 Tad_1_05272011.xlsx.</p>
<p style="text-align: right;">Page 35</p> <p>1 Q. And again, no way -- strike that  2 question.  3 Do you know why that particular file  4 was not produced in the Baldus case?  5 A. No.  6 Q. All right. I would like you to take  7 another look at another one. It's directly  8 below. It's Wisconsin_2010_1.sav. Do you see  9 that document?  10 A. Yes.  11 Q. Do you know when that was created?  12 A. April 19, 2011.  13 Q. Do you know why that document was not  14 produced in the Baldus case?  15 A. No.  16 Q. Now, I notice that that has a file  17 extension of .sav. Do you see that?  18 A. Yes.  19 Q. Do you know what .sav means?  20 A. Yeah. And sav file is a database file  21 extension that's used in SPSS, statistical  22 package for the social sciences.  23 Q. Are these, the three files that we've  24 looked at so far, are these files that you  25 created?</p>	<p style="text-align: right;">Page 37</p> <p>1 Q. (By Mr. Poland) And you're there?  2 A. Yes.  3 Q. All right. When was that file  4 created?  5 A. May 27, 2011.  6 Q. Can you tell from the metadata who  7 created that?  8 A. No, not from what I'm looking at now.  9 Q. All right. Do you know whether just  10 looking at the file name whether it's a file  11 that you believe you created?  12 A. I don't know if I created it. It's  13 possible I did. This dating device is one that  14 I use from period to period, from time to time.  15 So it's possible I did. I just don't know. I  16 don't recall.  17 Q. The naming convention that's on the  18 file, is that what you're referring to?  19 A. I've used naming conventions like this  20 in the past and do currently, yes.  21 Q. If you were to open that file would it  22 give you a better idea of whether you created  23 it, do you think?  24 A. Yeah, because I'm not sure what's in  25 it.</p>

<p style="text-align: right;">Page 38</p> <p>1 Q. All right. Let's go ahead and open it 2 up then. 3 A. Yes, that would be a file that I 4 created. 5 Q. All right. Now, I notice if you 6 actually go to the menu, I think it's the edit 7 menu, and you open up properties -- 8 A. Uh-huh. 9 Q. -- and if you click on the -- can you 10 do that or no? 11 MR. EARLE: I can -- go off the 12 record? 13 MR. POLAND: That's fine. We can go 14 off the record. 15 THE VIDEOGRAPHER: Going off the 16 record. The time is 9:53 a.m. 17 (Discussion off the record.) 18 THE VIDEOGRAPHER: We're back on the 19 record. The time is 9:53 a.m. 20 Q. (By Mr. Poland) So Dr. Gaddie, I 21 understand that with the computer you're 22 working with now you can't actually access some 23 of the properties of the file. But we looked 24 here in the break, and when I look at the 25 properties of the Tad_105272011 file we were</p>	<p style="text-align: right;">Page 40</p> <p>1 Q. Sure. 2 A. This spreadsheet is a -- can I scroll 3 through for a moment? Let me review something 4 here. 5 This spreadsheet was created to 6 estimate a partisan performance score for 7 proposed districts in the Wisconsin assembly 8 plan based upon a variety of different 9 scenarios, simple scenarios. And that is why 10 it was created. It is not the only spreadsheet 11 of this sort. 12 Q. Who asked you to create this 13 spreadsheet, this particular spreadsheet? 14 A. These were created -- I had agreed 15 with Joe Handrick to provide these types of 16 spreadsheets to Adam Foltz, to himself and Adam 17 Foltz and Tad Ottman, for the legislature in 18 the drafting process. So one thing we do, they 19 would create a map, then there would be part -- 20 there's electoral history data attached to it. 21 Those data were used to generate spreadsheets 22 of this sort that indicated how a district 23 would perform on a partisan measure under 24 different scenarios. 25 Q. So this particular one that was</p>
<p style="text-align: right;">Page 39</p> <p>1 looking at, I see under statistics that it says 2 last saved by CAS build. So that's C-A-S 3 b-u-i-l-d. 4 A. Yes. 5 Q. And you saw that on my computer? 6 A. Right. 7 Q. Can you tell me what CAS build is? 8 A. CAS build was an old -- it's an old 9 Dell laptop that I was working on at the time 10 that I used for data analysis. 11 Q. And we're going to look at a number of 12 spreadsheets today. Whenever we see a document 13 that was either created by or modified by CAS 14 build, that would indicate that it came from 15 your Dell laptop? 16 A. That's correct. 17 Q. Do you recall creating either this 18 specific spreadsheet, this Tad_1 and the rest 19 of the name, spreadsheet? 20 A. Yes. 21 Q. Why did you create this particular 22 spreadsheet? 23 A. This spreadsheet -- give me a minute. 24 It's been awhile since we played with these 25 data.</p>	<p style="text-align: right;">Page 41</p> <p>1 created that has Tad -- and that indicates Tad 2 Ottman, is that correct? 3 A. I would assume so, yes. 4 Q. And Mr. Ottman was a legislative aide 5 for the Wisconsin state senate in 2011, is that 6 correct? 7 A. I believe so, yes. 8 Q. So does this pertain specifically to 9 the senate districts in Wisconsin? 10 A. Well, if we look at this first set, 11 these were assembly districts. But when you're 12 creating an assembly district, it necessarily 13 pertains to the senate districts in Wisconsin 14 because senate districts are pods of three 15 assembly districts. So you can't draw one 16 without the other. 17 Q. Do you know why they asked you to 18 create this kind of a spreadsheet? 19 A. Well, what happened is when this 20 redistricting started we talked about the types 21 of measures that mapmakers need to have 22 available to them. And I had been involved in 23 the litigation phase in 2002 where among the 24 various items we looked at in the redistricting 25 process was a partisan check, to look and see</p>

<p style="text-align: right;">Page 42</p> <p>1 -- to check the partisanship of districts.  2 Q. So I'm going to stop you there just a  3 second because some of the judges -- we are in  4 front -- we'll be in front of a three-judge  5 federal panel and some of the judges might not  6 be familiar with the legislative redistricting  7 and the way this goes.  8 A. Okay.  9 Q. Judge Crabb has presided over a  10 redistricting case before, but the other judges  11 may not have.  12 A. Okay.  13 Q. So there are some terms that we might  14 need to go back and explain in a little bit  15 more detail.  16 A. Right. Okay. When in litigation one  17 of the concerns that will arise is whether or  18 not too heavy of a partisan thumb has been  19 placed on the crafting of a map by the  20 judiciary in crafting a map. And when we  21 litigated in Wisconsin in 2011 and 2012, 2012,  22 one of the items we debated about and discussed  23 in court was how you measure the weight of the  24 partisan thumb -- the weight of the partisan  25 thumb that was put on the map because different</p>	<p style="text-align: right;">Page 44</p> <p>1 Or what you can do is you can take the  2 actual election results, okay, the actual  3 outcomes of previous elections, you turn those  4 into a dependent variable, an outcome of  5 interest, and then you regress using linear  6 regression those results onto these larger  7 statewide measures.  8 The other thing you do is you attempt  9 to take into account whether or not there's an  10 incumbent running so that you can account for  11 the incumbency impact. Again, it's been four  12 years since I did this. But what we did is I  13 had proposed to the map drawers that if they  14 wanted to present a best estimate of partisan  15 impact so the lawmakers can understand the  16 consequence of different maps, that a  17 regression driven technique would be the best  18 approach. So I set about building a regression  19 equation using data that should have been  20 produced to generate estimates of partisanship,  21 partisan behavior in those districts for  22 different district proposals.  23 So what this -- what this spreadsheet  24 is, is the consequence of applying one of those  25 models. If it is what I think it is, it's the</p>
<p style="text-align: right;">Page 43</p> <p>1 map proposals were put forward by different  2 litigants in that case. And one of the things  3 that was done was a presentation of  4 partisanship, partisan performance, how fair or  5 how neutral or how biased was a map.  6 Q. And this was in 2002?  7 A. It was back in 2002, spring of 2002.  8 Q. Previous phase?  9 A. Right. Yeah. And one of the things  10 we took note of in that case, and this will be  11 borne out in different documentation that's  12 been produced, is that -- well, Judge  13 Easterbrook in particular had a particular  14 fondness for regression driven model of  15 partisanship.  16 There are basically two ways you can  17 measure or you can estimate partisan change  18 when you redistrict. One is to use what's  19 called a reconstituted election technique where  20 we take either one or an index with several  21 statewide elections, exogenous elections, which  22 are elections that occur outside a district.  23 Right? Higher levels of office. And we  24 attempt to get a sense of a partisan average  25 from that.</p>	<p style="text-align: right;">Page 45</p> <p>1 consequence of applying one of those models to  2 a map generated by a map maker where what we  3 know is, we know the statewide election  4 results, and we then put those data for each  5 district into the regression equation and that  6 gives us an estimated vote value for each  7 district. And that's what's reported here,  8 assuming no incumbent.  9 If we look at the different columns it  10 will say all 40, all 41, all 42. That's based  11 upon moving the vote share for one party or the  12 other up or down by one percentage point  13 increments statewide and then showing the  14 impacts across the districts.  15 Q. So was part of your engagement then in  16 2011 to act as a consultant to build this  17 regression model?  18 A. Yeah, my job was to devise measures  19 and consult with them about measures, and not  20 simply partisanship measures, measures of  21 compactness. Other measures, the integrity of  22 counties, the integrity of city boundaries, the  23 so-called good government principles of  24 redistricting.  25 Q. I think we call them traditional</p>

<p style="text-align: right;">Page 46</p> <p>1 redistricting?  2 A. Traditional redistricting criteria.  3 And also in particular where I actually spent  4 most of my time was trying to disentangle the  5 performance of the majority/minority districts  6 in Milwaukee County. And in particular, this  7 particular problem which we talked about  8 extensively last time of how to craft a Latino  9 majority senate district and Latino majority  10 assembly districts from Milwaukee County south  11 of the crosstown connector.  12 Q. But a significant part of your work  13 that you were retained to do and that you did  14 perform in 2011 had to do with the -- with  15 building a regression model to be able to test  16 the partisan makeup and performance of  17 districts as they might be configured in  18 different ways, correct?  19 A. Yes, that's correct.  20 Q. Now, we didn't see in any of the  21 materials that were produced any actual  22 regression model equation. Was there one that  23 was produced?  24 A. I produced everything I had in my  25 possession. I can -- I don't have it. It's</p>	<p style="text-align: right;">Page 48</p> <p>1 redistrict we're trying to understand what the  2 near present and the near future might look  3 like. And subsequent elections are only as --  4 the use of this kind of analysis to understand  5 subsequent elections are only as good as the  6 willingness of the electorate to behave the way  7 they did in past elections. So things change.  8 So in regression analysis you have a  9 dependent variable and you have independent  10 variable. So the dependent variable is the  11 outcome of interest. Okay? So if you think  12 about it in terms of an algebra equation, y  13 equals m x plus v, right? Where y is the  14 result, m is the constant, x is an independent  15 variable subject to change and v is the slope  16 coefficient, right? So old algebra, right? Y  17 equals m x plus v.  18 Q. I'm going to have to take your word  19 for that.  20 A. That's all right. That's all right.  21 So what you do is you load up all the data you  22 can on election outcomes. Okay? And so you  23 get -- you start with the state legislative  24 election outcome for a particular legislative  25 seat for the senate or for the assembly. And I</p>
<p style="text-align: right;">Page 47</p> <p>1 entirely possible that I generated it and I  2 lost the file or didn't save the file. I can  3 walk you through the specific inputs of it in  4 order to reconstitute it.  5 Q. Sure. Yeah, that would be helpful. I  6 might have to stop you along the way because I  7 might not understand very well.  8 A. Well, that's okay.  9 Q. But we'll take it step by step.  10 A. Okay. What we're trying to do when  11 you compute an equation like this -- and  12 actually Ken Mayer did this in 2012 in  13 developing his partisan baseline measure. And  14 I basically replicated the model.  15 Q. This is one of those points where I  16 need to stop you because you used the term  17 partisan baseline measure. Can you explain  18 what partisan baseline measure is?  19 A. Okay. Well, partisan baseline measure  20 would be the measure of partisanship for a  21 district, the measure of -- the level of party  22 strength. So --  23 Q. Not with respect to any particular  24 election?  25 A. No. No. Well, remember, when we</p>	<p style="text-align: right;">Page 49</p> <p>1 can't remember if I did this analysis using  2 precinct level data or district level data.  3 The outcomes are produced at the district  4 level. I would have to go back and review the  5 content if it's still around. You will want to  6 ascertain this.  7 But ideally what you do is you work  8 with the highest resolution data you have,  9 which would be a VTD or precinct level data.  10 Q. The smallest population?  11 A. The smallest geographic unit, yeah.  12 That gives you the biggest end.  13 Q. Is it the smallest geographic or is it  14 the smallest on a population basis that you're  15 looking at?  16 A. What are the smallest units that  17 electorates have been divided into that we can  18 know what their vote cast was. Okay? So more  19 observations is better than fewer. Okay? So  20 precincts are better than counties, for  21 example. Precincts are better than districts.  22 So VTD data.  23 And what you do is you look at the --  24 so you've got this outcome, vote for Democrat  25 for assembly, and you load that up for the</p>

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1 whole state for every observation you have.  
2 And then the next question you ask is, was  
3 there an incumbent running from one party or  
4 the other. You load that data up. Okay. And  
5 that's just indicated by a one or a zero. And  
6 that's one of your explanatory variables.  
7 Incumbents have an advantage in  
8 running for reelection. So presumably if a  
9 Democratic incumbent is running they probably  
10 do about nine points better than if the seat is  
11 open. So if we had incumbents running we want  
12 to net out the incumbency effect because that's  
13 going to create a bias in understanding how a  
14 district is actually going to perform.  
15 Then what you do is you need to have  
16 some other indicators of partisanship, past  
17 partisan performance. So you look at past  
18 elections, elections for governor or secretary  
19 of state, other statewide elected offices.  
20 Now, of course, these are all going to have  
21 some biases introduced by whether or not an  
22 incumbent is running.  
23 But what you expect to see is that  
24 when Democrats run strong statewide, you expect  
25 them to run a strong down ticket. Okay? So

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1 you would expect there would be some  
2 relationship. So what we attempt to do is  
3 account for the amount of change in the  
4 assembly vote that arises from -- let's say if  
5 there's a one point change in the Governor's  
6 vote, what is the proportional change in the  
7 vote for assembly. If there's a one point  
8 change in the attorney general vote, is there a  
9 one point change for secretary of state and so  
10 on and so forth.  
11 So what you try and do is you try and  
12 -- just try and get the best fit you can on the  
13 date. It doesn't mind you which election is  
14 more or less important. You're just trying to  
15 get a really good fit on the data so there's  
16 not a lot of error in guessing the way a  
17 district will perform. Okay? In guessing the  
18 outcome of interest.  
19 And that gives you an equation that's  
20 going to have some numbers associated with it.  
21 It will be a thing called a constant or an  
22 intercept, which is, if you hold the value of  
23 everything else to zero, this is the expected  
24 vote for one party or the other. And then you  
25 can -- you'll have a set of slope coefficients

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1 that indicate to you, okay, yeah, this is the  
2 -- this is how much we would expect the change  
3 for -- the vote for assembly to change if we  
4 increase the vote for governor by one point,  
5 for example. You know, any grad student who's  
6 had an introductory methods class can run this  
7 stuff these days. It's pretty straightforward.  
8 So again, it's been five years since I  
9 ran these equations, but the equations should  
10 look something like that.  
11 Q. You mentioned that Dr. Mayer had done  
12 -- Ken Mayer had done the same thing?  
13 A. In 2002, yes. In fact, one of the  
14 things up to that point in time is that there  
15 had always been a preference for reconstituted  
16 elections when we went to court. You just look  
17 at the change in the governor's vote from  
18 district to district before and after  
19 redistricting and call it done. Right?  
20 Judge Easterbrook was very impressed  
21 with Ken's use of the regression models. And  
22 my thinking was, well, if we have to talk about  
23 partisanship, let's just get it right and save  
24 everybody some time arguing over it and let's  
25 just measure it best way as possible, every way

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1 possible and in the manner that the court has a  
2 preference for.  
3 Q. Is the approach that you used in 2011  
4 is that similar to what Ken Mayer had used in  
5 2002 that Judge Easterbrook was impressed with?  
6 A. Yeah. I can't promise it was the  
7 same, but it was certainly very similar, yes.  
8 Q. Did you ever see Dr. Mayer's equation  
9 that he used to build his regression model?  
10 A. Well, I mean, it was produced in his  
11 documents in 2002, so it's an easy thing to  
12 remember, which is you regress the legislative  
13 votes on to past elections.  
14 Q. So is there actually -- would there be  
15 some kind of a formula that's used then that  
16 you would run everything through to do this?  
17 A. Well, the formula -- there's a formula  
18 that's the product of the statistical analysis  
19 and then there's a formula that you -- formula  
20 that arises from that that's used to generate  
21 the partisanship measures. The question is,  
22 and I'm sure we're going to look, the question  
23 is if I were doing it now, I would just  
24 generate a macro that programs it in and put in  
25 the information and have it generate. I can't

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1 recall if I did it that way or not. But that  
2 would be one approach to doing it.  
3 Q. Okay. So under what we're seeing then  
4 in the spreadsheet that we started out looking  
5 at, the Tad\_1 --  
6 A. Yes.  
7 Q. -- \_05252011, that is a measure of the  
8 partisanship with the current -- with the  
9 configuration that was put through your  
10 regression model, is that correct?  
11 A. Yeah. Counsel, I'm going to ask you  
12 to repeat the question because I was a little  
13 distracted.  
14 Q. That's fine. I'm going to ask the  
15 court reporter to read it back.  
16 (Record read by reporter.)  
17 A. I believe so, yes. And so, yes.  
18 Q. And so how do you tell, just looking  
19 at this file on the screen, this Tad\_1052 and  
20 so forth on the file, how do you tell what the  
21 measure of partisanship is by looking at this  
22 spreadsheet?  
23 A. Okay. It's pretty straightforward.  
24 The values are bounded from zero to one, and  
25 these are proportions of the vote. So if we

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1 were to express them in percentages, for  
2 example, if we were to look at Row 1 and look  
3 at Column K. Okay? So it's the -- and there's  
4 a 0.5122. That would be 52.12%.  
5 Q. 51.2%?  
6 A. 52 -- oh, yeah, I'm sorry. 51 -- it  
7 would be 51.22%, yes.  
8 Q. Okay.  
9 A. And then if you look -- if we were to  
10 -- that is it if this was generated from the  
11 regression equation. If it were generated from  
12 an average of reconstituted elections, it would  
13 still be the same thing. It would be the  
14 average of the statewide vote. But assuming  
15 this is the product of the regression equation,  
16 the regression would have estimated a vote  
17 value based upon a level of strength for one  
18 party or the other in the state, and the  
19 expected vote in that district would be 51.22%.  
20 Q. And do you know which particular party  
21 this is measuring?  
22 A. Immediately offhand, no, because, like  
23 I said, it's been four years since I've looked  
24 at this. I would have to -- if I knew what a  
25 particular district was, my guess is that it's

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1 either a Democrat or a Republican two-party  
2 performance measure. I just -- I can't recall  
3 which. I can't recall which way we scaled the  
4 positive and the negative.  
5 Q. Do you remember when you actually  
6 built your regression model in 2011, created  
7 it?  
8 A. No. I may have -- I don't recall  
9 doing any data analysis on this case before  
10 April 15. It may have been as early as that  
11 weekend. It may have been later. Probably in  
12 April.  
13 Q. All right.  
14 A. Yeah.  
15 Q. It certainly would have been before we  
16 -- before this spreadsheet was created that we  
17 have up on the screen right now, correct?  
18 A. Yes.  
19 Q. After you built your regression model,  
20 did the consultants that you were working with  
21 or the consultant, Joe Handrick, and then the  
22 legislative aides, Tad Ottman and Adam Foltz,  
23 did they have access to that regression model  
24 as well?  
25 A. I would have provided it to them. I'm

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1 trying to recall if I gave them the equation to  
2 work off of or if I generated estimates off of  
3 my computer. If I generated estimates off of  
4 my computer, it should be in the documentation  
5 that's been produced.  
6 Q. In other words, in that case you would  
7 have built the regression model, they would  
8 have given you certain map configurations, you  
9 would have run your regression, you would have  
10 found what the partisan bias would have been  
11 and then reported that back to them?  
12 A. I would have run the data through and  
13 produced a document like this, yes.  
14 Q. And I believe you testified back in  
15 2011 you didn't actually draw any of the  
16 configurations of the districts, correct?  
17 A. That is correct.  
18 Q. That was all done by Tad Ottman, Adam  
19 Foltz and Joe Handrick?  
20 A. That is correct.  
21 Q. Now, once you've run a particular  
22 configuration of districts through your  
23 regression model and you've calculated what the  
24 partisan bias is one way or the other,  
25 Republican or Democrat, that provides feedback

<p style="text-align: right;">Page 58</p> <p>1 on the partisan makeup of that district, 2 correct, as projected? 3 A. Yes. Let me clarify, though. I want 4 to make sure that you have the completely 5 correct understanding of the process. There's 6 one body of data of elections from the past 7 decade. Okay? So we run the regression 8 equation on those data and that gives us a 9 single equation to estimate the partisan 10 performance of a constituency. Okay? And then 11 what you do is you're able to take individual 12 districts as crafted by the map maker which 13 will have data on the elect -- the 14 reconstituted elections, the statewide 15 elections that were part of the previous 16 regression equation. Okay? So we create a 17 regression equation, it creates a set of slope 18 coefficients that are associated with each 19 predictor election that goes into estimating 20 the vote performance. 21 What you then do for every district is 22 you say, well, in this reconstituted district 23 the gubernatorial vote is this, the secretary 24 of state vote is this, attorney general vote is 25 this. You load those into the equation and</p>	<p style="text-align: right;">Page 60</p> <p>1 record. The time is 10:22 a.m. 2 Q. (By Mr. Poland) Dr. Gaddie, before we 3 broke we were looking at a number of files 4 that, at least based upon my review, I thought 5 were on the flash drive that you provided for 6 us a week ago today in this case but were not 7 on what was marked as Baldus Exhibit 57. 8 That's the flash drive you produced in 2012. 9 Mr. Keenan has informed me that he believes 10 some of those files actually might have been on 11 the Baldus flash drive. So we're going to go 12 through a few more of these and if we have to 13 go back and correct that record, we will. 14 A. Very good. Very good. 15 Q. The next file that I wanted to ask you 16 about in the flash drive that you produced in 17 the Whitford case is Tad1.sav. 18 A. Right. 19 Q. Are you there? 20 A. Yes. 21 Q. What is Tad1.sav? 22 A. This is an SPSS data file of the sort 23 that I described earlier. 24 Q. Do you know why the naming convention 25 was used Tad1?</p>
<p style="text-align: right;">Page 59</p> <p>1 that generates out the product. 2 Q. All right. And so the product being 3 the percentage likelihood that one party or the 4 other would prevail in that district, correct? 5 A. The estimated vote share. 6 Q. The estimated vote share. Okay. 7 A. Yeah. Percentage likelihood is a 8 different thing, which is the odds of winning. 9 Okay? This is just a measure of what the 10 partisan vote ought to look like, yeah. 11 Q. Okay. And based on what that output 12 is, you could reconfigure the district and try 13 to get a higher vote share for one party or the 14 other or you could try to reconfigure it and 15 get a lower vote share for one party or the 16 other, correct? 17 A. Yes. 18 THE WITNESS: Doug, 30 seconds. I 19 just need to run and get a glass of water real 20 quick. I've got to do my Marco Rubio thing 21 real quick. I'll be right back. 22 THE VIDEOGRAPHER: Going off the 23 record, the time is 10:17 a.m. 24 (Recess.) 25 THE VIDEOGRAPHER: We are back on the</p>	<p style="text-align: right;">Page 61</p> <p>1 A. I assume this would be -- there's no 2 assuming. This would be a file that was 3 generated from data related to a map that would 4 have been crafted by Mr. Ottman. 5 Q. All right. Was Mr. Ottman crafting 6 maps? 7 A. Well, by "crafting," I mean Mr. Ottman 8 was one of the people drawing maps at the time. 9 So this would be a map that was rendered by 10 him, yes. 11 Q. Do you know, did Mr. Ottman have your 12 regression model? Was he running 13 configurations of districts through your 14 regression model? 15 A. I don't recall again if I have -- 16 again, I don't recall. I provided information 17 as is -- this is a very dynamic process. 18 Honestly, I can't recall if I gave it to him or 19 not. Anything I was asked to provide, I 20 provided. I imagine, given the existence of 21 this file, what happened is I got a 22 configuration of the map that indicated the 23 district level, the vote performance for the 24 districts across the exogenous elections I 25 described and then generated the estimates of</p>



<p style="text-align: right;">Page 62</p> <p>1 partisanship off of it. And I imagine that's 2 what this file does. 3 Q. Can you see again from the metadata 4 that you've got available to you the data of 5 Tad1.sav? 6 A. Yeah, May 27, 2011. 7 Q. What about Mr. Foltz? Did Mr. Foltz 8 also provide configurations, various 9 configurations of districts to you and have you 10 run them through your regression model as well? 11 A. I'm trying to recall if he did or not. 12 I mean, Mr. Foltz was another mapmaker that was 13 in the room. He may have, but I don't recall. 14 If he had and I generated analysis, it should 15 be here. 16 Q. And then what about Mr. Handrick? Did 17 Mr. Handrick also participate in drawing the 18 maps and looking at outputs from your 19 regression model? 20 A. Yes. 21 Q. Did Mr. Handrick have any input into 22 the regression model that you created? 23 A. No. 24 Q. That was something you did entirely on 25 your own?</p>	<p style="text-align: right;">Page 64</p> <p>1 your expert work? 2 A. I was contacted about the 3 redistricting work initially in -- sometime in 4 February, I think, of 2011, as I recall. I had 5 had an informal contact from a Jim Troupis who 6 had been counsel in the previous re-map. And 7 then at some point in time Eric McLeod, who had 8 also been involved in the previous re-map, 9 transmitted me a retention letter and I think 10 there was correspondence to this respect in my 11 e-mails. And I believe my first actual 12 engagement with the data probably would have 13 been in April. Probably would have been in 14 Madison. 15 MR. POLAND: Let's go ahead and mark 16 this as an exhibit. What number are we up to 17 now? 18 THE REPORTER: 35. 19 (Exhibit No. 35 marked.) 20 Q. (By Mr. Poland) Dr. Gaddie, the court 21 reporter has handed you a document and you're 22 going to see that it's got two different 23 exhibit stickers on it. 24 A. Yes. 25 Q. One is Exhibit 35, and it's marked in</p>
<p style="text-align: right;">Page 63</p> <p>1 A. Yes. 2 Q. Did either Mr. Ottman, Mr. Foltz or 3 Mr. Handrick ever, in your presence, apply the 4 regression model or use the regression model? 5 A. I don't recall. Well, what do you 6 mean by "use?" 7 Q. Did they ever actually perform the 8 mechanics of doing whatever you need to do to 9 enter the data into the model and then 10 generating an output? 11 A. Not in my presence. 12 Q. Do you know if they ever did it 13 outside your presence? 14 A. I don't know. 15 Q. This is probably a good place to ask 16 you just about your hands-on work with the 17 legislative aides and then Mr. Handrick in 18 2011. 19 A. Yes. 20 Q. We did go through this in your 21 deposition back then, but I would like to do 22 that for the purpose of this case as well. 23 A. Sure. 24 Q. When were you retained to do the 25 legislative redistricting work, Dr. Gaddie, not</p>	<p style="text-align: right;">Page 65</p> <p>1 the Whitford case as Exhibit 35. It was also 2 marked as Exhibit Number 66 in your deposition 3 in 2012. Do you see that? 4 A. Yes. 5 MR. KEENAN: Can I note that you gave 6 him one with highlighting on it? 7 MR. POLAND: I gave him the wrong one. 8 I'm sorry. That's my initials. 9 MR. EARLE: You got to see the keys to 10 world peace. 11 MR. POLAND: Yeah, highlighted. If 12 highlighting is the key to world peace, then -- 13 THE WITNESS: Well, the thing is, as I 14 tell my students, if the whole thing is 15 highlighted, you're not doing yourself any 16 good. 17 All right. Counsel, I'm sorry. 18 MR. POLAND: I'm sorry for the 19 confusion. That's why you were asking me the 20 question. Thank you. 21 MR. EARLE: I'll be a little more 22 assertive next time. 23 MR. POLAND: Please do. 24 Q. (By Mr. Poland) Dr. Gaddie, do you 25 have Exhibit Number 35 in front of you?</p>

<p style="text-align: right;">Page 66</p> <p>1 A. Yes, I do.</p> <p>2 Q. Can you identify Exhibit 35 for the</p> <p>3 record, please?</p> <p>4 A. This is a retention letter which was</p> <p>5 sent to me by Eric McLeod on April 11 of 2011.</p> <p>6 Q. And if you turn to the third page of</p> <p>7 Exhibit Number 35.</p> <p>8 A. Yes.</p> <p>9 Q. Is that your signature?</p> <p>10 A. Yes, it is.</p> <p>11 Q. And do you see it's filled in this</p> <p>12 11th day of April 2011? Do you see that?</p> <p>13 A. Yes.</p> <p>14 Q. Do you recall where you signed Exhibit</p> <p>15 Number 35?</p> <p>16 A. No.</p> <p>17 Q. Do you know whether you might have</p> <p>18 been present in Madison on that day?</p> <p>19 A. I don't know. I was in Madison three</p> <p>20 or four -- I was in Madison three days later.</p> <p>21 I don't know if I was in Madison -- April 11</p> <p>22 would have been a Monday or a Tuesday. A</p> <p>23 Monday or a Tuesday. I don't believe I was in</p> <p>24 Madison when I signed this. So this may have</p> <p>25 been a facsimile transmission. It may have</p>	<p style="text-align: right;">Page 68</p> <p>1 that you provided a week ago?</p> <p>2 A. Yes.</p> <p>3 Q. So you do recall that you were in</p> <p>4 Madison during April of 2011?</p> <p>5 A. Yes, I was definitely in Madison on</p> <p>6 April -- on April 15 because I remember the</p> <p>7 protest at the state capital distinctly because</p> <p>8 it was tax day.</p> <p>9 Q. How many days were you in Madison on</p> <p>10 that trip that took you there on April 15?</p> <p>11 A. Oh, at least two or three. Just to</p> <p>12 clarify, I was also doing work in Illinois at</p> <p>13 the time, in Chicago. So sometimes I would be</p> <p>14 in Chicago, then hop the shuttle up to Madison</p> <p>15 or hop the bus up to Madison and then come back</p> <p>16 through Chicago and come home. So sometimes</p> <p>17 the travel gets a bit scrambled up or I may</p> <p>18 have been back and forth.</p> <p>19 Q. I understand. So those two or three</p> <p>20 days when you were in Madison in mid April in</p> <p>21 2011, was that the first time that you came to</p> <p>22 Madison for the purpose of legislative</p> <p>23 redistricting in 2011?</p> <p>24 A. As far as I can recall, yes.</p> <p>25 Q. Do you recall who asked -- strike that</p>
<p style="text-align: right;">Page 67</p> <p>1 been an electronic transmission. I don't</p> <p>2 recall. But I did sign this the date that I</p> <p>3 got it and then returned it.</p> <p>4 Q. If your deposition testimony in 2012</p> <p>5 was that you signed this in Madison, would you</p> <p>6 think your memory was better at that time than</p> <p>7 it is now?</p> <p>8 A. My memory was better at that time than</p> <p>9 it is now. So it's possible I was in Madison.</p> <p>10 I just don't recall.</p> <p>11 Q. Let me ask you about the number of</p> <p>12 times that you were in Madison for the purpose</p> <p>13 of your consulting work --</p> <p>14 A. Right.</p> <p>15 Q. -- with legislative redistricting in</p> <p>16 2011. How many times were you actually</p> <p>17 physically present in Madison?</p> <p>18 A. At least two, possibly three during</p> <p>19 the spring and summer of 2011. Precisely, I</p> <p>20 can't recall. In producing e-mail there are</p> <p>21 travel arrangement records that appear in there</p> <p>22 that will more precisely indicate. But it's</p> <p>23 been four years.</p> <p>24 Q. And when you say an e-mail, that's an</p> <p>25 e-mail that you produced on the flash drive</p>	<p style="text-align: right;">Page 69</p> <p>1 question.</p> <p>2 Do you know why you -- what prompted</p> <p>3 your trip to Madison around that time?</p> <p>4 A. Well, I was being retained to work on</p> <p>5 the re-map, so Mr. McLeod and Mr. Troupis</p> <p>6 wanted me to meet with Mr. Handrick and Mr.</p> <p>7 Ottman and Mr. Foltz and get a sense of the</p> <p>8 sort of measures and statistics that they might</p> <p>9 require in generating analysis for them</p> <p>10 presumably on behalf of the legislature for the</p> <p>11 purpose of redistricting.</p> <p>12 Q. And that was reflected in the</p> <p>13 engagement letter that you signed, correct?</p> <p>14 A. Yes.</p> <p>15 Q. Let's turn to that engagement letter,</p> <p>16 Exhibit 35 in front of you. And I would like</p> <p>17 you to look under the Scope of Engagement and</p> <p>18 Expectations.</p> <p>19 A. Okay.</p> <p>20 Q. This will probably look somewhat</p> <p>21 familiar to you. Do you see that first</p> <p>22 paragraph that says, "As a consultant to MB&amp;F</p> <p>23 in connection with the representation, we</p> <p>24 expect your duties to include service as an</p> <p>25 independent advisor on the appropriate racial</p>

<p style="text-align: right;">Page 70</p> <p>1 and/or political makeup of legislative and 2 congressional districts in Wisconsin." Do you 3 see that? 4 A. Yes. 5 Q. And that's stated as an expectation, 6 correct? 7 A. Yes. 8 Q. And did you in fact serve as an 9 advisor on the appropriate racial makeup of 10 legislative and congressional districts in 11 Wisconsin? 12 A. I would say that my input -- I 13 provided statistics and analysis as 14 appropriate. I would say that in terms of 15 advice, the advice was more skewed towards the 16 racial rather than the parties that make up the 17 district. This was the area of particular 18 concern where I could put my expertise to work. 19 With regard to political makeup, this 20 was solely in the form of generating estimated 21 partisan composition of the districts. Beyond 22 that indicating a preference for district maps 23 and designs, I didn't offer any counsel in that 24 form. 25 Q. You created the regression model, you</p>	<p style="text-align: right;">Page 72</p> <p>1 Q. That was Mr. McLeod's firm, correct? 2 A. Yes. 3 Q. The next sentence reads, "Said work 4 contemplates services of a character and 5 quality that are adjunct to our services as 6 lawyers and you shall perform said work at our 7 direction." Do you see that? 8 A. Yes. 9 Q. Did you in fact -- strike that 10 question. 11 In fact, the work that you provided, 12 was that done at the direction of the 13 legislative redistricting team in Wisconsin? 14 A. Yes. 15 Q. And that was Mr. McLeod, Mr. Troupis, 16 Mr. Handrick, Mr. Foltz and Mr. Ottman? 17 A. Yes. 18 Q. Anyone else that I left out? 19 A. I just want to make sure that I'm 20 clear. Actually, Doug, just to clarify, I was 21 retained by Mr. McLeod. Mr. Troupis was 22 present in the process. I discussed with Mr. 23 Ottman -- Mr. Ottman and Mr. Foltz and Mr. 24 Handrick the type of analysis statistics that 25 might be generated and then did so. Beyond</p>
<p style="text-align: right;">Page 71</p> <p>1 gave it to the mapmakers and let them do with 2 it what they were going to do with it? 3 A. Yes. 4 Q. But you did in fact act as an advisor 5 on the political makeup of the legislative and 6 congressional districts in Wisconsin to the 7 extent that you just testified? 8 A. Yes. 9 Q. And the next sentence sort of bears 10 that out. Right? It says, "This will include 11 in part providing advice based on certain 12 statistical and demographic information and on 13 election data or information." 14 A. Yes. 15 Q. You did do that? 16 A. Yes. 17 Q. The next paragraph reads, "All work 18 performed by you in connection with the 19 representation shall be for the sole purpose of 20 assisting MB&amp;F in rendering legal advice to the 21 senate and assembly." Do you see that? 22 A. Yes. 23 Q. And MB&amp;F, that's Michael, Best &amp; 24 Friedrich, correct? 25 A. Yes.</p>	<p style="text-align: right;">Page 73</p> <p>1 that there was very little in terms of any -- 2 actually, I don't recall any direct direction 3 coming from Mr. Troupis or Mr. McLeod or, for 4 that matter, the staff regarding anything other 5 than a technical execution of the statistical 6 assessment of their product. 7 Q. "Their product" being the 8 configuration of the districts? 9 A. Configuration of the maps, yes. Yeah. 10 So I mean, it was very soft guidance. Very 11 soft direction, for lack of a better way to put 12 it. 13 Q. Okay. I understand. 14 A. Yeah. 15 Q. The next paragraph -- I'm sorry. 16 Before I get there it says, "Accordingly, all 17 communications between you and MB&amp;F, as well as 18 communications with the senate and assembly and 19 work performed by you in connection with 20 representation, shall be confidential and made 21 solely for the purpose of assisting counsel in 22 rendering legal advice." Do you see that? 23 A. Yes. 24 Q. And did you in fact keep 25 communications and your work confidential at</p>

<p style="text-align: right;">Page 74</p> <p>1 least up until the time that you were 2 identified as an expert and had to turn 3 everything over in the Baldus case? 4 A. Yes. 5 Q. Is there anything from the work that 6 you did as a consultant on legislative 7 redistricting in 2011 that you have not turned 8 over that you've kept confidential up to this 9 point in time? 10 A. I've turned over everything in my 11 possession. 12 Q. The next paragraph states, "You will 13 not discuss with or otherwise disclose to 14 anyone or with any entity other than MB&amp;F and 15 the senate or assembly without a written 16 authorization the nature or content of any oral 17 or written communications or of any information 18 or your work performed related to the 19 representation." Do you see that sentence? 20 A. Yes. 21 Q. And did you adhere to that direction? 22 A. Yes. 23 Q. You did not speak to any -- directly 24 to any of the elected officials in the assembly 25 or the senate during the time that you were</p>	<p style="text-align: right;">Page 76</p> <p>1 Q. And so when you say the pro tem, that 2 was Senator Fitzgerald, correct? 3 A. As opposed to Speaker Fitzgerald, yes. 4 Q. His brother, who was in the assembly. 5 A. Yes. 6 Q. Yes. 7 A. Again, I may have them transposed. 8 But it was the two Fitzgeralds. 9 Q. You were not asked to sit in on any 10 meetings with any members of the state senate 11 or the state legislature when different map 12 configurations were presented to them, correct? 13 A. No, I was not asked to sit in on any 14 meetings with any lawmakers about any map 15 configurations. 16 Q. And you didn't talk to any lawmakers 17 on the telephone about any map configurations 18 and didn't communicate with them by e-mail? 19 Just had no communications whatsoever other 20 than the two that you mentioned here today, 21 correct? 22 A. I am certain I didn't. And if I did, 23 I sure as hell don't remember, yeah. 24 Q. I don't have anything to suggest that 25 you did.</p>
<p style="text-align: right;">Page 75</p> <p>1 performing consulting services, correct? 2 A. I had two contacts with elected 3 officials in my time consulting for the 4 assembly. I walked over with Joe Handrick to 5 the Capitol building because Joe was meeting 6 with the -- I can't -- when you have a pro tem 7 and a speaker who are brothers, it's a bit 8 difficult to disentangle which one is which. 9 He was meeting either with the speaker or the 10 pro tem in passing. I don't recall what the 11 meeting was about. It was very brief. I just 12 walked over to be introduced. We didn't talk 13 about substance of the map. As I recall, that 14 probably was with the speaker, as I recall. 15 On one occasion the pro tem did come 16 over to the mapping room to look at some data 17 that we had and I was introduced and explained 18 to him how one of these large spreadsheets that 19 we're going to be talking about, which I think 20 were informally called the heat maps, for lack 21 of a better way to put it because of the 22 visualization of color, to basically explain 23 how to interpret that. And that was the 24 totality of my contact with lawmakers in this 25 process.</p>	<p style="text-align: right;">Page 77</p> <p>1 A. No. But it's -- I mean, I'm sitting 2 here wracking my brain. And literally the only 3 contacts I had were those two. 4 Q. The next sentence goes on -- again 5 we're on Exhibit 35, the last paragraph on the 6 first page. Middle of the paragraph goes on to 7 state, "You will not disclose or permit 8 inspection of any papers or documents related 9 to the representation without our written 10 authorization in advance. All workpapers, 11 records or other documents or things, 12 regardless of their nature, and the source from 13 which they emanate, which are related to the 14 representation, shall be held by you solely for 15 our convenience and subject to our own 16 qualified right to instruct you with respect to 17 possession and control." Do you see that 18 language? 19 A. Yes. 20 Q. And you did adhere to that directive 21 until you had to produce things in the Baldus 22 litigation, correct? 23 A. Yes. 24 Q. And then it goes on and the rest of 25 that paragraph reads, "Any workpapers or</p>

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1 materials prepared by you or under your  
2 direction belong to the senate pursuant to the  
3 representation and every page must be sealed or  
4 otherwise stamped 'Attorney/Client Work-Product  
5 Privilege Confidential.'" Do you see that?  
6 A. Yes.  
7 Q. And again -- well, strike that. Let  
8 me ask you this question. Did you do anything  
9 to seal or stamp materials in your possession  
10 as attorney/client work product privileged  
11 confidential?  
12 A. No, but I also generated no actual  
13 paper that ever left Madison.  
14 Q. And you just qualified actual paper  
15 that never left Madison. Was there paper that  
16 actually stayed in Madison that you generated?  
17 A. I mean, as we're going to be talking  
18 about these very large spreadsheets, those were  
19 printed out on a wide carriage printer for use  
20 of examination.  
21 Q. I understand.  
22 A. Yeah. Yeah.  
23 Q. I understand. Okay. Very good. And  
24 then the other -- the one other aspect of this  
25 letter I wanted to ask you about is under the

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1 Term and Payment for Services section on Page  
2 2. If you go down to the fourth paragraph it  
3 says, "While you will be a consultant for MB&F,  
4 the senate and assembly for whom your services  
5 are being procured are solely responsible for  
6 payment of your services pursuant to a retainer  
7 that has been established." Do you see that?  
8 A. Yes.  
9 Q. And was it your understanding that you  
10 were providing consulting services to the  
11 senate and assembly?  
12 A. Yes.  
13 MR. POLAND: Let's set that aside.  
14 You know, we've got five minutes to a tape  
15 change. Why don't we go off the record while  
16 we change the tape?  
17 THE WITNESS: Sure.  
18 MR. POLAND: I'm going to take a look  
19 at more of the e-mails that you mentioned as  
20 well.  
21 THE WITNESS: Okay.  
22 THE VIDEOGRAPHER: Going off the  
23 record. The time is 10:43 a.m.  
24 (Recess.)  
25 THE VIDEOGRAPHER: We're back on the

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1 record. The time is 11:06 a.m.  
2 Q. (By Mr. Poland) Dr. Gaddie, before we  
3 broke we were talking about your trips to  
4 Madison for the purpose of legislative  
5 redistricting consulting in the spring of 2011.  
6 Do you recall that?  
7 A. Yes.  
8 Q. And you had mentioned in your  
9 testimony that you believe there are some  
10 e-mails that might help you to specify or put  
11 some better time estimations around when that  
12 travel occurred, is that correct?  
13 A. Yes.  
14 Q. All right. Let's take a look at some  
15 of those e-mails then and see. Can you  
16 identify -- and I see that you've got pulled up  
17 in the computer in front of you the flash drive  
18 that you produced last week. That's Exhibit  
19 Number 31.  
20 A. Yes.  
21 Q. And does that have some files that  
22 help you to give more precise estimates of the  
23 dates that you were in Madison?  
24 A. They should be able to, yes.  
25 Q. Are there any in particular that you

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1 can identify?  
2 A. Well, again, I would have to look in  
3 to them to say. But certainly the travel  
4 confirmation from Expedia dated June 13 would  
5 have been for travel to Madison.  
6 Q. All right. And so let me stop you  
7 right there a second. So when I open that up  
8 and I look at that file what I see -- and we're  
9 just going to have to look at it on the  
10 screens. We don't have a printed copy of that.  
11 A. That's fine.  
12 Q. But it appears that you had traveled  
13 -- left Oklahoma City on June 13, 2011. Do you  
14 see that?  
15 A. Yes.  
16 Q. And then it looks like you were going  
17 to -- going through O'Hare and then arriving in  
18 Madison that same day, correct?  
19 A. That's correct.  
20 Q. And then it looks like your return  
21 flight was on June 15, 2011, is that correct?  
22 A. That sounds correct, yes.  
23 Q. All right. So that's one trip that  
24 you took to Madison, correct?  
25 A. Yes.

<p style="text-align: right;">Page 82</p> <p>1 Q. Why did you travel to Madison between 2 June 13 and June 15 of 2011? 3 A. Because I was asked to travel there. 4 Q. Do you know why you -- well, strike 5 that question. 6 Who asked you to travel there? 7 A. I believe I was contacted by the 8 redistricters, by Eric McLeod and Joe Handrick, 9 and asked to travel there. I seem to recall 10 there may have been some communication 11 involving Jim Troupis as well. At this point 12 we were wrestling with issues of how to 13 finalize the districts in Milwaukee. And as I 14 recall, that's where much of the conversation 15 focused. 16 Q. And that had to do with racial make up 17 of some of the districts in Milwaukee? 18 A. Yes. 19 Q. And that was part of the subject of 20 the Baldus litigation, correct? 21 A. Yes. 22 Q. All right. Did any of the work that 23 you did when you traveled to Madison in June of 24 2011 involve any kind of partisanship analysis? 25 A. I don't recall.</p>	<p style="text-align: right;">Page 84</p> <p>1 April 12. Thank you. So let's keep going back 2 through. Okay. Here we go. If you go to the 3 third page of the e-mail there is a flight 4 itinerary which has me leaving Oklahoma City 5 for Chicago on the 13th and arriving in Madison 6 that evening and then departing Madison on the 7 17th to return back home going through 8 Minneapolis. 9 Q. Do you know whether you were in 10 Madison the entire time between April 13, 2011 11 and April 17, 2011? 12 A. Yes. To the best of my recollection, 13 I never left Madison. 14 Q. You don't recall going down to Chicago 15 at least on that trip? 16 A. No. No. 17 Q. And it looks like when you were in 18 Madison, I thought I saw this here a minute 19 ago, that you were staying -- oh, there we go. 20 You were staying at the Concourse Hotel? 21 A. Yes. 22 Q. And that's just right off of Capitol 23 Square in Madison? 24 A. Yes. 25 Q. When you were in Madison working from</p>
<p style="text-align: right;">Page 83</p> <p>1 Q. Is there another record on the flash 2 drive that you produced that would help you to 3 identify other times that you traveled to 4 Madison? 5 A. Well, there would have been traveling 6 in April. Would have been travel in April 7 around the time of tax season. So again, that 8 time period around the 14th, 15th, 16th, 17th I 9 should have been in Madison. I was in Madison. 10 Q. Let me stop you there and let's see if 11 we can tie it to a file. I notice that there 12 is a PDF that says Re: Flight details.pdf -- 13 A. Yes. 14 Q. -- on your flash drive. Do you see 15 that? 16 A. Yes. 17 Q. All right. Does that help you to fix 18 with any more specificity when you were 19 traveling to Madison? 20 A. Well, the part that I can view here 21 without opening the file up, not really. 22 Q. Okay. 23 A. It's -- you know, there is an 24 indication that my last correspondence with 25 Suzanne Trotter about my travel date is on</p>	<p style="text-align: right;">Page 85</p> <p>1 April 13, 2011 to April 17, 2011, whose offices 2 were you working in? 3 A. I was working out of the offices of 4 Michael, Best &amp; Friedrich. 5 Q. Did you do work out of any other 6 office during that time? 7 A. No. 8 Q. It looks like on the 17th when you 9 returned, it looks like you left -- or at least 10 you were scheduled to depart Madison at 12 11 o'clock noon, is that correct? 12 A. That's correct. 13 Q. Do you recall -- and I know this is a 14 long time ago. Do you recall whether your 15 flight was on time? 16 A. I was on Delta. Of course I wasn't on 17 time. I don't know. I don't recall. I got 18 very familiar with the Minneapolis airport. I 19 can tell you that much. 20 Q. Got it. Okay. 21 A. Because I think I've been to it once, 22 maybe twice, and it was this trip. Yeah. 23 Q. When you were in Madison between April 24 13 and April 17 of 2011, fair to say that the 25 work that you performed at that time did</p>

<p style="text-align: right;">Page 86</p> <p>1 involve partisanship analysis?  2 A. Yes.  3 Q. Other than June and April of 2011, do  4 you recall any other times that you were  5 actually in Madison doing work for the purpose  6 of your consulting with legislative  7 redistricting?  8 A. I'm trying to remember. There  9 probably -- I'm trying to remember if there  10 wasn't one other trip. It may have been a  11 piggyback on a trip to Chicago. I can't  12 recall. I do recall being -- I recall  13 distinctly being in Madison because the  14 Wisconsin Feminist Science Fiction convention  15 was going on, and I'm a big sci fi fan. So it  16 was kind of neat having that convention inside  17 the Concourse Hotel while I was there. I can't  18 remember if I was up there in May or not. But  19 again, it's been four years. There was so much  20 travel going on at that point in time.  21 I do know that the trip up in June  22 immediately followed my anniversary trip to the  23 Caribbean with my wife for my 20th anniversary.  24 Q. I notice there's also a billing record  25 that you had produced. And this says Wisconsin</p>	<p style="text-align: right;">Page 88</p> <p>1 and the file name is Re --  2 A. Yes.  3 Q. -- WD Wednight.pdf. Do you see that?  4 A. Yes.  5 Q. And if you scroll down to the -- I  6 think this is the -- it's the first page. It  7 appears that you were traveling to Madison in  8 May?  9 A. Late May, yes.  10 Q. Late May.  11 A. Yes.  12 Q. Okay. I see that there is a --  13 there's just a reference to nights and we don't  14 see dates other than the date an e-mail was  15 sent on May 24, 2011. Do you see that?  16 A. Yes.  17 Q. All right. And it says that you're  18 going to be arriving on a United flight at 6:50  19 p.m.  20 A. Yes.  21 Q. This is correspondence you had with --  22 the e-mail address is JoeMinocqua@msn.com,  23 correct?  24 A. Yes.  25 Q. That's Joe Handrick?</p>
<p style="text-align: right;">Page 87</p> <p>1 billing, 2011/06/03.  2 A. Yeah.  3 Q. And you identify -- this is a letter  4 it looks like you sent to Eric McLeod on June  5 3, 2011.  6 A. Yes.  7 Q. And you say you're attaching a bill  8 for services performed from May 1 through the  9 31st. Do you see that?  10 A. Yes.  11 Q. And I didn't see attached to this any  12 kind of receipts for travel or anything like  13 that. Would you normally -- if you had  14 traveled to Madison in May, would you have  15 probably submitted receipts for travel or  16 reflected that on an invoice?  17 A. Well, had I incurred any expenses I  18 would have. Because all arrangements were  19 booked and arranged for and billed to the law  20 firm, I had no expenses to claim.  21 Q. I see. It looks like we do have one  22 other to take a look at here.  23 A. Okay.  24 Q. You'll see there's another PDF on the  25 flash drive that's marked as Exhibit Number 31</p>	<p style="text-align: right;">Page 89</p> <p>1 A. That is Mr. Handrick's e-mail address,  2 yes.  3 Q. Did Mr. Handrick in fact pick you up  4 at the airport when you arrived?  5 A. I believe he did. We had dinner at  6 the Esquire Club, which is one of the supper  7 clubs in Madison that Joe has a fondness for.  8 Q. Do you recall whether -- do you recall  9 what specific date that flight was on?  10 A. No. It probably, given the e-mail is  11 on the 24th, it could have been no earlier than  12 the 25th. I was probably up there for --  13 again, I'm working from deep memory, but I was  14 probably up there for no more than a couple or  15 three days at that time.  16 Q. Do you believe that you were up there  17 on or about May 27?  18 A. Yes.  19 Q. Do you have a specific recollection of  20 being in Madison in late May of 2011?  21 A. I recall being there, yes.  22 Q. Anything in your mind's eye strike you  23 about where you -- that might tie you to that  24 time period in terms of the work you were  25 doing?</p>

<p style="text-align: right;">Page 90</p> <p>1 A. No. No. I mean, nothing that I can 2 recall. 3 Q. Would your work at that time have 4 involved partisanship analysis? 5 A. More than likely, yes. 6 Q. And do you recall anything 7 specifically about the partisanship analysis 8 work you were doing in late May? 9 A. No. Again, once we had developed a 10 mechanism for baselining estimates on the 11 districts, baselining partisanship on 12 districts, there wasn't that much more work to 13 be done other than applying that formula to 14 maps that might be generated. Again, much of 15 my concern in this time period was really with 16 trying to get a handle on the performance of 17 the majority/minority districts. 18 Q. Okay. So there are two other files 19 that I want you to take a look at on the flash 20 drive you produced last week. Let's go to 21 those. Let me find it on my computer here now, 22 too. One is New_words_-_statewide.xlsx. 23 A. Okay. 24 Q. And I need to find that, too. There 25 it is. It's actually not too far down. It's a</p>	<p style="text-align: right;">Page 92</p> <p>1 work in retention in this case. Because if you 2 look in this file, you'll discover there are 3 census data aggregated up at the ward level 4 regarding race and ethnicity drawn from the 5 census, both total population, VAP population 6 data, married to electoral history data, which 7 I assume came from the State Board of 8 Elections. These were data that were provided 9 to me to work with in pursuit of my duties 10 under my contract. 11 Q. Okay. So these were not -- this is 12 not anything that you generated on your own. 13 This is, like you said, the data that you were 14 given to work with? 15 A. Yes. 16 Q. And then the last file I would like 17 you to take a look at is Milwaukee_County.xlsx. 18 It's Milwaukee_County.xlsx. 19 A. There it is. Okay. We're open. 20 Q. Okay. Great. When was this file 21 created? 22 A. December 10, 2011. 23 Q. And why don't we go ahead and open it 24 up and take a look and see what it is? 25 A. Okay. Okay. Again, this appears to</p>
<p style="text-align: right;">Page 91</p> <p>1 9.2 megabyte file. 2 A. Yeah. We're waiting for it to cycle. 3 Q. Okay. 4 MR. EARLE: Do you want me to open it? 5 MR. POLAND: Well, I was going to ask 6 first about when it was created. 7 A. Okay. 8 Q. (By Mr. Poland) Can you see that on 9 your metadata? 10 A. Yes. December 8, 2011. 11 Q. Do you know why it would have been 12 created on December 8, 2011? 13 A. I have no idea. 14 Q. Do you know who created this file? 15 A. No. 16 Q. Why did you have this file on the 17 flash drive that you produced? 18 A. It was in my possession. And if I 19 could look inside of it and if I could see what 20 was in it, I might be able to illuminate my 21 answer. 22 Q. Let's do that. 23 A. Very good. Okay. Yes. These would 24 be -- this would be a root data file that I 25 would have been working off of to perform my</p>	<p style="text-align: right;">Page 93</p> <p>1 be a data set much like the previous one we 2 looked at. It appears to be only data from 3 Milwaukee County. 4 Q. So again, not data that you created. 5 This is data that you used for the purpose of 6 your work? 7 A. That's correct, yes. 8 Q. There actually is another file that I 9 want you to take a look at. I do have a 10 printed copy of it. And this is actually a 11 Word file. 12 MR. EARLE: Is that the one over 13 there? 14 MR. POLAND: Do you know what the file 15 name is, Peter? 16 MR. EARLE: Yes. It's Wisconsin 17 Partisanship. And it's right -- 18 MR. POLAND: Which folder is it under? 19 MR. EARLE: It's apparently not here. 20 MR. POLAND: Oh, it's in the other 21 one. I'm sorry. 22 MR. EARLE: It might be. Wait a 23 second and maybe I can tell you. 24 MR. POLAND: I think we have to go to 25 the other one.</p>



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1 Q. (By Mr. Poland) All right. I'm going  
2 to ask you to take a look at Exhibit Number 34,  
3 which is your Baldus flash drive.  
4 THE WITNESS: There it is right there.  
5 Yeah, zoom that up a little bit. I didn't  
6 bring my Plus 3s today, Peter.  
7 MR. EARLE: I'm admiring your eyesight  
8 because you're seeing stuff that I wish I could  
9 see.  
10 THE WITNESS: Oh, these are transition  
11 lenses. Actually, I can see the wall as clear  
12 as a board, but up close it's --  
13 Q. (By Mr. Poland) So for the record,  
14 this is a file in Exhibit Number 34. That's  
15 the flash drive from the Baldus case. It's a  
16 Word file. The file name is  
17 Wisconsin\_Partisanship.docx.  
18 A. Yes.  
19 Q. All right. Do you have that in front  
20 of you?  
21 A. Yes, I do.  
22 Q. I'm going to mark a copy of that here,  
23 a hard copy of that, and we can work with it in  
24 hard copy for those of us who want to do that.  
25 MR. POLAND: I'm not sure what exhibit

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1 number we're on now.  
2 THE REPORTER: 36.  
3 (Exhibit No. 36 marked.)  
4 Q. (By Mr. Poland) Dr. Gaddie, I'm  
5 handing you a copy of a document that the court  
6 reporter has marked as Exhibit Number 36. Do  
7 you have that in front of you?  
8 A. Yes.  
9 Q. And you also have that document pulled  
10 up on the screen of the computer in front of  
11 you?  
12 A. Yes, I do.  
13 Q. Can you identify Exhibit Number 36 for  
14 the record, please?  
15 A. This is a set of notes that I wrote  
16 for myself to inform my conversation with the  
17 team at Michael Best regarding the creation of  
18 a partisanship measure, the context in which it  
19 could be created -- it was being created and my  
20 steps -- my general steps in that direction.  
21 Q. Can you tell from the metadata on the  
22 computer when Exhibit Number 36 was created?  
23 A. Actually, it's -- for what it's worth,  
24 I believe this was created while I was in  
25 Madison during my first trip. Probably around

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1 April 17.  
2 Q. Okay. So the best of your  
3 recollection, Exhibit 36 was created on or  
4 about April 17, 2011?  
5 A. Well, according to my data it was.  
6 But, yes. I mean, I wrote this.  
7 Q. Oh, okay. But you've got the metadata  
8 in front of you?  
9 A. I'm looking at the metadata, yeah.  
10 Q. Okay. All right.  
11 A. Peter and I are getting the hang of  
12 this.  
13 Q. You certainly are. Okay. Terrific.  
14 And so you did create this while you were in  
15 Madison?  
16 A. Yes.  
17 Q. Do you recall drafting Exhibit Number  
18 36?  
19 A. Yeah. Let's put it this way. I don't  
20 recall specifically drafting it, but I know my  
21 writing style, and this is the kind of thing I  
22 would have written. Yes, I wrote this.  
23 Q. Do you remember where you were when  
24 you wrote it?  
25 A. I was sitting at Michael, Best &

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1 Friedrich. Probably in -- I was either sitting  
2 at Michael, Best & Friedrich in one of their  
3 conference rooms or I was sitting over at the  
4 hotel, one or the other.  
5 Q. Over at the Concourse where you were  
6 staying?  
7 A. That's usually the only places I went  
8 when I was in Madison, other than getting  
9 popcorn down there from that little vendor by  
10 the Capitol. That's about it.  
11 Q. You were hard at work?  
12 A. Yeah. Yeah. They don't pay me to  
13 eat.  
14 Q. Why did you create Exhibit Number 36?  
15 A. Really as a -- first of all, to create  
16 a rationale for establishing the measure, that  
17 even if we weren't going into court to argue  
18 for a map that was supposed to be fair and  
19 reactive and have the court adopt a map, it was  
20 still necessary to understand the partisan  
21 effect of a map. Okay? So in the first  
22 paragraph, yes. The obligations are different,  
23 but nonetheless, we needed to understand the  
24 partisan consequence using data of any map that  
25 was created.

<p style="text-align: right;">Page 98</p> <p>1 In the second paragraph what I do is I 2 indicate that I've taken the electoral data 3 using the assembly data from 2006, '8 and '10 4 and constructed a regression analysis, which we 5 talked about previously, in order to create an 6 estimate of the vote performance of every 7 district. 8 Then what I indicate in the third 9 paragraph that this could be used to create a 10 set of visual aids to demonstrate the partisan 11 structure of Wisconsin politics. Okay? 12 Communicate the top-to-bottom party basis of 13 state politics. And the one thing I take note 14 of in here is that the recent supreme court 15 race in Milwaukee County executive contest 16 appears to be -- it appeared that partisanship 17 was invading non-partisan races. That is an 18 observation that's made not on data but based 19 upon a qualitative assessment at the time of 20 the environment. 21 Q. Let me take you back to something that 22 you said just at first in part of your answer. 23 A. Yes. 24 Q. You said something to the effect that 25 it's important to understand the partisan</p>	<p style="text-align: right;">Page 100</p> <p>1 case, wasn't it, in 2011? 2 A. What was done? 3 Q. They took a look at the entire map to 4 assess the partisan impact, correct? 5 A. I would have to assume so. But they 6 certainly had the ability to do so, yes. 7 Q. And the decision ultimately about 8 whether to change a map one way or the other to 9 affect that partisan outcome is a policy 10 decision of the legislators, correct? 11 A. That is correct. 12 Q. I want to go back and just talk about 13 the start of the document here. You start out 14 by saying "The measure of partisanship should 15 exist to establish the change in the partisan 16 balance of the district. We are not in court 17 at this time. We do not need to show that we 18 have created a fair, balanced, or even reactive 19 map. But we do need to show to lawmakers the 20 political potential of the district." Right? 21 A. That's correct. 22 Q. And you use the word "potential" 23 there. What did you mean by the word 24 potential? 25 A. If you had an election in the future,</p>
<p style="text-align: right;">Page 99</p> <p>1 effect. Why is it important to understand the 2 partisan effect? 3 A. Well, again, I was writing as a 4 political scientist. If you're going to 5 redistrict it's important to understand the 6 consequences of it. Lawmakers are going to be 7 concerned about a variety of different 8 consequences of a redistricting. The impact on 9 their constituency, the impact on other 10 constituencies. 11 If a lawmaker comes in and wants to 12 know what you did to his district, it would be 13 nice to be able to tell him we've got an 14 estimate of what your district used to look 15 like in terms of partisanship and here's what 16 it looks like now. So this kind of technique 17 allows us to generate a measure that you can 18 show to somebody and explain to them, this is 19 what we think the net electoral impact is on 20 your constituency. 21 In the aggregate, it means you can 22 look at an entire map and ascertain the extent 23 to which you have moved the partisan balance 24 one way or the other. 25 Q. And that was done, in fact, in this</p>	<p style="text-align: right;">Page 101</p> <p>1 how might it turn out. So when I say 2 potential, what I'm saying is that if we ran an 3 election, this is our best estimate of what a 4 non-incumbent election would look like given a 5 particular set of circumstances, depending on 6 whether one party is stronger or weaker. 7 Q. And that's what your regression model 8 was designed to do, to show that potential of 9 the district? 10 A. Yeah, it was designed to tease out a 11 potential estimated vote for the legislator in 12 the district and then allow you to also look at 13 that and say, okay, what if the Democrats have 14 a good year? What if the Republicans have a 15 good year? How does it shift? Okay? 16 The other thing is we know that 17 districts don't correspond precisely to our 18 statistical models all the time. So we're not 19 concerned just with the crafting of the 20 district or a point estimate of the vote. It's 21 only an estimate. There's error. Right? 22 There's going to be a range within which the 23 outcome might occur. 24 The idea was to give to those people 25 that were mapping, those people that were</p>

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1 making choices, as much knowledge as we could  
2 glean about each district by giving them the  
3 most leverage on the least amount of data.  
4 Q. Okay. Now, the next paragraph you  
5 start out and you say, "I have gone through the  
6 electoral data."  
7 A. Oh, yes.  
8 Q. I'm sorry.  
9 A. Yeah, go ahead.  
10 Q. Was there something --  
11 MR. EARLE: It went dark.  
12 A. I've got a hard copy here.  
13 Q. (By Mr. Poland) Okay. You say, "I  
14 have gone through the electoral data for state  
15 office and built a partisan score for the  
16 assembly districts." Do you see that?  
17 A. Yes.  
18 Q. And when you say "built a partisan  
19 score," what do you mean by that?  
20 A. Again, an estimate of party strength.  
21 So an estimated percentage vote based on the  
22 regression equation for that district under a  
23 set of circumstances.  
24 Q. All right. And then you go on and you  
25 say, "It is based on a regression analysis of

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1 the assembly vote from 2006, 2008, 2010, and it  
2 is based on prior election indicators of future  
3 election performance." Do you see that?  
4 A. Yes.  
5 Q. All right. Who made the decision to  
6 use those specific past elections for the  
7 purpose of the regression analysis?  
8 A. These were the best data available. I  
9 can't recall why we started going back in time  
10 to 2006, but one thing we know in general is  
11 that more recent elections are more informative  
12 than elections that exist in the distant past.  
13 I can't recall exactly why that choice was  
14 made.  
15 Q. Do you recall who made that choice?  
16 A. It was really just sort of a thing  
17 that happened, I guess. I don't remember  
18 specifically.  
19 Q. Do you recall having any discussions  
20 with Mr. Handrick or Mr. Foltz or Mr. Ottman  
21 about what data ought to be used?  
22 A. If I had a conversation it would have  
23 been with Mr. Handrick. Generally speaking, in  
24 talking about these measures, Mr. Handrick was  
25 the only person that I would have had these

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1 conversations with.  
2 Q. And why was Mr. Handrick the one that  
3 you would have talked to?  
4 A. We just worked together in the past.  
5 Joe understands data and so it's easy to have  
6 those conversations with him.  
7 Q. And he also had served in the  
8 assembly, correct?  
9 A. He had served in the assembly. He had  
10 done a re-map before.  
11 Q. Was Mr. Handrick generally familiar  
12 with the regression analysis and building a  
13 partisan score?  
14 A. Well, I had to introduce him to the  
15 regression analysis. He sort of took my word  
16 with regard to the technique and how it would  
17 work and what it would do. So he accepted my  
18 recommendation to rely on this. And again, in  
19 no small part, because the court had relied  
20 upon it in the past. If we had to go talk  
21 about partisanship to a judge and it was Judge  
22 Easterbrook, we want to give Judge Easterbrook  
23 what he likes to see.  
24 Q. I understand.  
25 A. Or any judge. We want to give to

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1 judges a clear articulation of what we've done  
2 using the best available science. And  
3 regression analysis is the best available  
4 science.  
5 Q. Going into the third paragraph then,  
6 you say, "I am also building a series of visual  
7 aids to demonstrate the partisan structure of  
8 Wisconsin politics." Do you see that?  
9 A. Yes.  
10 Q. And then you go on to say, "The graphs  
11 will communicate the top-to-bottom party basis  
12 of the state politics." Correct?  
13 A. Yes.  
14 Q. And what are you referring to in those  
15 two sentences?  
16 A. Okay. There should have been -- I  
17 mean, I don't know if these were what I  
18 provided in discovery or not, but there should  
19 be two types of visuals that you should  
20 encounter which are very, very, very large  
21 files. One is a bivariate correlation table.  
22 And I want to make note of the fact  
23 that at this point in time I'm working in New  
24 Mexico, Oklahoma, Wisconsin, Illinois,  
25 Louisiana, Maryland. Okay? So I've got a lot

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1 of irons in the fire. But as I recall from  
2 Wisconsin, we developed a giant correlation  
3 table using precinct level data of all the  
4 statewide elections, okay, and the assembly  
5 elections. And when printed out it was  
6 probably about as big as half of this table.  
7 So we could then go through and identify how  
8 these statewide elections strongly correlated  
9 with the assembly elections. It was an ability  
10 to -- it was a way of visually explaining to  
11 someone who might ask why we're taking all  
12 these other elections, jumbling them up in an  
13 equation to predict this one vote.  
14 We can go in and say, okay, at this  
15 point we can show the assembly election closely  
16 correlate with the Governor's race, the  
17 presidential race, whatever. So there should  
18 have been a large visual for that, unless my  
19 memory is failing me.  
20 But then in developing maps we had  
21 developed estimates in Excel sheets much like  
22 the one we looked at previously, the  
23 Tad1\_20110527 file, where I had color coded the  
24 cells to indicate the partisan direction, the  
25 intensity of partisan strength in different

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1 districts.  
2 Part of what that would indicate is if  
3 you simply looked at it visually it would  
4 create something resembling something like an S  
5 curve. You could see the point at which a  
6 party got stronger or weaker, the possibility  
7 of its district tipping in one direction or  
8 another. So it was simply a visual shortcut  
9 for somebody who doesn't like numbers to look  
10 at a visualization of a map and understand how  
11 it would shift in terms of strength for one  
12 party or the other. And those were, again,  
13 very large files that if we printed them out  
14 would cover half this table.  
15 Q. All right. I've got a couple of  
16 questions about that. Let me just ask you  
17 before I jump to the computer. You mentioned  
18 printing out this bivariate correlation table  
19 and you said it would cover about half of the  
20 -- it would cover half the table or so if you  
21 brought it in here?  
22 A. Well, if we brought it in here,  
23 seriously, it would cover from here to you and  
24 across. A giant sheet of paper.  
25 Q. Where was that printed out?

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1 A. There was a room in Michael, Best &  
2 Friedrich which was the mapping room. And if  
3 that were printed out, that's where it would  
4 have resided.  
5 Q. All right. Do you recall seeing that  
6 printed out in Michael, Best & Friedrich's  
7 office?  
8 A. If I'm remembering correct, yeah, it  
9 should have been in there. It never left that  
10 room, to my knowledge. But that's where I  
11 recall that file existing.  
12 Q. Do you remember looking at it, at a  
13 printout?  
14 A. Yeah.  
15 Q. Was anyone with you when you looked at  
16 the printout?  
17 A. Joe Handrick would have been with me,  
18 yeah.  
19 Q. Anybody else that you can recall?  
20 A. Not that I can recall. There may have  
21 been other people in the room. The only people  
22 I encountered in that room were Joe, Tad, Adam,  
23 McLeod would come in occasionally, and then  
24 that one occasion where one of the presiding  
25 officers had come in the room. Other than that

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1 I had no contact with anybody in that room. It  
2 was usually just the three -- it was usually  
3 just Mr. Handrick, Mr. Ottman and Mr. Foltz.  
4 Q. And that's the mapping room when you  
5 say "that room"?  
6 A. The mapping room, yes.  
7 Q. All right. Now, would you be able to  
8 identify looking at either your -- the flash  
9 drive from the Baldus case or the flash drive  
10 you produced to us a week ago, would you be  
11 able to recognize those files?  
12 A. If I see it, I'll recognize it, yes.  
13 Q. I'm going to give you a second here or  
14 a minute or two to just sort of scroll through  
15 and see if you can identify them.  
16 A. Okay. Why don't we start with this  
17 one? I'm starting with the Lexar file, the  
18 Lexar zip drive.  
19 MR. EARLE: It's 31.  
20 Q. (By Mr. Poland) That's Exhibit 31. So  
21 that's the flash drive you produced a week ago,  
22 Dr. Gaddie?  
23 A. Yes.  
24 MR. EARLE: Would it help to sort by  
25 size?

<p style="text-align: right;">Page 110</p> <p>1 THE WITNESS: It would definitely help 2 to sort by size. And it would be -- in all 3 likelihood it would be an Excel file. 4 MR. EARLE: Oh, you opened it? 5 THE WITNESS: Yeah, let's take a look 6 at it. I didn't do anything. Let's take a 7 look at it, though. 8 MR. EARLE: It will take a moment to 9 pop up. 10 THE WITNESS: Okay. That is not it 11 because that's another version of the root 12 electoral data. 13 Q. (By Mr. Poland) Are you still on the 14 flash drive that you produced last week? 15 A. Yes. And again, depending on the 16 file, it may not be that. While it's a large 17 printout, it's a single dimension flat file, so 18 -- again, that's the data orientation file off 19 of -- let's go down here and look further. May 20 I? If you don't mind. 21 MR. EARLE: Help yourself. 22 A. Here it is. Okay. If you go down you 23 will find a directory on the Lexar drive that 24 is entitled Wisconsin 2010. 25 MR. EARLE: That's Exhibit 31.</p>	<p style="text-align: right;">Page 112</p> <p>1 it's also on the Exhibit 57, too. 2 MR. POLAND: Okay. It's on both. 3 MR. KEENAN: Yeah. 4 Q. (By Mr. Poland) All right. So Dr. 5 Gaddie, the table itself is what was printed 6 out and displayed in the mapping room at 7 Michael, Best &amp; Friedrich? 8 A. This was printed off, yes. 9 Q. All right. Now, this -- you had 10 referred to visual aids in Exhibit 36, in your 11 memo. 12 A. Right. 13 Q. This is a visual aid that you referred 14 to? 15 A. Yes. It's the thing we look at. 16 Q. Fair enough. 17 A. It passes the ocular test. 18 Q. Okay. And how exactly does the 19 Wisconsin correlates work as a visual aid? Can 20 you explain it to me briefly? 21 A. Well, again, what we have is we have a 22 whole series of different elections that take 23 place and we have precinct level data, VTD 24 level data on all these elections. And what 25 this table is, this is simply a Pearson's</p>
<p style="text-align: right;">Page 111</p> <p>1 A. Exhibit 31, yes. And if you open it 2 up you'll see a file that's called Wisconsin 3 correlates which was created on April 15, 2011. 4 Q. (By Mr. Poland) All right. So we're 5 on Exhibit Number 31. And I'm sorry, the file 6 number is? 7 A. It's under the directory. It's under 8 the folder Wisconsin 2010. 9 Q. Wisconsin 2010. All right. 10 A. Yes. 11 Q. And it's called 12 Wisconsin_correlates.xlsx. Now, that only 13 shows up as 111 kilobytes on mine. 14 A. Well, it's not -- 15 Q. That's all right. 16 A. We're looking at it over here. 17 Actually, it may not -- again, it's a 18 physically large document printed out, but 19 because it has -- it is only cell entries. It 20 has no macros inside of it. It has no -- you 21 know, it's a very simple file. It's a flat 22 file, for all intents and purposes. 23 Q. I understand. Now, so I have it open 24 and I'll wait for counsel to get there, too. 25 MR. KEENAN: I am. I would note that</p>	<p style="text-align: right;">Page 113</p> <p>1 correlation coefficients table. Okay? Which 2 means that it is testing the linear 3 relationship between two variables. So the 4 vote for governor at the precinct level, how 5 does it correlate with the vote for secretary 6 of state? The vote for secretary of state, how 7 does it correlate with the vote for assembly? 8 The vote for assembly, how does it correlate 9 with the state senate? We're looking at 10 pair-wise relationships for every election for 11 which we have data. Okay? 12 And in order to explain why we should 13 use the regression equation or why these 14 variables were all related, generating this 15 large visual and then showing it to people was 16 the easiest way to communicate this information 17 because -- I'll give you an example. If you 18 just look at the -- I would say just look in 19 the far northwest corner. ASM 2010 Dem. 20 That's the assembly vote in 2010 for the 21 Democrat on rows 3, 4, 5 -- column 3, 4 -- row 22 3, 4, 5. And then you look at Column C, 23 assembly 2010 Dem, that's the vote for 24 Democrat. You notice the Pearson correlation 25 is one?</p>

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1 Q. Uh-huh.  
2 A. That's because we're measuring the  
3 same thing twice. Of course it's perfectly  
4 correlated. You look one column over, Dem 2010  
5 REP, you notice there's a negative .960 with a  
6 little asterisk next to it? That's a Pearson's  
7 correlation coefficient of negative .96. What  
8 it means is that there's a strong negative  
9 correlation between the strength of the  
10 Republican vote for assembly and the strength  
11 for the Democratic vote.  
12 The reason it's not a perfect  
13 correlation is sometimes independents run.  
14 Right? So there's a little bit of noise in  
15 there. But if you continue over. Look, for  
16 example, at ASM 2002 DEM. There's a .696  
17 Pearson's correlation between the Democratic  
18 vote in 2002 for the assembly and the vote in  
19 2010 for assembly. So it's not a perfect  
20 linear relationship. Okay?  
21 So again, what we're trying to do is  
22 show initially all these elections appear to be  
23 interrelated to a greater or lesser degree. If  
24 a Person's value is negative it means that the  
25 outcome is negatively associated with the other

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1 variable. Okay? If it's positive, it means  
2 there's a positive relationship. The closer  
3 the absolute value is to zero, the weaker the  
4 relationship. A value of one means a perfect  
5 correlation.  
6 So I was treating this as a data  
7 reduction technique to be able to show people  
8 why it was that we looked at these statewide  
9 elections to build a model for assembly  
10 elections.  
11 Q. All right.  
12 A. So that's what -- it was a big  
13 marshaling of data for about a two-minute  
14 point. Okay?  
15 Q. And you mentioned it was done down to  
16 the precinct level. Was it at the ward level?  
17 A. A ward is a precinct, yes. A voter  
18 turn-out district, a VTD.  
19 Q. As small as you could get, as you had  
20 testified.  
21 A. Smallest available unit from the  
22 division of elections, yes.  
23 Q. All right. So this is one of the  
24 visual aids that you had constructed?  
25 A. Yes.

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1 Q. And then you mentioned another that  
2 you had developed with color-coded cells to  
3 indicate what you had called the S curve?  
4 A. Yeah. Let's see if we can find one of  
5 those. Can I close this up?  
6 Q. Yes, please do.  
7 A. Okay. Thank you. Let's see if we  
8 don't have one of these sitting around here.  
9 While I am not seeing one here, I can explain  
10 -- give me a moment.  
11 Q. Sure.  
12 A. Here's the thing. In substance they  
13 would strongly resemble the Tad\_1\_05272011  
14 file, let's look on the other drive and see if  
15 we can't find a specific example.  
16 Q. Sure. And when you said "the other  
17 drive," you mean look on the one that you  
18 produced in the Baldus case?  
19 A. Yeah.  
20 Q. Do you want to look in the Baldus case  
21 drive then?  
22 A. Yeah, if you don't mind.  
23 Q. Sure. Wherever you think it might be,  
24 Dr. Gaddie.  
25 A. I appreciate that. Give me just a

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1 minute. I'm sure we're opening it eventually.  
2 Let me just make sure it's going to answer the  
3 question.  
4 Do you want to open this up? This is  
5 not it, but it may have been the foundation.  
6 That's not it. Sorry about that.  
7 Here we go. No, no, sorry about that.  
8 I'm sorry, gentlemen, it's been a few years  
9 since I've messed with this. So I'm going to  
10 ask you to bear with me. Thank you.  
11 Q. Is there any kind of a naming  
12 convention that you recall using?  
13 A. I'm trying to remember.  
14 Q. Do you know whether -- you had  
15 mentioned S curve before. Do you know whether  
16 curve would have been in a file name?  
17 A. It's possible. Again, here's the  
18 thing. I can remember visualizing these. I  
19 can remember their generation, and I cannot  
20 remember what I would have named them or saved  
21 -- actually, let's --  
22 Q. If I were to have you take a look at  
23 one of my computers, would you be able to --  
24 A. Would that be okay?  
25 Q. Yeah, absolutely.

<p style="text-align: right;">Page 118</p> <p>1 A. I'm going to go off mic for just a 2 second and walk over and look and I will come 3 back. 4 MR. EARLE: In other words, he's going 5 to be untethered. 6 Q. (By Mr. Poland) Just generally 7 speaking, is this what it looks like? 8 A. Yes, that's what I'm looking for. 9 Well, let me answer the question on mic. 10 Yes. 11 Q. All right. What I'm going to do then 12 is I'm going to mark another flash drive as an 13 exhibit. 14 MR. EARLE: Which should I take out? 15 MR. POLAND: None. 16 MR. EARLE: I think I'm out of jacks. 17 THE WITNESS: Maybe there's another 18 jack over there. Is there another jack there? 19 MR. EARLE: No. 20 MR. POLAND: All right. Why don't -- 21 THE WITNESS: I have an idea. Let's 22 go off record while you guys work this out. 23 I'm going to go to the bathroom and be back in 24 two minutes. 25 MR. POLAND: That's a good solution.</p>	<p style="text-align: right;">Page 120</p> <p>1 are photos of hard drives, or this is a photo 2 of a hard drive, and you will see one says 3 Republican and one says senate Republican and 4 ASM? 5 A. Yes. 6 Q. Did you ever see any external hard 7 drives that looked like these in Exhibit 38 8 when you were working at Michael, Best &amp; 9 Friedrich? 10 A. I don't recall them. 11 Q. Did you ever do any work yourself on 12 any of the redistricting at Michael, Best &amp; 13 Friedrich? 14 A. I never touched the computers inside 15 the room. 16 Q. You worked exclusively on one of your 17 own computers? 18 A. Yes. 19 Q. I've had marked as Exhibit Number 37 a 20 flash drive and I've given copies of it to 21 counsel. Have you ever heard -- strike that 22 question. 23 Are you aware of any of the 24 post-judgment proceedings in the Baldus case? 25 A. No.</p>
<p style="text-align: right;">Page 119</p> <p>1 Let's do that. 2 THE VIDEOGRAPHER: Going off the 3 record. The time is 11:53 a.m. 4 (Recess.) 5 (Exhibit No. 37 and 38 marked.) 6 THE VIDEOGRAPHER: We are back on the 7 record. The time is 12:01 p.m. 8 Q. (By Mr. Poland) Dr. Gaddie, when you 9 were working at the Michael, Best &amp; Friedrich 10 office in 2011, do you recall that there were 11 several computers that were used for 12 redistricting? 13 A. Yes. 14 Q. And do you recall that Mr. Foltz, Mr. 15 Ottman and Mr. Handrick each used one of those 16 computers? 17 A. Yes. 18 Q. Did you ever see any external hard 19 drives connected to those computers? 20 A. Not that I recall, no. 21 Q. I'm going to hand you a document 22 that's been marked as Exhibit Number 38 and ask 23 you to take a look at it. 24 A. Okay. 25 Q. And I will represent to you that these</p>	<p style="text-align: right;">Page 121</p> <p>1 Q. Are you aware that there was some 2 discovery into the redistricting computers that 3 were conducted? 4 A. No. 5 Q. Are you aware that the Baldus 6 plaintiffs obtained an order from the court 7 allowing them to conduct a forensic analysis? 8 A. No. 9 Q. Have you ever heard of a name -- 10 computer forensic expert named Mark Lanterman? 11 A. No. 12 Q. I'm going to remind you that the 13 Baldus plaintiffs retained a computer forensic 14 expert named Mark Lanterman -- 15 A. Okay. 16 Q. -- who obtained possession of the hard 17 drives, both internal and external, from the 18 computers that were used by Adam Foltz and Tad 19 Ottman and has conducted certain analyses on 20 those computers. Okay? 21 A. All right. 22 Q. Now, let's take a look -- we're going 23 to go to the flash drive that's Number 37 that 24 I provided to you. 25 A. Okay.</p>

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1 Q. If you look in the directory for  
2 Exhibit Number 37 you should see that there are  
3 four subfiles or subfolders. One says WRK  
4 32587 External HD. One says WRK 32587. The  
5 next one says WRK 32586 External HD and WRK  
6 32586. Do you see those?  
7 A. Yes.  
8 Q. I would like you to open the first of  
9 those folders, the WRK 32587 External HD.  
10 A. Okay.  
11 Q. And you should see one subfile that  
12 says External or says Responsive Spreadsheets  
13 and then there's another file that's an XL  
14 file. Do you see that?  
15 A. Yes.  
16 Q. I would like you to look at the XL  
17 file.  
18 A. Okay.  
19 Q. And open it up and take a look at it.  
20 MR. KEENAN: Could you repeat that  
21 folder?  
22 MR. POLAND: It should be the first of  
23 the folders that appears on that flash drive.  
24 MR. KEENAN: 32587?  
25 MR. POLAND: External HD. And then

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1 we're just going to take a look at the  
2 responsive spreadsheets file detail report.  
3 Q. (By Mr. Poland) Okay. Do you have  
4 that open, Dr. Gaddie?  
5 A. Yes.  
6 Q. All right. And so you see up at the  
7 top there's a header on that document that says  
8 External HD Responsive Spreadsheet File Detail  
9 Report?  
10 A. Yes.  
11 Q. And this is for the computer report  
12 that's WRK 32587. Do you see that?  
13 A. Yes.  
14 Q. All right. Now, if you scroll down to  
15 -- I would like you to take a look at lines  
16 Number 91 through 94 on that spreadsheet. 91  
17 through 94.  
18 A. Yes.  
19 Q. All right. And do you see that the  
20 file names, 91 is Tad Senate Assertive Curve?  
21 A. Yes.  
22 Q. And 92 is Tad Senate Assertive Curve?  
23 A. Right.  
24 Q. Number 93 has the same alternate file  
25 name and 94 as well. Do you see that?

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1 A. Yes.  
2 Q. All right. Now, if you scroll over on  
3 the spreadsheet. Just go over to your right  
4 all the way over to the columns that identify  
5 author and last saved by.  
6 A. Yeah.  
7 Q. Can you identify who that is?  
8 A. That would be my name.  
9 Q. Right. Both as author and last saved  
10 by for lines 91 through 94, correct?  
11 A. Yes.  
12 Q. And what date does the meta indicate  
13 that it was created?  
14 A. May 28.  
15 Q. All right. At 8:12 in the morning,  
16 correct?  
17 A. Yes.  
18 Q. All right. Now what I would like you  
19 to do is -- well, actually, let me ask you this  
20 question first. Do you know why there would be  
21 four different -- four different files with the  
22 same name, Tad Senate Assertive Curve?  
23 A. No.  
24 Q. Now what I would like you to do is  
25 we're going to take a look at that file.

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1 A. Okay.  
2 Q. So if you go back out to the folder  
3 itself we should be able to find it there.  
4 MR. EARLE: Let me make this -- oh,  
5 shit.  
6 MR. POLAND: We're on the record,  
7 Peter.  
8 MR. EARLE: Oh. No, the court  
9 reporter's hands weren't on it. I'm trying to  
10 make it easier for Keith to see here. Let me  
11 get the screen adjusted. I'm trying to move a  
12 column over.  
13 Q. (By Mr. Poland) So we're going to be  
14 looking in the folder that says WRK 32587  
15 External Responsive Spreadsheets Duplicated.  
16 A. Okay.  
17 Q. It's actually not very far down, at  
18 least in my directory.  
19 MR. EARLE: Can you give me the name  
20 again?  
21 MR. POLAND. Sure. It's Tad Senate  
22 Assertive Curve.  
23 MR. EARLE: Do you want me to open it?  
24 MR. POLAND: Yes, please open it.  
25 Q. (By Mr. Poland) Are you there?



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1 A. Yes.  
2 Q. Now, just before we broke you had been  
3 talking about a visual aid to indicate what you  
4 called an S curve.  
5 A. Yes.  
6 Q. Is this file that we're looking at  
7 right now, this Tad Senate Assertive Curve, is  
8 that what you're talking about in terms of a  
9 visual representation of an S curve?  
10 A. Yes.  
11 Q. I'm not familiar with the term S  
12 curve.  
13 A. Okay.  
14 Q. Could you please describe what that  
15 is?  
16 A. Yeah. Now, let me lay this aside over  
17 here. There is a mini lecture, but we're going  
18 to keep it tight. In single member district  
19 systems, especially under a two-party system,  
20 the responsiveness of votes to seats is not  
21 expected by political scientists to be strictly  
22 proportional. That is to say, if you get 60%  
23 of the vote you're not expected to get 60% of  
24 the seats. If you get 40% of the votes, you're  
25 not expected to get 40% of the seats. The

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1 expectation is that the combination of  
2 competitive and noncompetitive districts will  
3 create a seat bonus for parties that get a  
4 disproportionately large number of seats based  
5 on relatively small majorities and then that  
6 effect tapers off. Similarly, if you're  
7 falling below 50%, you may incur a somewhat  
8 larger penalty in terms of the seats that you  
9 accrue. Okay?  
10 So instead of having a relationship  
11 where, let's say, you know, this is the number  
12 of seats you get on this axis and this is the  
13 number of votes you get on this axis, if there  
14 were a one-to-one relationship you would expect  
15 to see a 45 degree curve. What the S curve  
16 does is it moves like this. At 50% of the vote  
17 you expect to get 50% of the seats. But once  
18 you get above that you're going to get some  
19 bonuses and it eventually will taper off and  
20 you're going to hit a ceiling above which you  
21 cannot gain additional seats because the other  
22 parties will be too secure. Similarly, as you  
23 fall off, you'll hit a floor that you can't  
24 drop below. That's the S curve.  
25 What we have here is a representation

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1 of what an S curve response might look like in  
2 order to help people visualize the impact on  
3 particular districts. Okay? Because in a  
4 traditional S curve representing the percentage  
5 of districts you win relative to the percentage  
6 of the vote that you obtain.  
7 What this visual does is it orders  
8 districts from the strongest to the weakest for  
9 one party or another. Okay? And it shows  
10 based upon an expected statewide vote for one  
11 party or the other which seats are going to  
12 tend more Democratic shaded in blue, more  
13 Republican shaded in red. Light blue means  
14 that they're Democratic tending, but  
15 competitive. Orange means they're Republican  
16 tending but competitive.  
17 You'll notice that as we move to the  
18 left the Democrats are stronger, the  
19 Republicans are weaker, more seats come into  
20 play for the Democrats or become safe for the  
21 Democrats. As we move to the right more seats  
22 become safe for the Republicans and fewer seats  
23 become safe for the Democrats.  
24 So for this map, and there should be  
25 other examples, what we do is you simply -- you

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1 generate the point estimate from the regression  
2 equation of the expected vote and then it is  
3 simply color coded based upon the vote range  
4 using one of -- using a macro in Excel so that  
5 after you've coded in the initial vote share  
6 from the actual regression equation, as you  
7 move the value of the vote for one party either  
8 up or down, you can see the responsiveness of  
9 the districts and how they shift and the number  
10 of seats that come into play for one party or  
11 fall away.  
12 So again, a visualization of both the  
13 distribution of partisanship in the districts  
14 and the sensitivity of individual districts to  
15 changes and partisan strength across the state,  
16 assuming that the entire state shifts in the  
17 same direction one way or the other. And  
18 that's what this device was meant to do.  
19 Q. Now, I note that the file name is Tad  
20 Senate Assertive Curve.  
21 A. Yes.  
22 Q. Does that have any meaning for you?  
23 A. This was an aggressive map. It's an  
24 assertive map. This is a map that, indeed if  
25 you look at it, it is a map that makes an

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1 assertive move towards Republican advantage.  
 2 Q. Do you know -- strike that question.  
 3 We saw just a minute or two ago when  
 4 we looked at the directory that this was  
 5 created toward the end of May when you were in  
 6 Madison, correct?  
 7 A. That's correct.  
 8 Q. All right. Did you create this S  
 9 curve on your own computer, do you recall?  
 10 A. When I first created these I created  
 11 them on my own computer. Doug, I'm trying to  
 12 remember. The first time I created these, I  
 13 created them on my own computer. I have no  
 14 memory of ever touching one of those machines  
 15 in there. In fact, this was one of my terms  
 16 and conditions was I'm not supposed to touch  
 17 the machines. So I would have created this  
 18 curve, given the file to Tad because I couldn't  
 19 print the big wide carriage printer from my  
 20 laptop. It had to go to one of the three  
 21 mapping machines to be able to communicate with  
 22 the wide carriage full color printer inside,  
 23 inside the room.  
 24 Q. So these were -- these S curves were  
 25 actually printed out, is that correct?

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1 A. Yes, at least some of them were. I  
 2 can recall some being printed out, yes.  
 3 Q. Do you recall whether the Tad Senate  
 4 Assertive Curve was printed out?  
 5 A. I don't remember.  
 6 Q. Do you recall specifically any of them  
 7 that might have been printed out?  
 8 A. Offhand, no. I recall -- I can recall  
 9 some being printed out. I can't recall which  
 10 ones.  
 11 Q. Did you look at these printouts with  
 12 any of the other members of the redistricting  
 13 team?  
 14 A. The only people I ever looked at these  
 15 curves with were Mr. Ottman, Mr. Foltz and Mr.  
 16 Handrick. I cannot recall if the pro tem was  
 17 in the room when we looked at one of these or  
 18 not, but he's the only lawmaker I ever saw in  
 19 the room. I can't recall if we showed him this  
 20 visual or not.  
 21 Q. All right. And that's Senator  
 22 Fitzgerald, correct?  
 23 A. Yes.  
 24 Q. Do you know how close this Tad Senate  
 25 Assertive Curve mapped up with the -- strike

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1 that.  
 2 Do you know how the senate district  
 3 boundaries represented by the Tad Senate  
 4 Assertive Curve matched up with the boundaries  
 5 of the final map?  
 6 A. I don't know.  
 7 Q. When you were gathering your  
 8 responsive data to respond to the subpoena in  
 9 the Baldus case and also to respond to the  
 10 subpoena in this case, do you recall ever  
 11 seeing any of these S curve maps among the  
 12 materials that you reviewed?  
 13 A. I don't recall. I simply turned over  
 14 all material.  
 15 Q. Do you know why these files might not  
 16 have been on your computer but were on Mr.  
 17 Ottman's computer?  
 18 A. No.  
 19 Q. You can close out that file. I would  
 20 like to take you back to the directory that we  
 21 were looking at before, which is the external  
 22 HD responsive spreadsheets file detail report.  
 23 A. Uh-huh.  
 24 MR. EARLE: That's 87 external?  
 25 MR. POLAND: I'm sorry. Yeah. That's

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1 WRK 32587.  
 2 Q. (By Mr. Poland) If you'd scroll down  
 3 and you look at lines 145 through 147, please.  
 4 And you'll see those again say Tad Senate  
 5 Assertive Curve. Do you see that?  
 6 A. Yes.  
 7 Q. And then if you scroll over in the  
 8 spreadsheet over to the author and last saved  
 9 by, you'll see that you are identified as the  
 10 author of those three, correct?  
 11 A. I'm not seeing it yet.  
 12 Q. Okay.  
 13 A. Are we there yet?  
 14 Q. It's Column H.  
 15 A. Thank you.  
 16 MR. EARLE: Wait a second. This moves  
 17 a lot faster.  
 18 MR. POLAND: These are Lines 145  
 19 through 147.  
 20 MR. EARLE: Got it.  
 21 A. I see that.  
 22 Q. (By Mr. Poland) Do you see that you're  
 23 the author?  
 24 A. Yes.  
 25 Q. And then you see it says last saved by

<p style="text-align: right;">Page 134</p> <p>1 T. Ottman? 2 A. Yes. 3 Q. And that's Tad Ottman, correct? 4 A. Yes. 5 Q. Then I would like you to scroll down 6 to Rows 247 through 250. Let me know when 7 you're there. 8 MR. EARLE: We're there. 9 Q. (By Mr. Poland) Okay. So do you see 10 the 247 through 250, the name is Senate Current 11 Curve? 12 A. Yes. 13 Q. Do you see that? 14 A. Yes. 15 Q. And then if you again scroll over to 16 look at the author and last saved by, you'll 17 see those are both -- those both have your 18 name, correct? 19 A. Yes. 20 Q. And do you see that there is a created 21 date as well? 22 A. Yes. 23 Q. And it's the same date, correct, 5/28? 24 A. Yes. 25 Q. Do you know, just looking at the file</p>	<p style="text-align: right;">Page 136</p> <p>1 looks like a very different picture than what 2 we saw from the Tad Assertive Map. Am I 3 correct in that? 4 A. Yes. 5 Q. All right. How so? How is it 6 different? 7 A. Well, I would have to look at both of 8 them to tell you. The band of responsive 9 districts at the mid point are -- it's broader 10 and it is less heavily skewed to the 11 Republicans, according to this graphic. 12 Q. So the Tad Assertive map that we 13 looked at for the senate was more heavily 14 skewed in favor of the Republicans, is that 15 correct? 16 A. Yes. 17 Q. And as you're testifying today, you 18 don't know whether that reflects the senate 19 districts that were ultimately part of Act 43? 20 A. That's correct. 21 Q. Do you recall putting side by side any 22 of these S curves that -- printouts of the S 23 curves that had current districts versus other 24 potential districts? 25 A. I don't recall.</p>
<p style="text-align: right;">Page 135</p> <p>1 name -- and we'll open up the file here in just 2 a second -- do you know offhand what the Senate 3 Current Curve represents? 4 A. That should have been the curve for 5 the baseline map, for the pre-redistricting 6 map. 7 Q. Does this indicate that, in giving the 8 time that you're looking at these, that there 9 was a comparison of the S curves of the current 10 map with the Tad Assertive Map? 11 A. It's possible, yes. 12 Q. Let's go ahead and find the Senate 13 Current Curve among the spreadsheets themselves 14 and let's open that one up. 15 MR. EARLE: Tell me which one again. 16 MR. POLAND: Sure. Senate Current 17 Curve -- it's actually not -- it's one, two, 18 three, four, five, six -- it's seven down in 19 the external -- the WRK 32587. Do you see it? 20 THE WITNESS: Right there above my 21 finger. 22 MR. POLAND: Are you there? 23 THE WITNESS: Uh-huh. 24 Q. (By Mr. Poland) Okay. This looks like 25 a very, very -- just to my untrained eye it</p>	<p style="text-align: right;">Page 137</p> <p>1 Q. Did you recall making any observations 2 or recommendations to Mr. Ottman, Mr. Handrick 3 or Mr. Foltz about the aggressive nature of the 4 maps that were being revealed or displayed by 5 the S curves that were created? 6 A. I don't recall any specific comments. 7 I might have made a recommendation. I'm sure 8 it came up, but I don't remember. 9 Q. All right. I want to go back then 10 just to see if there were any other 11 spreadsheets that I want to look at from that 12 external hard drive. So give me just a second 13 here. 14 I think I'm done with the external -- 15 that particular external hard drive. What I 16 would like to do then is go through the same 17 exercise on the next computer, the WRK 32587. 18 So if you look up -- open up the responsive 19 spreadsheets file data report for the 32587 20 computer. 21 MR. EARLE: We're there. 22 Q. (By Mr. Poland) Okay. If you would go 23 to Rows 149 through -- well, let's just start 24 out with 149. Let me ask you about 149 through 25 159.</p>

<p style="text-align: right;">Page 138</p> <p>1 A. Okay.</p> <p>2 MR. POLAND: And are you there?</p> <p>3 MR. KEENAN: Uh-huh.</p> <p>4 Q. (By Mr. Poland) Okay. So you see that</p> <p>5 all of those are senate current curves?</p> <p>6 A. Yes.</p> <p>7 Q. And you see that if you -- actually,</p> <p>8 scroll over to the author, you'll see that you</p> <p>9 are identified in 149 through -- I'm sorry,</p> <p>10 through 158, I think it is, you're identified</p> <p>11 as the author of each of those?</p> <p>12 A. Yes.</p> <p>13 Q. All right. Now, on 149, Row 156 and</p> <p>14 Row 158, it indicates they were last saved by</p> <p>15 you, correct?</p> <p>16 A. It appears so, yes.</p> <p>17 Q. And the others, which is Row 150, 51,</p> <p>18 52, 53, 54, 55 and then 57, Mr. Ottman last</p> <p>19 saved those, correct?</p> <p>20 A. Yes.</p> <p>21 Q. All right. Now, if you scroll back</p> <p>22 over to the left again where we had the --</p> <p>23 where we had the file name, you'll actually see</p> <p>24 a file path.</p> <p>25 A. Right.</p>	<p style="text-align: right;">Page 140</p> <p>1 We had to find a way to get files off of my</p> <p>2 laptop to their machine to be able to print.</p> <p>3 And the wireless was lousy, so I couldn't</p> <p>4 e-mail them.</p> <p>5 Q. You don't recall using flash drives</p> <p>6 for any of that?</p> <p>7 A. It could have been a flash drive.</p> <p>8 Doug, I just don't remember. We got them off</p> <p>9 my machine and got them to them. And one thing</p> <p>10 you'll note is that a file will be accessed and</p> <p>11 then saved later by Tad, open it up, prepare it</p> <p>12 for printing, save it. It's entirely possible</p> <p>13 he -- the other thing is, once you create this</p> <p>14 type of file, it's possible to load new data</p> <p>15 into it and create new spreadsheets if you have</p> <p>16 access to the regression equation we talked</p> <p>17 about previously.</p> <p>18 I don't recall that happening. But I</p> <p>19 generated these -- I generated these initially</p> <p>20 on my computer and created them and then handed</p> <p>21 them off to Mr. Ottman. And I would imagine to</p> <p>22 Mr. Foltz as well. I just don't remember.</p> <p>23 Because we did these for both assembly and for</p> <p>24 senate.</p> <p>25 Q. Would you take a look also at -- we're</p>
<p style="text-align: right;">Page 139</p> <p>1 Q. Do you see that?</p> <p>2 A. Yeah.</p> <p>3 Q. All right. Now, I would like you to</p> <p>4 look at 149, 150, 152, 154. Do you see that in</p> <p>5 each of those file paths there's a reference to</p> <p>6 Drop Box?</p> <p>7 A. Yes, I do.</p> <p>8 Q. Did you ever use Drop Box in</p> <p>9 transmitting any files to Mr. Ottman or</p> <p>10 receiving any files from Mr. Ottman?</p> <p>11 A. I didn't start using Drop Box</p> <p>12 personally until just a couple of years ago.</p> <p>13 Doug, I'm going to have to guess into this</p> <p>14 based upon what was going on in the room. I</p> <p>15 created these series of initial curves. I</p> <p>16 would assume that we logged to Drop Box, moved</p> <p>17 them from my computer to Drop Box and pulled</p> <p>18 them down. I don't remember. But I created</p> <p>19 these initial files, I know that.</p> <p>20 Q. Okay.</p> <p>21 A. But how -- but again, I hadn't started</p> <p>22 using Drop Box for any purpose until in the</p> <p>23 last couple of years. And I've never used it</p> <p>24 for transmitting districting documents. I</p> <p>25 don't remember doing those, but it must be why.</p>	<p style="text-align: right;">Page 141</p> <p>1 going to look at Rows 169 through 178.</p> <p>2 A. Yes.</p> <p>3 Q. And so you see those are Tad Senate</p> <p>4 Assertive Curve?</p> <p>5 A. Uh-huh.</p> <p>6 Q. All right. You've got the same file</p> <p>7 name that we had seen before, correct?</p> <p>8 A. Yes.</p> <p>9 Q. All right. And if you scroll over</p> <p>10 then to the author and last saved by, again,</p> <p>11 we're going to see that you're identified as</p> <p>12 the author of each of those and then on the</p> <p>13 files that are at Rows 169, 172 and 176, it</p> <p>14 indicates they were last saved by you and the</p> <p>15 others were last saved by Mr. Ottman, correct?</p> <p>16 A. Yes.</p> <p>17 Q. Now, as I -- if you go over and if you</p> <p>18 look at the file path a little bit further over</p> <p>19 to the left.</p> <p>20 A. Right. Correct.</p> <p>21 MR. EARLE: There you go.</p> <p>22 THE WITNESS: There we go.</p> <p>23 Q. (By Mr. Poland) There is an indication</p> <p>24 -- in the 169 file path it indicates Drop Box,</p> <p>25 correct?</p>

<p style="text-align: right;">Page 142</p> <p>1 A. Correct.</p> <p>2 Q. Do you see that the next row, 170, it</p> <p>3 says in the file path, there's -- one of the</p> <p>4 names that's in there, it says January maps for</p> <p>5 discovery. Do you see that?</p> <p>6 A. Yes. Yes.</p> <p>7 Q. Does that have any meaning to you at</p> <p>8 all?</p> <p>9 A. Particular meaning, no. I mean, I can</p> <p>10 infer from the file, but I have no particular</p> <p>11 -- it has no particular meaning to me.</p> <p>12 Q. It doesn't. Okay. Yeah, I don't want</p> <p>13 you to infer there.</p> <p>14 And then 178, do you see it also</p> <p>15 identifies Drop Box?</p> <p>16 A. Yes.</p> <p>17 Q. And you never received any kind of</p> <p>18 credentials to use Drop Box, a user name or a</p> <p>19 password or anything like that?</p> <p>20 A. No. Like I said, I've only been on</p> <p>21 Drop Box for a couple of years.</p> <p>22 Q. Did anybody ever while you were there</p> <p>23 log onto your computer and set you up with Drop</p> <p>24 Box or Switch It or anything?</p> <p>25 A. I don't recall. I don't know.</p>	<p style="text-align: right;">Page 144</p> <p>1 repaired it, but I'm hesitant to save the</p> <p>2 changes it made to it. I don't know. Which</p> <p>3 one are we in?</p> <p>4 MR. POLAND: This is Senate Current</p> <p>5 Curve.</p> <p>6 MR. EARLE: Okay. But I'm afraid --</p> <p>7 can we go off the record for a second?</p> <p>8 MR. POLAND: Sure.</p> <p>9 THE VIDEOGRAPHER: Going off the</p> <p>10 record. The time is 12:31 p.m.</p> <p>11 (Recess.)</p> <p>12 THE VIDEOGRAPHER: We are back on the</p> <p>13 record. The time is 12:35 p.m.</p> <p>14 Q. (By Mr. Poland) Dr. Gaddie, you have</p> <p>15 the Senate Current Curve Excel spreadsheet open</p> <p>16 that --</p> <p>17 A. Yes.</p> <p>18 Q. -- we were discussing? All right.</p> <p>19 This looks, to my eye at least, very different</p> <p>20 than the previous current curve, Senate Current</p> <p>21 Curve, that we had seen. Am I wrong in that?</p> <p>22 A. I don't know. I would have to look at</p> <p>23 them both. Can we open up both side by side?</p> <p>24 Q. Sure. Remember you had said before in</p> <p>25 the other one it looked like there was a band</p>
<p style="text-align: right;">Page 143</p> <p>1 Q. Let's take a look then and go into the</p> <p>2 spreadsheets themselves.</p> <p>3 A. Okay.</p> <p>4 Q. So that would be under the WRK 32587</p> <p>5 responses spreadsheets duplicated.</p> <p>6 THE WITNESS: Peter, I'm working real</p> <p>7 hard to not read your instant messages.</p> <p>8 Q. (By Mr. Poland) And so let's take a</p> <p>9 look at -- the Senate Current Curve is the</p> <p>10 first one that comes up for me. It's actually</p> <p>11 telling me that I can't open it.</p> <p>12 A. Should we try it over here?</p> <p>13 Q. Yeah.</p> <p>14 MR. EARLE: You want senate -- I'm</p> <p>15 going to close my email. Let me just jump over</p> <p>16 here for a second. I'm sorry about that.</p> <p>17 MR. POLAND: No worries.</p> <p>18 MR. EARLE: It says I can't open it</p> <p>19 either.</p> <p>20 MR. POLAND: You know, it repaired it</p> <p>21 for me. I don't know if that --</p> <p>22 MR. KEENAN: I had to click "yes."</p> <p>23 MR. POLAND: Yeah, I did, too, and it</p> <p>24 repaired it.</p> <p>25 MR. EARLE: Open and repair. It</p>	<p style="text-align: right;">Page 145</p> <p>1 that was going across the middle? We don't see</p> <p>2 that one here.</p> <p>3 A. Okay.</p> <p>4 Q. We can certainly open them up side by</p> <p>5 side if you'd like.</p> <p>6 A. Actually, if you could open the other</p> <p>7 one up where I can just look on the screen and</p> <p>8 that screen just a moment if you don't mind.</p> <p>9 Q. Oh, yeah, let me do that. So on my</p> <p>10 computer then we'll have up the Senate Current</p> <p>11 Curve that came from the WRK 32587 external</p> <p>12 hard drive. And then you've got from the WRK</p> <p>13 32587 on yours?</p> <p>14 A. Okay. Actually, the reason they're</p> <p>15 different --</p> <p>16 Q. Yes.</p> <p>17 A. If you're asking me to illuminate the</p> <p>18 difference.</p> <p>19 Q. Yes.</p> <p>20 A. If you look at this file that is on my</p> <p>21 screen, it has been sorted from strongest to</p> <p>22 weakest district. That one, if you look, is</p> <p>23 sorted by a senate district number.</p> <p>24 Q. I see. Okay.</p> <p>25 A. So if we sort that from strong to</p>

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1 weakest, it should sort itself out to look like  
2 the curve like we have here.  
3 Q. Okay. Got it. So what I did was I  
4 went through and I clicked on Composite. Would  
5 that do it?  
6 A. Well, let's see. Yeah. No, that's  
7 not it either.  
8 Q. That's not it either. Okay. All  
9 right. But it should do that?  
10 A. It does.  
11 Q. It appears to you that it's a sorting  
12 issue?  
13 A. It's a sorting issue.  
14 Q. Okay. Well, you can close out of that  
15 spreadsheet. Or I'm sorry, I'm going to close  
16 out of that spreadsheet. And I'll also close  
17 out of the other senate current curve.  
18 MR. EARLE: Close this one?  
19 MR. POLAND: Yes, you can close that  
20 one, too.  
21 Q. (By Mr. Poland) The other that I  
22 wanted to have you open on the WRK 32587  
23 responsive spreadsheets is the Tad aggressive  
24 -- I'm sorry, Tad Assertive. Although as I  
25 scroll down I see there's a Tad Assertive Curve

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1 and then there's a Tad Senate Assertive Curve  
2 I.  
3 A. Yes.  
4 Q. Do you see those right below one  
5 another?  
6 A. Yes.  
7 Q. Let's take a look at the Tad Senate  
8 Assertive Curve first.  
9 A. Okay.  
10 Q. And I'm getting the same open and  
11 repair message as I had before.  
12 MR. EARLE: I think we're all doing  
13 the same thing. That will be on the exhibit  
14 itself, the repair.  
15 MR. POLAND: That will be on the  
16 exhibit?  
17 MR. EARLE: That's what we're working  
18 off is the exhibit itself.  
19 MR. POLAND: Yes. Yes.  
20 MR. EARLE: So the record shows that  
21 is all I'm saying.  
22 Q. (By Mr. Poland) Are you there, Dr.  
23 Gaddie?  
24 A. Yes.  
25 Q. Let's leave that one up and then let's

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1 open up the Tad Senate Assertive Curve 1. And  
2 are you able to view both of those at one time?  
3 A. Yes.  
4 Q. Side by side?  
5 A. Well, side by side --  
6 Q. There is actually a way to do it if  
7 you put your cursor over the little green  
8 circle in the upper left-hand corner and you  
9 hold it, it will take up half the screen.  
10 A. Bear down on it. Oh, there we go.  
11 No. No.  
12 MR. EARLE: I did something wrong.  
13 What did I do?  
14 THE WITNESS: I don't know.  
15 MR. EARLE: I'm sorry.  
16 THE WITNESS: That's all right, Peter.  
17 I have an idea. Let's just escape out of that.  
18 Hang on.  
19 MR. POLAND: I can also have you take  
20 a look on my screen if that would be easier.  
21 THE WITNESS: I think we're getting  
22 this worked out here. Okay. So this is Curve  
23 1 and this is Curve. Okay. Yes.  
24 Q. (By Mr. Poland) Is there a difference  
25 between the Tad Senate Assertive Curve and the

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1 Tad Senate Assertive Curve 1?  
2 A. Yes, there are a set of differences  
3 that illuminate. The assertive curve has a  
4 broader range of competitive districts if you  
5 look around where it says composite or all 50.  
6 And there's a more even balance. The Assertive  
7 Curve 1 has a narrower band. Now, I -- I'm not  
8 -- okay. These are not -- I mean, if you look  
9 at the numbers inside the cells, these are not  
10 data from the same map.  
11 Q. They're not data from the same map?  
12 A. Well, I mean, the inputs can't be data  
13 from the same map because the output is  
14 different.  
15 Q. Okay.  
16 A. It's possible that this could be a  
17 saving of another map or of the baseline map  
18 and the data file name wasn't updated.  
19 Q. So there are two different maps that  
20 are portrayed on these two different S curves?  
21 A. Potentially, yeah. But these are  
22 definitely not the same district data going  
23 into computing this. These are not data for  
24 the same map.  
25 Q. Again, just from my eye, it looks like

<p style="text-align: right;">Page 150</p> <p>1 the Tad Senate Assertive Curve 1 has more safe 2 Republican districts and more safe Democratic 3 districts, too. Am I looking at that wrong? 4 A. Let's focus on a particular -- where 5 -- Counsel, where in the -- let's pick a 6 particular column to look at. So let's say we 7 look at the column that says -- 8 Q. How about Index 58, for example? 9 A. Index 58. Okay. We're getting pretty 10 far over in the skew. 11 Q. Yeah. 12 A. But, yeah, let's go over that. Index 13 58 there is only one competitive district in 14 the entire map, and it's a Democratic leaning 15 map. Now, let's recall, however, this is also 16 an estimate of the partisan performance of the 17 plan where Republicans were averaging 58% of 18 the votes statewide. That's what Index 58 19 means. 20 Q. And that reflects the way that that 21 particular map was drawn, correct? 22 A. Yes. So if we were to look over at 23 Index 50, we would discover that again there's 24 only one competitive leaning Democratic 25 district, a number of safe Democratic</p>	<p style="text-align: right;">Page 152</p> <p>1 place to break for lunch. 2 THE WITNESS: I'm doing fine if you 3 want to keep going. If you need a break, we 4 can break. 5 MR. EARLE: I think we should take a 6 lunch at some point. 7 MR. POLAND: Why don't we do it now. 8 Let's go off the record. 9 THE VIDEOGRAPHER: Going off the 10 record. The time is 12:45 p.m. 11 (Recess.) 12 THE VIDEOGRAPHER: We are back on the 13 record. The time is 12:52 p.m. 14 Q. (By Mr. Poland) Dr. Gaddie, I would 15 like to move now to a different -- one of the 16 hard drives that should be on the directory -- 17 A. Yes. 18 Q. -- of the flash drive that you've got 19 there. I would like to look at WRK 32586 20 external HD. 21 A. Okay. 22 Q. All right? And so let's open up the 23 external HD responsive spreadsheets file detail 24 report file. And let me know when you've got 25 it open.</p>
<p style="text-align: right;">Page 151</p> <p>1 districts. Most of the competitive districts 2 are leaning Republican in that map. If we look 3 at the other graphic assertive curve, which I 4 think I'm -- again, you know, I'm looking at 5 these data for the first time in four years. 6 This appears to be the baseline map or a 7 different map that's not nearly so assertive. 8 You'll notice that there are other more 9 Republican than Democratic leaning districts or 10 a sizable number of both. And while there are 11 more safe Republican than safe Democratic 12 districts, there's a sizable number of both. 13 There's a broader band of competition in the 14 assertive map than there is in the assertive 1 15 map. 16 Q. Do you know who drew the maps that 17 generated this output? 18 A. Well, I would assume since it's -- I 19 would assume since it's a senate map it would 20 have been Mr. Ottman. 21 Q. And since it says Tad Senate 22 Assertive? 23 A. Right. Yeah. 24 Q. Let's close out of those then. 25 MR. POLAND: This might be a good</p>	<p style="text-align: right;">Page 153</p> <p>1 MR. EARLE: We're open. 2 Q. (By Mr. Poland) All right. I would 3 like you to look at Row 4. Do you see there's 4 a file name Wisconsin Correlates.xlsx? 5 A. Yes. 6 Q. All right. Now, if you scroll over to 7 the right, over to author, you'll see that the 8 author is listed as CAS build. Do you see 9 that? 10 A. Yes. 11 Q. And that's you, correct? 12 A. Yes. 13 Q. And it says it was last saved by A 14 Foltz. That's Adam Foltz, correct? 15 A. Yes. 16 Q. And then the created date indicates it 17 was April 15, 2011, correct? 18 A. Yes. 19 Q. And that's during the time that you 20 were in Madison, right? 21 A. Correct. 22 Q. Let's take a look then at that 23 particular spreadsheet. 24 A. Yes. 25 Q. And do you know how to pull that up on</p>

<p style="text-align: right;">Page 154</p> <p>1 the -- from the flash drive?  2 A. I'm letting Peter fly.  3 Q. All right.  4 MR. EARLE: Give me the name again.  5 THE WITNESS: Wisconsin Correlates.  6 MR. POLAND: Wisconsin Correlates.  7 MR. EARLE: XLXS?  8 MR. POLAND: Uh-huh.  9 A. Okay. We're there.  10 Q. (By Mr. Poland) All right. I'm almost  11 there.  12 Now, this is not an S curve, is it?  13 A. No.  14 Q. What is this particular file?  15 A. You recall previously we discussed a  16 file that was in the documents I gave you all  17 that were the Wisconsin correlates, the large  18 Pearson correlates data set. This is just a  19 re-rendering of that same file. So these are  20 the same data that were in that file. So this  21 is a table of Pearson's correlates between  22 different statewide elections and elections for  23 assembly again at the ward VTD precinct level.  24 Q. Is this a file that you had intended  25 again as one of the visual aids that would be</p>	<p style="text-align: right;">Page 156</p> <p>1 maps by the map drawers and one was a map that  2 was an assertive map, was the term that they  3 used.  4 Q. Do you know what they meant by  5 "assertive?"  6 A. I would assume politically assertive.  7 Q. Meaning more aggressively pro  8 Republican?  9 A. Yes.  10 Q. If you look at -- again, this is Row  11 18. If you look over at the author, you'll see  12 that you're identified as the author?  13 A. Yes.  14 Q. And it --  15 A. Actually, that would be Column H.  16 Yes.  17 Q. Yes, Column H, correct. And you'll  18 see that it was last saved by Adam Foltz,  19 correct?  20 A. Yes.  21 Q. And it indicates it was created on May  22 20, 2011, correct?  23 A. Correct.  24 Q. And that was during the time that you  25 were in Madison, right?</p>
<p style="text-align: right;">Page 155</p> <p>1 printed out and displayed?  2 A. Yes. In fact, this is probably the  3 version that was printed out and displayed.  4 Q. Do you recall again who was there when  5 it was printed out and displayed in the map  6 room?  7 A. Again, Mr. Handrick and I looked at  8 it. I would assume Mr. Foltz and Mr. Ottman.  9 Q. Okay. The next -- you can close out  10 of that spreadsheet.  11 The next row I wanted you to turn to  12 in the external HD Responsive Spreadsheet File  13 Detail Report is Row 18.  14 A. Okay.  15 Q. Tell me whenever you're there.  16 A. Okay. We're there.  17 Q. Do you see that the file name ends  18 with composite_joe_assertive_curve.xlsx?  19 A. Yes.  20 Q. Does the "Joe" there refer to Joe  21 Handrick?  22 A. Yes.  23 Q. And what is meant by "assertive  24 curve?"  25 A. There was a characterization of some</p>	<p style="text-align: right;">Page 157</p> <p>1 A. Yes.  2 Q. Let's open up that spreadsheet then.  3 A. Okay.  4 Q. This is Composite Joe Assertive Curve.  5 A. Yes.  6 Q. All right. And do you have that up in  7 front of you? Do you have it up in front of  8 you?  9 A. Yes.  10 Q. All right. Do you recall this  11 particular plan that generated this S curve?  12 A. I recall that there was -- I recall  13 that there was a plan. Details of it I can't  14 tell you, but I recall generating this curve  15 off of the data from this plan, yes.  16 Q. All right. Was this plan in  17 particular compared to any other plan that you  18 know of?  19 A. Again, they may have compared it to  20 other plans. They may have compared it to the  21 baseline plan.  22 Q. When you were present?  23 A. No.  24 Q. No. Do you know why Joe Handrick  25 would have been creating plans as opposed to --</p>



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1 actually, strike that question.  
2 Is this for the -- this is for the  
3 assembly, correct?  
4 A. Judging by the number of districts,  
5 this has to be an assembly map, yes.  
6 Q. Do you know why Mr. Handrick would  
7 have been drawing a map that was an assertive  
8 map?  
9 A. I don't know. I guess he was drawing  
10 an assertive map.  
11 Q. Okay. Did you talk to him at all  
12 about -- discuss with him the assertive map  
13 that he drew?  
14 A. Well, I mean, I talked with him about  
15 this product. We discussed the skew of the  
16 map, the Republican leading nature of it, how  
17 strong it was moving in one direction or the  
18 other and the responsiveness. I can't recall  
19 details, but when we generate a visual like  
20 this you describe what's going on.  
21 Q. Do you recall printing this particular  
22 map and discussing it with Mr. Handrick?  
23 A. I don't know. It may have been  
24 printed off. I don't recall.  
25 Q. Do you know how this particular map

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1 compares to the assembly districts that were  
2 finally adopted in Act 43?  
3 A. No.  
4 Q. If you go back then to the  
5 Spreadsheets File Detail Report.  
6 MR. EARLE: Do you want to keep this  
7 one open?  
8 MR. POLAND: Sorry?  
9 MR. EARLE: Do you want to keep this  
10 one open?  
11 MR. POLAND: Yes, please do keep that  
12 open. Thank you.  
13 Q. (By Mr. Poland) Next is -- I would  
14 like you to look at Row Number 20. Actually,  
15 you know what? While we've got that one open,  
16 let's jump all the way down to 32.  
17 A. From the spreadsheet?  
18 Q. On the spreadsheet, yeah.  
19 MR. KEENAN: Which spreadsheet?  
20 MR. POLAND: This is the external --  
21 this is the WRK 32586 External HD Responses  
22 Spreadsheets File Detail Report.  
23 Q. (By Mr. Poland) And so if we go down  
24 to Row 32 you'll see there is a file with a  
25 file path that says Composite Joe --

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1 Composite\_Joe\_Base\_Curve.xlsx. Do you see  
2 that?  
3 A. Yes.  
4 Q. All right. And if you scroll over to  
5 the right under Author, it's Column H, you'll  
6 see that you're identified as the author,  
7 correct?  
8 A. Yes.  
9 Q. And last saved by Adam Foltz, correct?  
10 A. Yes.  
11 Q. And created on May 28, 2011, right?  
12 A. Yes.  
13 Q. All right. So I would like you to  
14 open that one up and let's have that one open  
15 next to the Joe Assertive Curve.  
16 A. I'm going to take a moment and --  
17 Q. Reorient them?  
18 A. -- reorient these so that we can draw  
19 some --  
20 Q. Do you know how to make it so you can  
21 split the screen?  
22 A. Yeah.  
23 Q. Okay.  
24 A. These were created on a Mac. So  
25 that's why it says Ronald Keith Gaddie CAS

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1 build, just to clarify. That will save us a  
2 question later. I'm sorry, I didn't mean that  
3 smarmy.  
4 Q. No, no, no. No offense taken.  
5 A. You know, I'll say after the many,  
6 many days we spent doing this before I think we  
7 -- okay. We can actually do it this way and it  
8 will serve our purpose. That was not it, no.  
9 MR. EARLE: Yeah, if you just pull it  
10 down there on the screen.  
11 THE WITNESS: We're almost there,  
12 Counselor.  
13 A. I'm trying to figure out why they're  
14 not scaling the same way. Okay. This is good  
15 enough for us to go. Okay, Counselor.  
16 Q. (By Mr. Poland) Okay. You have both  
17 of the spreadsheets open, the Joe Base Curve  
18 and the Joe Assertive Curve?  
19 A. Yes.  
20 Q. All right. Do you recall ever having  
21 these two files open next to each other and  
22 looking at them next to each other?  
23 A. I don't. I mean, it's possible, but I  
24 don't recall having them open next to each  
25 other.

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1 Q. Okay. What does the Joe -- how does  
2 the Joe Assertive Curve compare to the Joe Base  
3 Curve?  
4 A. Okay. Well, if we look at the Joe  
5 Base Curve, we've got actually a fairly steady  
6 almost 45 degree line running through the 50/50  
7 mark in the district. So at district 50 --  
8 rather at the 50th district in the rank order  
9 and at the 50% vote, they appear to intersect.  
10 The share of competitive districts actually  
11 appears to remain in similar balance, although  
12 there were more Democratic competitive  
13 districts on the base map than there are on the  
14 assertive curve. But unlike in the base map,  
15 the number of competitive districts continue  
16 forward as the partisan balance in the state  
17 moves more heavily Republican.  
18 The only other difference is that  
19 there is a more rapid shift in terms of safe  
20 districts for the Republicans that occurs at  
21 what appears to be about 53% of the votes  
22 statewide, and it doesn't occur until about 54  
23 or 55% of the vote on the baseline map. So  
24 there is some shift in the skew of the map  
25 between the base map and the assertive curve.

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1 Q. Okay. And again, you don't know --  
2 these are for assembly districts, correct?  
3 A. These are for the assembly districts,  
4 yes.  
5 Q. And you don't know how the maps that  
6 are portrayed in these particular S curves, how  
7 they relate to what eventually was adopted in  
8 Act 43?  
9 A. I don't know if these were implemented  
10 or not.  
11 Q. Did you ever have any discussions with  
12 Mr. Handrick where you talked about the  
13 comparison between the assertive curve and the  
14 base map?  
15 A. I'm trying to recall if I did or not.  
16 Again, Doug, it's been four years.  
17 Q. I understand. I would like to go back  
18 then to the File Detail Report Spreadsheet.  
19 MR. EARLE: Do you want to keep these  
20 open?  
21 MR. POLAND: No, you can close those.  
22 MR. EARLE: Okay.  
23 Q. (By Mr. Poland) And I think that the  
24 last one that I wanted to look at on this, I  
25 think -- let's see. If you look in Row Number

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1 20, this is the team map curve.xlsx.  
2 A. Uh-huh.  
3 Q. And if you scroll over to Author  
4 you'll see again you were the author.  
5 A. Right.  
6 Q. And then you will see it was last  
7 saved by Adam Foltz.  
8 A. Yes.  
9 Q. And the date there June 14, 2011,  
10 correct?  
11 A. Correct.  
12 Q. Again, that coincides with the time  
13 that you were in Madison, correct?  
14 A. That's correct.  
15 Q. Let's open up that -- well, actually,  
16 before we do that, do you remember -- well,  
17 strike that.  
18 Do you know whether the name "team map  
19 curve" has any significance?  
20 A. Again, it's a vague recollection, but  
21 I would assume this would be a final version of  
22 a map that was agreed to by the mapmakers.  
23 Q. So let's --  
24 A. I don't know. But if I recollect,  
25 then that would be the case.

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1 Q. So let's open that one up.  
2 MR. EARLE: Where did you find that?  
3 You have good eyes.  
4 MR. POLAND: Where did you find it?  
5 MR. EARLE: Down about two-thirds.  
6 MR. POLAND: They might be arranged  
7 differently in there. There we go. There it  
8 is. Yeah, team map curve.  
9 Q. (By Mr. Poland) Okay. Do you have  
10 that up in front of you then?  
11 A. Yes, I do.  
12 Q. All right. Does this refresh your  
13 recollection at all about what "team map curve"  
14 may be referring to?  
15 A. It doesn't do anything to refresh my  
16 recollection beyond what I've said previously.  
17 But given the timing of the map and the nature  
18 of the process, I would assume this would be a  
19 map that they would have arrived at, yeah.  
20 Q. And this is for the assembly  
21 districts, correct?  
22 A. Yes, it is.  
23 Q. Can you make a comparison between the  
24 Team Map Curve and then the Joe Base Map Curve  
25 that we just looked at?

<p style="text-align: right;">Page 166</p> <p>1 A. The Base Map Curve?  2 Q. Yes.  3 A. Okay. Well, we're going to need to  4 pull the Base Map Curve back up. Actually, if  5 you'll just go File, Open and reset it. It  6 should be up there.  7 MR. EARLE: Base Map Curve. I'm  8 sorry. There you go. Do you want me to make  9 it smaller?  10 THE WITNESS: If you don't mind.  11 There it is.  12 Q. (By Mr. Poland) And let me know when  13 you've got them both on the screen where you  14 can view them.  15 A. All right, Doug. We're ready.  16 Q. Okay. How does the Team Map Curve  17 compare to the Joe Base Curve?  18 A. Again, the Team Map Curve again  19 preserves a large range of competitive  20 districts when the map is near 50 -- when the  21 state is divided nearly 50/50. It maintains  22 the existence of competitive districts across  23 both parties as the partisan balance shifts  24 right or left as close to the base map where  25 the Democratic districts and also the</p>	<p style="text-align: right;">Page 168</p> <p>1 Okay. The team map -- again, this is an ocular  2 test, an ocular examination. And we've got  3 some scaling issues with regard to the size of  4 the cells, so I'm trying to correct for that.  5 The team map is not quite as  6 aggressive in creating safe Republican seats as  7 the assertive curve map was. One of the things  8 we take note of -- again, as I eyeball this --  9 is you don't get to having a majority of safe  10 Republican seats under the map until you get to  11 54% statewide vote. And that has reached a 52%  12 statewide vote under the assertive map. There  13 is also a wider band of competitive districts  14 at 51% Republican statewide as compared to the  15 assertive curve.  16 So the assertive map, the Joe  17 Assertive Curve Map, is more Republican in  18 terms of the district, distribution and  19 competitiveness than the team map in looking at  20 these two visuals.  21 Q. Okay. And again, you don't know which  22 of these ultimately was reflected -- or if  23 either of them reflected the final map in Act  24 43 for the assembly districts?  25 A. I don't recall. As I indicated, by</p>
<p style="text-align: right;">Page 167</p> <p>1 Republican districts tend to narrow in terms of  2 the number of competitive seats available. And  3 again, at 53% it appears that there is an  4 uptick in the shift of safe districts towards  5 the Republicans.  6 Q. Is the Team Map Curve a more pro  7 Republican map than a pro Democrat map?  8 A. Let me look at it for a minute. Okay.  9 At 50% of the expected vote statewide, of the  10 99 assembly districts it appears that 55 of  11 them are either safely or leaning Republican  12 with 21 of those seats being competitive  13 Republican districts. At 53% Republican  14 statewide vote of the 99 assembly districts, 46  15 of them appear to be districts that we would  16 term safely Republican based upon the estimate.  17 So there is a Republican lean in this map, yes.  18 Q. And do you know how the -- can you  19 compare the team map to the Joe aggressive or  20 Joe assertive, I should say?  21 A. I'm going to need to open it back up,  22 so bear with me just a moment. Counselor, give  23 me just a moment.  24 Q. Absolutely.  25 A. I'm orienting to be able to see.</p>	<p style="text-align: right;">Page 169</p> <p>1 this point most of my effort was on the  2 majority/minority districts.  3 Q. Right.  4 A. All my effort was on the  5 majority/minority districts at this point.  6 Q. Okay. So I would like you now to go  7 to the last of the files that we have, the WRK  8 32586.  9 A. Okay.  10 Q. And let's take a look at the  11 Responsive Spreadsheets File Detail Report.  12 MR. EARLE: For the external hard  13 drive?  14 MR. POLAND: No, this is for 32586.  15 MR. EARLE: Okay.  16 MR. POLAND: And let me know when  17 you're there.  18 MR. EARLE: We're there.  19 Q. (By Mr. Poland) I would like you to  20 look at rows 6 through 13. And do you see  21 those have file names that are somewhat similar  22 to what we just looked at?  23 A. Yes.  24 Q. There's an Adam Assertive Curve, a  25 Composite Current Curve, a Joe Assertive Curve</p>

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1 and a Joe Base Curve, correct?  
2 A. Yes.  
3 Q. Do those names hold any significance  
4 for you?  
5 A. I assume that Adam is Mr. Foltz and  
6 that Joe is Mr. Handrick.  
7 Q. All right. And Mr. Foltz, again, is  
8 the legislative aide for the assembly in the  
9 redistricting process, correct?  
10 A. I believe so, yes.  
11 Q. If you scroll over to the right, over  
12 to the author, you'll see that you are the  
13 author of each of these files that are  
14 identified in rows 6 through 13, correct?  
15 A. That's correct.  
16 Q. And it indicates they were last saved  
17 by Adam Foltz?  
18 A. That is correct.  
19 Q. And that was on May 28, 2011 when you  
20 were in Madison, correct?  
21 A. Yes.  
22 Q. And then let's go down a little bit  
23 further, down to rows 33 through 36. And again  
24 you see we have a Team Map Curve?  
25 A. Yes.

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1 Q. And if you scroll over to the right  
2 you'll see that you're listed as the author.  
3 And again, they were last saved by Mr. Foltz?  
4 A. That's correct.  
5 Q. And that was on June 14, 2011?  
6 A. Yes.  
7 Q. And then if you go down to rows 40 and  
8 41 you'll see Wisconsin Correlates as a file  
9 name?  
10 A. Yes.  
11 Q. And CAS build as the author. And that  
12 was you as well, correct?  
13 A. Yes.  
14 Q. And Mr. Foltz is the one who last  
15 saved them?  
16 A. Yes.  
17 Q. And those were created on April 15,  
18 2011, right?  
19 A. That's correct.  
20 Q. I would like to take you up to a  
21 different file. I would like to take you up to  
22 Row 20. And this is a planned comparisons --  
23 I'm sorry, Planned Comparisons.xlsm. Do you  
24 see that?  
25 A. Yes.

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1 Q. Let's go ahead and open that one up.  
2 MR. EARLE: That's xlsm?  
3 MR. POLAND: Correct. Correct. I've  
4 got some printouts for this one.  
5 Q. (By Mr. Poland) By the way, I know  
6 that there are some file extensions that are  
7 xlsm and some that are.xlsx. Do you know what  
8 the difference is between those?  
9 A. I have no idea.  
10 Q. You know, I've got some printouts of  
11 these things, too. So we can mark them.  
12 MR. KEENAN: She said lunch is here.  
13 MR. POLAND: Oh, it's here? Let's  
14 break then.  
15 THE WITNESS: Sure. Okay.  
16 MR. POLAND: This would be a good  
17 place to break.  
18 THE VIDEOGRAPHER: Going off the  
19 record. The time is 1:19 p.m.  
20 (Recess.)  
21 THE VIDEOGRAPHER: We're back on the  
22 record. The time is now 1:42 p.m.  
23 (Exhibit No. 39 marked.)  
24 Q. (By Mr. Poland) Dr. Gaddie, just  
25 before we broke for lunch I had asked you to

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1 take a look at a spreadsheet that is identified  
2 on the WRK 32586 Responsive Spreadsheets File  
3 Detail Report.  
4 A. Yes.  
5 Q. On Line Number 20, the file name is  
6 Planned Comparison.xlsm. Do you see that?  
7 MR. EARLE: Oh, you're on the  
8 spreadsheet. I'm sorry.  
9 A. Yeah, we're on it.  
10 Q. (By Mr. Poland) Okay. You're on it.  
11 And if you scroll over to the right, do you see  
12 that it was authored by Adam Foltz?  
13 A. Yes.  
14 Q. And it was authored on --  
15 MR. EARLE: 5/2.  
16 Q. (By Mr. Poland) -- 5/2. Yeah, it was  
17 created on 5/2. There is -- it looks like  
18 there are a couple of different -- it says  
19 office created date. It's got 5/2. If you  
20 scroll back over to the left you'll see it has  
21 a created and it says central and it says  
22 5/9/2011. And I'm just saying this for the  
23 record.  
24 A. No, I understand.  
25 Q. Okay. I'm just trying to orient

<p style="text-align: right;">Page 174</p> <p>1 myself here. 2 MR. EARLE: Now I see. 3 MR. POLAND: Do you see what I'm 4 talking about? 5 MR. EARLE: Uh-huh. 6 Q. (By Mr. Poland) All right. So I would 7 like to ask you some questions about this 8 particular spreadsheet. I've actually printed 9 some copies. We've printed some copies of this 10 one up and maybe that will save us the problem 11 of having to pull it up on the screen. 12 MR. EARLE: Do you want to correct the 13 error on the red writing? 14 MR. POLAND: Yes, I will. 15 Q. (By Mr. Poland) I'm handing you an 11 16 by 17 printout of it. Unfortunately, the rest 17 of us are going to have to look at something a 18 little bit smaller. Hopefully our eyes are up 19 to the challenge. 20 So Dr. Gaddie, in front of you we've 21 put a printout of the spreadsheet we were just 22 discussing. Written in red at the top of the 23 Page 1 of Exhibit 39 you'll see it identifies 24 the file name, Plan Comparisons.xlsm. Do you 25 see that?</p>	<p style="text-align: right;">Page 176</p> <p>1 Q. I would like for you to look at the 2 very first page of Exhibit 39. And up at the 3 top there's a table and it says 4 MilwaukeeGaddie_4_16_11_V1_B. Do you see that? 5 A. Yes. 6 Q. All right. Does that particular file 7 name have any significance for you? 8 A. No. 9 Q. All right. And again, this is a 10 spreadsheet that we saw that Adam Foltz had 11 created. 12 A. Yes. 13 Q. And we have assembly districts on the 14 left and senate districts on the right, 15 correct? 16 A. Yes. 17 Q. Is there a particular name that you 18 would give to a file that appears like this or 19 looks like this? 20 A. Well, again, I would have to be 21 interpreting into it. And again, I'm working 22 without memory from Wisconsin. But in 23 eyeballing this, I would assume that 24 "Milwaukee" means that there's a separate 25 breakdown for the districts that are in</p>
<p style="text-align: right;">Page 175</p> <p>1 A. Yes. 2 Q. The next line says created -- 3 handwritten in "created 5/9/11, 5:39 p.m." Do 4 you see that? 5 A. Yes. 6 Q. And that corresponds to Column C on 7 the Responsive Spreadsheets File Detail Report 8 that we were just going through. 9 A. Do you need me to confirm that? 10 Q. No, I don't need you to. This is just 11 for all of our reference. 12 A. Very good. 13 Q. And then below that it says 14 "accessed." And on the copy that everybody had 15 written in red it said 4/27/11. That was our 16 mistake. It should actually be 4/27/12. And 17 again, that's in the accessed -- that's Column 18 D of the spreadsheet. And then just below that 19 it says "modified." And we had handwritten in 20 4/27/11. Again, that's wrong. That should be 21 4/27/12. So we've corrected that in the blue 22 in the top. 23 A. Very good. 24 Q. I just wanted to make that clear. 25 A. Thank you.</p>	<p style="text-align: right;">Page 177</p> <p>1 Milwaukee County, although I cannot be certain 2 of that. 3 "Gaddie," I would assume that they are 4 using the measure for partisanship that I had 5 developed for them to index and that's what's 6 being indicated in the current and new columns 7 on percentage. 4/16/11, I don't know. That 8 could be a date. That could be April 16, 2011. 9 V1 could be Version 1. B could be an update to 10 Version 1, so it would be a subsequent update 11 of the initial version of the table that was 12 created. 13 But again, I'm just interpreting from 14 the data. I don't know that to be the case. 15 Q. When you were working as a consultant 16 to or with Mr. Ottman and Mr. Foltz and 17 Handrick, did they ever show you any kind of a 18 spreadsheet that looked like this? 19 A. I may have seen something like this, 20 yes. 21 Q. Do you specifically recall that? 22 A. I don't specifically recall it, but 23 you encounter data like this all the time doing 24 this work. 25 Q. I would like you to look down. There</p>

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1 are two boxes in the bottom. You'll see one  
2 that says Current Map and then one says New  
3 Map. Do you see that?  
4 A. Yes.  
5 Q. And so let's look under the box that  
6 says current map. Do you see it says "Safe GOP  
7 55% plus," and then it's got "Assembly 27" and  
8 "Senate 7." Do you see that?  
9 A. Yes.  
10 Q. And then just below it says, "Lean GOP  
11 52.1 to 54.9%. Assembly 13, Senate 8." And  
12 then below that, "Total GOP seats" and then in  
13 parentheses it says, "Safe plus lean" and it  
14 has 40 of 15. Do you see that?  
15 A. Yes.  
16 Q. What is that measuring?  
17 A. Okay. This actually -- this is  
18 helping me get a recollection. There are a  
19 variety of ways of categorizing a legislative  
20 district. There are safe districts. There are  
21 leaning districts. There are swing districts.  
22 And again, I'm reaching into the  
23 recesses of conversation, but I suspect that  
24 Mr. Foltz and I probably had a conversation  
25 about how would you characterize these data to

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1 take them down to a manageable scale for people  
2 to understand the impact. And one way of doing  
3 this -- and we've done this with litigation as  
4 well and in political science scholarship.  
5 Safe districts were routinely characterized as  
6 districts that are over 55% for one party or  
7 the other. Lean districts are the districts  
8 that are above 50% but below 55%.  
9 Because of the potential for -- one of  
10 the other things we know from political science  
11 research is districts that fall in a 51, 49,  
12 52, 48 range are often the most competitive.  
13 So a breakout like this allows you a shorthand  
14 for understanding the districts that are safe,  
15 districts that have the potential to be  
16 competitive but lean towards one party, and  
17 then those districts that are truly in play,  
18 truly competitive districts, those that are in  
19 the 48 to 52% range in the case of this table.  
20 So that's what's being told here.  
21 Q. Okay. Now, just below what we had  
22 looked at with the safe GOP, lean GOP and total  
23 GOP, you get into -- just below that it says,  
24 "Swing 48 to 52%" and then it says, "Assembly  
25 19. Senate 5." Do you see that?

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1 A. Yes.  
2 Q. All right. And again, what does the  
3 "swing" correspond to?  
4 A. These would be districts where the  
5 estimate from the regression model put the  
6 partisan -- the point estimate of the partisan  
7 vote somewhere between 48 and 52% of the vote  
8 let's say for the Republican party. Okay? And  
9 19 corresponds to the number of districts in  
10 the assembly that fell in that range. Five  
11 corresponds to the number of districts in the  
12 senate that fell in that range for the current  
13 map.  
14 Q. Okay. Were you asked specifically to  
15 look at the number of swing districts?  
16 A. I don't recall. I mean, you talk  
17 about these things when you talk about  
18 districts. How can you categorize information  
19 to present it to the decision makers. There  
20 was doubtlessly a conversation about this.  
21 Q. Have you ever heard the term swing  
22 analysis before?  
23 A. Yeah.  
24 Q. All right. Were you asked to perform  
25 a swing analysis as part of your work in the

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1 2011 redistricting?  
2 A. The closest you'll see to a swing  
3 analysis is the curve maps that we just looked  
4 at. That's representation of how a swing might  
5 occur, but it's not a formal swing analysis,  
6 no.  
7 Q. What would you have to do to undertake  
8 a formal swing analysis that wasn't represented  
9 in the S curves that you --  
10 A. Well, it's --  
11 Q. -- created?  
12 A. Doug, we just did it there. It took  
13 us five hours, but I just talked over you. Ask  
14 the question again, please. I'm sorry.  
15 Q. I'm sorry. What would you -- to do a  
16 full swing analysis, what will you have to do  
17 above and beyond the S curves that you  
18 generated?  
19 A. Well, what you would do is -- part of  
20 what you would do with the swing analysis is  
21 you would actually have a graphic  
22 representation of the curve off of the model.  
23 So at 50% of the votes we expect to see how  
24 many seats for one party or the other. As we  
25 increase the skew of the votes state wide for

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1 one party or the other, how do the number of  
2 seats that you retain, how do they gain. You  
3 might model this off of different models. You  
4 might use reconstituted elections to see if  
5 there are sensitivities. And then you would  
6 graphically plot it. And one of the  
7 comparisons you might make is to compare that  
8 against a variety of different curves. A  
9 straight 45 degree curve, an S curve.  
10 What you're looking -- and, again,  
11 it's been years since I've messed with  
12 something like that. But a swing analysis,  
13 what you're doing is you're looking for --  
14 you're looking for responsiveness. Okay? And  
15 you're looking for -- well, you're looking for  
16 responsiveness and then you're looking for also  
17 skew outside the range of what you might expect  
18 given the ordinary bias of a single member  
19 district system.  
20 Q. Do your S curves at all provide any  
21 information on the durability of the districts  
22 over time?  
23 A. No.  
24 Q. So back to Exhibit Number 39.  
25 A. Yes.

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1 Q. Then at the bottom we see in the same  
2 box that we're in, Current Map, we see a lean  
3 dem, a safe dem and then total dem seats,  
4 right?  
5 A. Yes.  
6 Q. All right. Now, there is a box right  
7 next to it that says New Map. Do you see that?  
8 A. Yes.  
9 Q. And then there are also protections.  
10 And it looks like in New Map we've got the  
11 number of safe GOP seats are increasing from 27  
12 to 34. In the senate from seven to ten. Lean  
13 GOP they're going up 13 to 18 and the senate is  
14 staying the same. So the total GOP seats, safe  
15 plus lean, are increasing from 40 to 52 and 15  
16 to 18. Do you see that?  
17 A. Yes.  
18 Q. All right. Do you have any knowledge  
19 about whether the -- that kind of analysis was  
20 employed in creating what became the final map  
21 for Act 43?  
22 A. That kind of analysis? What kind of  
23 analysis?  
24 Q. I'm sorry. The analysis looking at  
25 the safe, lean and then total GOP seats from a

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1 current map to a new map.  
2 A. I don't know if it was employed or  
3 not, but certainly the analysis was available.  
4 Q. And as reflected on Exhibit 39?  
5 A. Yes.  
6 Q. And so when we look at dems under New  
7 Map, we see that from the Current Map to the  
8 New Map, the lean dem seats decrease from seven  
9 to six in the assembly and from three to two in  
10 the senate. And the safe dem decreased from 33  
11 to 32 in the assembly and actually go up by one  
12 in the senate, correct?  
13 A. Correct.  
14 Q. And so we see a total dem seats  
15 decreasing from 40 to 38 in the assembly and  
16 staying the same in the senate, right?  
17 A. Yes.  
18 Q. Would you turn to the second page of  
19 Exhibit 39, please?  
20 A. Yes.  
21 Q. Up at the top we have what appears to  
22 be a file name or at least a header that says  
23 Statewide2\_Milwaukee\_Gaddie and then the same  
24 \_4\_16\_11\_V1\_B. Do you see that file?  
25 A. Yes.

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1 Q. And again, does that have any meaning  
2 to you?  
3 A. Other than what I might infer that I  
4 described previously that it's a set of terms  
5 designed to identify elements and inputs in the  
6 map and the timing of the map.  
7 Q. Okay. So if we look at the --  
8 actually, if you would turn to the third page  
9 then.  
10 A. Sure.  
11 Q. And you see up at the top it says  
12 Final Map?  
13 A. Yes.  
14 Q. Do you have any information as to  
15 whether this reflects the final map that was  
16 enacted in Act 43?  
17 A. No.  
18 Q. Again, we see the same kind of  
19 analysis as we did in the previous two pages,  
20 correct?  
21 A. Yes.  
22 Q. All right. If we compare the number  
23 of seats, the total GOP seats, safe plus lean,  
24 in what's identified as the Final Map, we see  
25 it's 52 in the assembly and 17 in the senate,

<p style="text-align: right;">Page 186</p> <p>1 correct?</p> <p>2 A. Yes.</p> <p>3 Q. And then we've got Swing, we've got</p> <p>4 ten. Or New Swing it says. We've got ten in</p> <p>5 the assembly, three in the senate, right? And</p> <p>6 then the total dem seats, strong plus lean,</p> <p>7 we've got 37 in the assembly and 13 in the</p> <p>8 senate, correct?</p> <p>9 A. Yes.</p> <p>10 Q. All right. And then I think we must</p> <p>11 have just gotten two copies of the same page</p> <p>12 there in the Final Map.</p> <p>13 A. Yeah.</p> <p>14 Q. And then the last page of this says</p> <p>15 Custom Map. Do you see that?</p> <p>16 A. Yes.</p> <p>17 Q. Does that have any meaning to you at</p> <p>18 all?</p> <p>19 A. Well, I recall -- I mean, I recall</p> <p>20 from the 2002 redistricting the Kessler map</p> <p>21 from it. I'm trying to remember if there was a</p> <p>22 Kessler map presented in the most recent</p> <p>23 litigation or not. I don't recall. But I</p> <p>24 would assume that this represents an</p> <p>25 alternative map presented by a different</p>	<p style="text-align: right;">Page 188</p> <p>1 are 15 in the senate, 13 total dem seats in the</p> <p>2 senate with five swing, correct?</p> <p>3 A. Yes.</p> <p>4 Q. And if you go to New Map, those</p> <p>5 numbers change as indicated in the box at the</p> <p>6 bottom, correct?</p> <p>7 A. Correct.</p> <p>8 Q. Any map that you ever saw were you</p> <p>9 ever asked to do any kind of analysis on a</p> <p>10 Kessler Map?</p> <p>11 A. None that I can recall.</p> <p>12 Q. Let's go ahead and mark this. I've</p> <p>13 got big ones for everybody. Let's mark this as</p> <p>14 -- are we on 40 now?</p> <p>15 THE REPORTER: Yes.</p> <p>16 (Exhibit No. 40 marked.)</p> <p>17 Q. And let's mark this one that we can</p> <p>18 actually read as Exhibit 41.</p> <p>19 (Exhibit No. 41 marked.)</p> <p>20 Q. Dr. Gaddie, let's start with Exhibit</p> <p>21 Number 40. That's the smaller of the two</p> <p>22 sheets. Do you have that in front of you?</p> <p>23 A. All I have is Exhibit 41.</p> <p>24 Q. Oh, I'm sorry. I asked the court</p> <p>25 reporter to hold on to it.</p>
<p style="text-align: right;">Page 187</p> <p>1 litigant or a different stakeholder in the</p> <p>2 process.</p> <p>3 Q. Okay. Now, this, at least according</p> <p>4 to the metadata, this is created in 2011,</p> <p>5 correct?</p> <p>6 A. I'm on paper.</p> <p>7 Q. Oh, yes. I'm sorry. We looked at the</p> <p>8 file. We have looked in the file. So we</p> <p>9 looked at the metadata.</p> <p>10 MR. EARLE: Let me go back to it.</p> <p>11 A. Yes.</p> <p>12 Q. (By Mr. Poland) All right. And so if</p> <p>13 we -- the Baldus litigation hadn't actually</p> <p>14 started yet in May of 2011, correct?</p> <p>15 A. Yes. I think that's right, yeah.</p> <p>16 Q. If you look at on the page that has</p> <p>17 Kessler Map at the top, if you look under</p> <p>18 Current Map, the Kessler Map has total GOP</p> <p>19 seats in the assembly at 40 and total dem seats</p> <p>20 in the assembly at 40 as well, correct?</p> <p>21 A. Yes.</p> <p>22 Q. And swing is 19?</p> <p>23 A. Yes.</p> <p>24 Q. And then in the senate, again under</p> <p>25 Current Map, there are -- the total GOP seats</p>	<p style="text-align: right;">Page 189</p> <p>1 A. Thank you.</p> <p>2 Q. My apologies. We've handed you two</p> <p>3 documents, one has been marked Exhibit 40 and</p> <p>4 one is 41. I would like you to look at Exhibit</p> <p>5 40 first.</p> <p>6 A. Okay.</p> <p>7 Q. All right. And do you see that</p> <p>8 Exhibit Number 40 was marked as an exhibit in</p> <p>9 your deposition in 2012?</p> <p>10 A. Yes.</p> <p>11 Q. All right. Do you recall being</p> <p>12 questioned about Exhibit 40?</p> <p>13 A. I don't recall, but -- I don't recall,</p> <p>14 but I must have.</p> <p>15 Q. Okay. Now I'm going to ask you to</p> <p>16 look at Exhibit Number 41.</p> <p>17 A. Right.</p> <p>18 Q. And do you see that both Exhibit</p> <p>19 Number 40 and Exhibit Number 41 in the lower</p> <p>20 right-hand corner say -- they've got a Bates</p> <p>21 number, Foltz 001065?</p> <p>22 A. Yes.</p> <p>23 Q. All right. So Exhibit 41 is just a</p> <p>24 much, much more legible copy of Exhibit 40,</p> <p>25 isn't it?</p>



<p style="text-align: right;">Page 190</p> <p>1 A. Yes.</p> <p>2 Q. All right. You can set Exhibit 40 to</p> <p>3 the side. We won't try to worry about looking</p> <p>4 at that.</p> <p>5 If you look up at the top of Exhibit</p> <p>6 Number 41.</p> <p>7 A. Yes.</p> <p>8 Q. Do you see that the heading for</p> <p>9 Exhibit Number 41 is the same as the heading at</p> <p>10 the top of Exhibit 39, correct?</p> <p>11 A. Yes.</p> <p>12 Q. So that's the Milwaukee Gaddie 41611</p> <p>13 V1 B, correct?</p> <p>14 A. Yes.</p> <p>15 Q. Now, there's some extra data that's</p> <p>16 presented in Exhibit 41 that does not appear in</p> <p>17 that first page of Exhibit 39, correct?</p> <p>18 A. Yes.</p> <p>19 Q. So if you look up at the top you'll</p> <p>20 see 2002, 2004, 2006, 2008, 2010. Do you see</p> <p>21 that?</p> <p>22 A. Yes.</p> <p>23 Q. All right. What do those numbers</p> <p>24 indicate?</p> <p>25 A. Okay. Those are earmarkers at the top</p>	<p style="text-align: right;">Page 192</p> <p>1 Q. Is this part of the work that you did</p> <p>2 to help build a partisan score for the assembly</p> <p>3 districts?</p> <p>4 A. In terms of building a partisan score,</p> <p>5 no. In terms of building a partisan history,</p> <p>6 yes. Again, I don't recall specifically doing</p> <p>7 this, but this looks like the kind of thing</p> <p>8 I've done in the past. So I may have assembled</p> <p>9 this. I have had input on it. I certainly</p> <p>10 recognize it.</p> <p>11 Q. The last column in the chart there, in</p> <p>12 the table, it says Cycles GOP. Do you see</p> <p>13 that?</p> <p>14 A. Yes.</p> <p>15 Q. Do you know why cycles -- what does</p> <p>16 that indicate?</p> <p>17 A. Just indicates the number of elections</p> <p>18 out of five that a Republican had prevailed in</p> <p>19 the election.</p> <p>20 Q. Got it. Because there are five</p> <p>21 elections that are represented in the cycle?</p> <p>22 A. Exactly.</p> <p>23 Q. All right. I see. Why would you have</p> <p>24 included that in this table?</p> <p>25 A. Again, we're just attempting to</p>
<p style="text-align: right;">Page 191</p> <p>1 of the column headers.</p> <p>2 Q. Uh-huh. Okay.</p> <p>3 A. Shall I continue?</p> <p>4 Q. Please do.</p> <p>5 A. Okay. And what's being indicated here</p> <p>6 is the prevailing party in these districts in</p> <p>7 these given years go with a letter indicating</p> <p>8 the party and then color coded. And then the</p> <p>9 final column is indication of the number of</p> <p>10 election cycles in the previous redistricting</p> <p>11 in the previous decade, whether that district</p> <p>12 went Democrat or Republican -- went Republican.</p> <p>13 Q. Do you know why that particular -- the</p> <p>14 analysis of those years was included in Exhibit</p> <p>15 41?</p> <p>16 A. No, but I'm pretty sure that I -- this</p> <p>17 looks like something I actually would have</p> <p>18 compiled or would have put together out of</p> <p>19 data. This looks like something I would have</p> <p>20 put together. I don't know if I did or not.</p> <p>21 But one of the things that you do get curious</p> <p>22 about is, is there a trend or a transition</p> <p>23 going on in the district. And this was one way</p> <p>24 of illustrating that. Is there reactivity in</p> <p>25 the existing districts.</p>	<p style="text-align: right;">Page 193</p> <p>1 summarize information about the district</p> <p>2 histories.</p> <p>3 Q. Do you recall whether anybody asked</p> <p>4 you to put together this kind of an analysis?</p> <p>5 A. I don't recall.</p> <p>6 Q. Do you recall ever discussing this</p> <p>7 kind of an analysis with anyone?</p> <p>8 A. I'm sure that we chatted about this</p> <p>9 among the folks that were -- between Joe and</p> <p>10 Tad and Adam, I'm sure we at least went over</p> <p>11 this or looked at it, but I don't recall any</p> <p>12 in-depth conversations about it.</p> <p>13 Q. From what we saw in Exhibit 39, it</p> <p>14 does appear that that analysis was included in</p> <p>15 some additional work that at least Mr. Foltz</p> <p>16 compiled, correct?</p> <p>17 A. It looks that way, yes.</p> <p>18 Q. Having seen Exhibit Number 41, does</p> <p>19 that refresh your recollection at all with</p> <p>20 respect to any of the other spreadsheets that</p> <p>21 are included on Exhibit 39 or the tabs of that</p> <p>22 spreadsheet?</p> <p>23 MR. EARLE: Here it is.</p> <p>24 A. Not especially, no. I mean, this is</p> <p>25 --</p>

<p style="text-align: right;">Page 194</p> <p>1 Q. (By Mr. Poland) Again, this time 2 frame, this 4/16/11, that's within the time 3 frame that you were in Madison, correct? 4 A. Yes. 5 (Exhibit No. 42 marked.) 6 Q. Dr. Gaddie the court reporter is 7 handing you a document that's been marked as 8 Exhibit Number 42. 9 A. Yeah. 10 Q. A document that I know that you've 11 seen before, but please take a minute to look 12 at it. 13 A. Yes. 14 Q. Do you recognize Exhibit Number 42? 15 A. Yes. 16 Q. Can you identify it for the record, 17 please? 18 A. It appears to be an e-mail from me 19 dated April 20 of 2011. 20 Q. All right. And this is a document 21 that was marked at Exhibit 67 in your 2012 22 deposition, wasn't it? 23 A. Yes. 24 Q. All right. Now, the dates are a 25 little bit difficult to follow here. I wasn't</p>	<p style="text-align: right;">Page 196</p> <p>1 estimates on all the precincts." Do you see 2 that? 3 A. Yes. 4 Q. All right. Now, do you know why you 5 went ahead and ran the regression models for 6 those years? 7 A. I don't recall why. Again, as I 8 indicated before, more recent data are more 9 instructive than older data in understanding 10 the near future and measuring partisanship. So 11 working with most recent data first. 12 Q. Okay. Now -- 13 A. But beyond that, I don't recall. 14 Q. Sorry. I did it that time. 15 Your sentence says, "Ran the 16 regression models," and there's a plural there. 17 Do you see that? 18 A. Yes. 19 Q. All right. Actually, was there more 20 than one regression model that you were working 21 with? 22 A. Well, it would have been the same 23 model run on different years, because part of 24 what you're doing when you generate a model to 25 understand the near future is you don't work</p>
<p style="text-align: right;">Page 195</p> <p>1 quite able to make much sense of them. At the 2 top of the first page you'll see there's a date 3 that says Wednesday, April 20, 2011, at 7:34 4 a.m. Do you see that on the right-hand side? 5 A. Yes. 6 Q. All right. And that's -- that 7 corresponds with an e-mail from Mr. Handrick to 8 Adam Foltz and Tad Ottman that says "See 9 Keith's comments below," correct? 10 A. Yes. 11 Q. All right. Now, just below that is an 12 e-mail from you to Joe Minocqua, who is Joe 13 Handrick, correct? 14 A. Right. 15 Q. And that's also April 20, correct? 16 A. Yes. 17 Q. Now, it says 3:47:20. Is that 3:47 18 a.m. or p.m., do you know? 19 A. I would assume it would be a.m. 20 Q. All right. Now, April 20, you weren't 21 still in Madison, were you? 22 A. No. It's my wife's birthday. 23 Q. In that e-mail, you say, "Hey, Joe, I 24 went ahead and ran the regression models for 25 2006, 2008 and 2010 to generate open seat</p>	<p style="text-align: right;">Page 197</p> <p>1 with data. 2 Okay. Let's suppose we want to create 3 a model to understand district performance next 4 year. Okay? We're going to use data up to 5 this point in time to do that. But let's 6 suppose we wanted to understand how a measure 7 would work four years ago. We would use 8 information up to that point in time but not in 9 that year or afterwards. We can't use the 10 future to explain the -- to predict the past or 11 explain the past. So you use data up to 2006 12 to model 2006, up to 2008 to model 2008, up to 13 2010 to model 2010. 14 Open seat estimates. Again, you'll 15 recall when we talked about the point estimates 16 of an expected vote in a district, because 17 we've netted out a control for incumbency, it's 18 an open seat estimate because that's what we're 19 curious about is how will a district look 20 absent the presence of an incumbent. 21 And what I did is -- and again I'm 22 recalling from the past -- is generated the 23 open seat estimates from the regression, take 24 that vote and then correlate it against the 25 composite that had been developed. And the</p>

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1 composite would have been -- again I'm digging  
2 into deep recesses here, Doug. This is  
3 probably some effort to composite or average  
4 the previous -- the previous statewide votes  
5 for statewide offices and then to see how well  
6 they correlate. And we're indicating they're  
7 correlating at a .93 level.  
8 So if somebody says, why don't you  
9 just look at the Governor's race. Well, this  
10 model has a strong relationship in forecasting  
11 what this election should have looked like. So  
12 basically what we're doing is we're trying to  
13 generate models up to different points in time  
14 and then estimate their relationship to votes  
15 later on.  
16 Q. You're e-mailing Mr. Handrick here.  
17 Is that something that you would expect Mr.  
18 Handrick to understand when you're e-mailing  
19 this to him?  
20 A. Yeah, Joe would understand. I think  
21 so.  
22 Q. Okay.  
23 A. I'm not sure if Joe understands -- I  
24 don't know how keen Joe is on the regressions,  
25 but if I tell Joe that we've got a regression

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1 analysis that has a very high level of  
2 correlation to a composite he had been  
3 developing for his own purposes, what I'm  
4 communicating there is if you want to look at  
5 your composite for your own purposes to  
6 understand the map, it's a good proxy.  
7 Q. All right.  
8 A. And then I think I actually used that  
9 term in here.  
10 Q. I was about to say, the next paragraph  
11 down, if you read it, you say, "At this point,  
12 if you asked me, the power of the relationships  
13 indicates that the partisanship proxy you are  
14 using (all races) is an almost perfect proxy  
15 for the open seat vote and best proxy you'll  
16 come up with."  
17 A. Yeah.  
18 Q. And so what did you mean when you used  
19 -- when you made that statement?  
20 A. Well, the actual open seat vote would  
21 be the vote in a district if it were open. You  
22 know, proxy measures are substitute measures we  
23 use absent an actual measure. So what I'm  
24 saying there is if you have this partisanship  
25 measure you've developed and I've tested it

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1 against what we would expect the open seat vote  
2 to look like, there's such a strong  
3 relationship between the two values. Without  
4 having to go through the purpose of doing all  
5 the stuff with the equation, generating  
6 estimates, if you want to rely on your proxy as  
7 your own vehicle or measure, you can do that.  
8 What I'm saying is his proxy had a  
9 high degree of predicted validity when compared  
10 to a more sophisticated statistical model.  
11 Q. And where you say -- you've got all  
12 races in parentheses there. That's the proxy,  
13 the partisanship proxy that Joe is using?  
14 A. Yeah.  
15 Q. What is the all races? Is that a --  
16 A. I'm trying to recall. You would have  
17 to ask Joe.  
18 Q. Okay. Below that you say, "This seems  
19 to pretty much wraps (sic) up the partisanship  
20 measure debate."  
21 A. Yeah.  
22 Q. What was the debate about?  
23 A. Do we need the regression equation or  
24 can we use proxy measures?  
25 Q. Got it. All right. You were a fan of

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1 the regression, is that right?  
2 A. I'm a fan of the regression, yeah. I  
3 think whenever you can get more leverage, more  
4 information on a problem, you ought to use it.  
5 Q. All right. And Mr. Handrick was  
6 looking for a proxy?  
7 A. I don't remember. You know, we had  
8 talked about how can you measure this. There  
9 was the measure, again as I indicated before,  
10 that Judge Easterbrook preferred from previous  
11 litigation. We wanted to make every -- in  
12 fact, Judge Easterbrook had pointedly rejected  
13 a proxy election approach in his May 2002 -- in  
14 the May 2002 decision.  
15 You know, if you were going to  
16 litigate over this and have to talk about how  
17 you measured partisanship, best to give the  
18 judge what he likes rather than what we know he  
19 doesn't. Right? So this is an effort to  
20 comply with the expectation of the court if it  
21 ever got there. That was my argument, was,  
22 let's go ahead and do what we're going to end  
23 up having to do anyway if we have to.  
24 Q. Okay. And if you jump down then to  
25 the next sentence it says, "Have Jim call me if

<p style="text-align: right;">Page 202</p> <p>1 he needs anything."  2 A. Yeah.  3 Q. Is that Mr. Troupis?  4 A. It is.  5 Q. All right. And then you say,  6 "Otherwise, I'll be tweaking the polarization  7 analysis." Do you see that?  8 A. Yes.  9 Q. What was the tweaking that you were  10 going to be doing of the polarization analysis?  11 A. Well, tweaking in this sense just  12 means I'm going to be trying to get a handle on  13 the racial polarization analysis for the Black  14 and the Latino districts in Milwaukee.  15 You'll recall from the previous  16 litigation, getting a handle on those Hispanic  17 districts was very difficult because we  18 couldn't -- I was having a hard time estimating  19 a stable turnout model to get a sense of what  20 would constitute a performing Hispanic  21 district. So that's what I was messing with  22 there, was trying to get a handle on the -- the  23 measure of polarized voting in Milwaukee  24 County.  25 Q. Okay. Kind of jumping at this point</p>	<p style="text-align: right;">Page 204</p> <p>1 information about what he might have meant or  2 you might have meant when you said "all races"  3 on the first page?  4 A. I can't say for sure, Doug. I mean,  5 it's -- let me read this again.  6 Doug, I just can't recall. I don't  7 know.  8 Q. Okay. Does it appear that Mr.  9 Handrick's e-mail to you on April 19 is really  10 addressing this issue of trying to create a  11 proxy as opposed to having to rely on the  12 regressions?  13 A. It could be. That's entirely  14 possible.  15 Q. All right. The last thing I want to  16 ask you about this document is, the e-mail  17 directly below that is from you to Joe on April  18 20. And you say, "I am close to having a  19 partisan baselining for you." Do you see that?  20 A. Yeah.  21 Q. Do you remember specifically at that  22 time working on a partisan baselining for Mr.  23 Handrick?  24 A. I would assume. I'm talking about  25 trying to make sure the regression equations</p>
<p style="text-align: right;">Page 203</p> <p>1 from partisanship analysis over to the  2 polarization analysis, or at least immediately?  3 A. Yeah.  4 Q. And just below that e-mail, and it  5 looks like this predates your e-mail to Mr.  6 Gaddie, but -- or Mr. Handrick, Mr. Handrick  7 sent you an e-mail on April 19 where he said --  8 the subject is Milwaukee County elections and  9 he says, "We looked at the different combos  10 today."  11 A. Yeah.  12 Q. And then if you go back to the second  13 page it says, "The 2006 and 2010 races combined  14 too much to the GOP."  15 And then the next paragraph down he  16 says, "I had Tad do a composite with the 2006  17 and 2010 state races and all the federal races  18 from '04 to 2010. In other words, all  19 statewide races from '04 to 2010."  20 A. Yes.  21 Q. "This seems to work well both in  22 absolute terms as well as seats in relation to  23 each other." Do you see that?  24 A. Yes.  25 Q. Does that give you any more</p>	<p style="text-align: right;">Page 205</p> <p>1 work, so --  2 Q. All right. And what made me curious  3 is you said "having a partisan baselining for  4 you." Was there something specific that you  5 were getting at there?  6 A. Just any measure that we could use to  7 compare districts and compare performance  8 across. Yeah, just any measure of partisan  9 tendency for districts, a partisan baseline.  10 Q. We can set that one to the side. I  11 wanted to go back and ask you questions about a  12 couple of the spreadsheets that were on your  13 drive that you produced to us last week. So  14 why don't we pull that one up?  15 This is Exhibit Number 31, just for  16 the record.  17 A. All right. Counsel, I think we're  18 ready.  19 Q. Great. This is a file we looked at  20 when we initially pulled up your flash drive.  21 I would like to take a look at  22 Wisconsin_1.xlsx.  23 A. Yes. All right, Counsel, I'm ready.  24 Q. Are you able to see the metadata on  25 that particular document?</p>

<p style="text-align: right;">Page 206</p> <p>1 A. No. Hang on. Let's see if we can -- 2 where would I find that? 3 MR. EARLE: Under View, I think. 4 MR. POLAND: Well, actually, if you go 5 under Edit you can find Properties. 6 MR. EARLE: Wait a second. Do you 7 know how we can see that? 8 THE WITNESS: That's right. Go back 9 to the -- 10 MR. EARLE: I'll just shrink this. 11 THE WITNESS: Here we go. Yes. 12 Q. (By Mr. Poland) I'm sorry, its File 13 Properties. I apologize. It's the file 14 pull-down menu. Properties is the last one. 15 A. Okay. 16 Q. And do you see that it was created 17 Sunday February -- I'm sorry. It was modified 18 Thursday, April 14, 2011? 19 A. Yeah, I see that. 20 Q. Okay. It looks like the created 21 metadata probably got a little bit messed up. 22 So April 14 of 2011. 23 And can you see how far out the voting 24 data or how recent the voting data is that's 25 used to create this particular spreadsheet,</p>	<p style="text-align: right;">Page 208</p> <p>1 Q. So this seems to be a day -- make sure 2 I've got this right. A day after the Wisconsin 3 1.xlsx, correct? 4 A. Yes. 5 Q. All right. Is the election data that 6 is -- that appears in this particular 7 spreadsheet, the more recent one, the Wisconsin 8 election data.xlsx, different than in the 9 Wisconsin 1.xlsx? 10 A. I don't know, Doug. These are two 11 huge databases. They've got 6,000 wards in 12 them and several hundred variables. 13 Q. Okay. 14 A. I don't know if they're different or 15 not. 16 Q. If you go over -- if you scroll over 17 to the right of the spreadsheets, does that 18 tell you whether you've got more elections that 19 are being analyzed or included in these 20 spreadsheets? 21 A. In which file? 22 Q. In the second of the two, in the 23 Wisconsin election data.xlsx. 24 A. There are more columns in the second 25 database. So I don't know if this is more</p>
<p style="text-align: right;">Page 207</p> <p>1 this Wisconsin_1.xlsx? 2 A. Can I take a moment to review? 3 Q. Yes. 4 A. There are electoral data from 2002 to 5 2010 in this database. 6 Q. Okay. And then take a look at the 7 spreadsheet that is Wisconsin Election 8 Data.xlsx. 9 MR. EARLE: Leave this one open? 10 MR. POLAND: Yeah, leave it open. 11 Q. (By Mr. Poland) So it's 12 Wisconsin_Election Data. It's just a few down, 13 at least in my -- on my directory. 14 A. Right there. 15 MR. EARLE: Are you going to cover the 16 metadata? You might want to do that before we 17 click it. 18 MR. POLAND: Oh, before you open it? 19 Oh, yeah. Okay. 20 MR. EARLE: Yeah. 21 Q. (By Mr. Poland) Can you tell me when 22 this particular spreadsheet was created? 23 A. Well, the create date on it says 24 February 21, 2016 also, but the modify is April 25 15, 2011.</p>	<p style="text-align: right;">Page 209</p> <p>1 elections or just computations off of data that 2 were already there. But there is a lot more 3 data in the second file. 4 Q. Okay. I've got one other that I 5 wanted to ask you about. 6 A. Yes. 7 Q. And that's Wisconsin election data rev 8 1.xlsx. 9 A. Okay. 10 Q. And so that's going to be just above 11 it. 12 A. There we go. 13 Q. And I see we have to change the 14 videotape. Why don't we do that while you're 15 opening that? 16 A. That's fine. 17 THE VIDEOGRAPHER: Going off the 18 record. The time is 2:26 p.m. End of Disc 3. 19 (Recess.) 20 THE VIDEOGRAPHER: We are back on the 21 record. The time is 2:29 p.m. 22 Q. (By Mr. Poland) Dr. Gaddie, do you 23 have Wisconsin election data rev 1 spreadsheet 24 up in the computer in front of you now? 25 A. Yes.</p>

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1 Q. I would like you to scroll over pretty  
2 far over to the right here in the end of the  
3 columns. You'll see four columns. There's a  
4 PC, PD, PE and PF columns.  
5 A. Yes.  
6 Q. Do you see that?  
7 A. Yes.  
8 Q. And you see the headings of those  
9 columns respective are 2010 statewide, 2010  
10 plus '06 statewide, 2010 plus '06 plus '02  
11 statewide, and then all fed '04-10. Do you see  
12 those?  
13 A. Yes.  
14 Q. What do those columns represent?  
15 A. These are different efforts to index  
16 the voting district based upon statewide  
17 elections. The first one is a composite just  
18 built upon -- the PC is a composite built just  
19 upon the 2010 statewides.  
20 PD is a composite built upon the 2010  
21 and '06 statewides. So these are state  
22 constitutional offices. PE is based upon the  
23 '02, '06 and '10 statewides. And Column PF, I  
24 don't know if that is all of the statewides  
25 plus all the federal statewides or if it is

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1 just all the federal offices. It's one or the  
2 other. I don't know.  
3 Q. Okay. I don't think -- I think I  
4 forgot to ask you about the metadata on this  
5 one. Do you have -- I won't ask you the  
6 created date, but the modified date, do you  
7 have a date on there?  
8 A. Let's get to the proper forum. Just  
9 give us a moment.  
10 MR. EARLE: I thought I had one over  
11 here. I'll just shrink it.  
12 THE WITNESS: Yeah.  
13 A. Okay. We've got a modified on it of  
14 April 15 at 3:47. The create date is February  
15 of this year.  
16 Q. (By Mr. Poland) All right. If you  
17 actually go to the statistics tab. Do you see  
18 that there? And click on that.  
19 Oh, you can't do that?  
20 A. Can I just come over and look on  
21 yours?  
22 Q. Oh, yeah, of course. Here, I can just  
23 slide it over.  
24 Statistics, do you see who indicates  
25 it was last saved by?

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1 A. T-o-t-t-m-a-n. So that would be Mr.  
2 Ottman.  
3 Q. Mr. Ottman?  
4 A. Yeah.  
5 Q. Okay. Now, the four columns that we  
6 had just looked at --  
7 A. Yes.  
8 Q. -- those PC through PF, those did not  
9 appear on the previous two spreadsheets we had  
10 looked at, correct, the Wisconsin 1.xlsx and  
11 Wisconsin election data.xlsx?  
12 A. Yes.  
13 Q. They did not?  
14 A. They did not, yes. I'm agreeing with  
15 your statement, yes.  
16 Q. Do you know why those were added? Why  
17 those four columns were added to this  
18 particular spreadsheet?  
19 A. No.  
20 Q. Did somebody ask that they be added to  
21 this spreadsheet?  
22 A. I don't know.  
23 Q. Do you know whether you added them?  
24 A. I don't recall. I don't think I did.  
25 Q. Is this -- do you know whether this

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1 particular spreadsheet, Wisconsin election data  
2 rev 1, is one that you used to build your  
3 regression model?  
4 A. I had to have used -- I don't know if  
5 I used this exact spreadsheet. I had to use a  
6 spreadsheet like this to get at the data to do  
7 what I did. And I'll tell you there is -- the  
8 previous iteration of the spreadsheet has my  
9 fingerprints on it. And it goes to -- I'll  
10 just say it goes to columns OZPA and PB. These  
11 are factor analysis computations which were  
12 likely generated off of previous election data  
13 to ascertain if there was some kind of latent  
14 structure existing in the partisanship data  
15 that we could build an index out of. It didn't  
16 reveal anything meaningful, so I never used it.  
17 Q. Okay.  
18 A. But that's what those are. So the --  
19 you know, there is original data in here that I  
20 have computed that my fingerprints were clearly  
21 on, and it's those three columns.  
22 Q. Okay.  
23 A. But I don't recall. The main reason I  
24 can say that I didn't add these four columns  
25 are these are not the types of devices I would

<p style="text-align: right;">Page 214</p> <p>1 have used for a column header.</p> <p>2 Q. All right. Because this was on a</p> <p>3 spreadsheet that you produced to us --</p> <p>4 A. Uh-huh.</p> <p>5 Q. -- do you know why you would have had</p> <p>6 in your possession the spreadsheet that Mr.</p> <p>7 Ottman might have saved?</p> <p>8 A. In an effort -- again, if you look</p> <p>9 back at the subsequent e-mail from five days</p> <p>10 after this, there's this effort to test the</p> <p>11 indices to the aggression equation against</p> <p>12 these types of indices. So that would be why I</p> <p>13 would have it in my possession.</p> <p>14 Q. Got it.</p> <p>15 A. Is that these data, while I did not</p> <p>16 generate them, I would have used these data as</p> <p>17 part of that exercise.</p> <p>18 Q. Okay. Do you have any recollection of</p> <p>19 receiving a spreadsheet like this from Mr.</p> <p>20 Ottman?</p> <p>21 A. I mean, I was in Madison. I probably</p> <p>22 did, yeah.</p> <p>23 Q. Could have been Mr. Handrick or Mr.</p> <p>24 Foltz?</p> <p>25 A. Yes.</p>	<p style="text-align: right;">Page 216</p> <p>1 Q. I would like you to look at the</p> <p>2 metadata on the file on the computer.</p> <p>3 A. Yes.</p> <p>4 Q. Can you tell me when that one was</p> <p>5 created?</p> <p>6 A. July 14, 2011, 1:32 p.m.</p> <p>7 Q. Okay. And are you able to click on</p> <p>8 the statistics button there or can you not do</p> <p>9 that?</p> <p>10 MR. EARLE: No, it will not do that.</p> <p>11 MR. POLAND: It will not do that.</p> <p>12 Okay.</p> <p>13 Q. (By Mr. Poland) Then I will just ask</p> <p>14 you, can you see who created it?</p> <p>15 A. Created? There's a last saved by.</p> <p>16 Q. Or last saved by?</p> <p>17 A. It says Tad.</p> <p>18 Q. Okay. That would be Mr. Ottman?</p> <p>19 A. I would assume, yes.</p> <p>20 Q. Now, again, if you look at the</p> <p>21 spreadsheet on the computer you'll see down at</p> <p>22 the bottom there are three separate tabs. Do</p> <p>23 you see those?</p> <p>24 A. Uh-huh.</p> <p>25 Q. And one says Joe Aggressive, correct?</p>
<p style="text-align: right;">Page 215</p> <p>1 MR. POLAND: Let me take two minutes</p> <p>2 here.</p> <p>3 THE VIDEOGRAPHER: Going off the</p> <p>4 record. The time is 2:35 p.m.</p> <p>5 (Recess.)</p> <p>6 THE VIDEOGRAPHER: We are back on the</p> <p>7 record. The time is 2:45 p.m.</p> <p>8 Q. (By Mr. Poland) Dr. Gaddie, the court</p> <p>9 reporter has handed you a copy of a document</p> <p>10 that's been marked as Exhibit 43.</p> <p>11 (Exhibit No. 43 marked.)</p> <p>12 Q. Do you have that in front of you?</p> <p>13 A. Yes, I do.</p> <p>14 Q. And do you see that's a three-page</p> <p>15 document?</p> <p>16 A. Yes.</p> <p>17 Q. We just printed that from a</p> <p>18 spreadsheet, and we've got a copy of the</p> <p>19 spreadsheet in electronic format pulled up on</p> <p>20 the computer in front of you. Do you see that?</p> <p>21 A. Yes.</p> <p>22 Q. All right. So for the record, this is</p> <p>23 a file that has the name Plan Comparisons and</p> <p>24 it's in xlsx spreadsheet. Do you see that?</p> <p>25 A. Yes.</p>	<p style="text-align: right;">Page 217</p> <p>1 A. Yes.</p> <p>2 Q. One says Joe Aggressive 2, correct?</p> <p>3 A. Yes.</p> <p>4 Q. And one says Team Map 6/15/11. Do you</p> <p>5 see that?</p> <p>6 A. Yes.</p> <p>7 Q. June 15, 2011 is a time when you were</p> <p>8 in Madison, correct?</p> <p>9 A. I believe so, yes.</p> <p>10 Q. Do you recall ever seeing a map or</p> <p>11 talking with Mr. Handrick about a map called</p> <p>12 Joe Aggressive?</p> <p>13 A. I can recall talking about it. I can</p> <p>14 recall the map name. I don't recall details of</p> <p>15 the conversation, but I do recall a map called</p> <p>16 Joe Aggressive, yes.</p> <p>17 Q. And that's to be distinguished from</p> <p>18 the Joe Assertive that we'd seen earlier,</p> <p>19 correct?</p> <p>20 A. I would assume, yes.</p> <p>21 Q. And do you know -- this is pretty late</p> <p>22 stage in the process of the legislature</p> <p>23 adopting a map, correct?</p> <p>24 A. I guess, yes. I don't recall.</p> <p>25 Q. You don't recall when Act 43 was</p>

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1 passed?  
2 A. No.  
3 Q. Let's take a look first at the tab  
4 that says Joe Aggressive.  
5 A. Okay.  
6 Q. As opposed to the Joe Aggressive 2.  
7 MR. KEENAN: Doug, where can I find an  
8 electronic version of this?  
9 MR. POLAND: Yeah, we're going to get  
10 into the printed stuff right now. I can give  
11 you an electronic one.  
12 MR. KEENAN: Where did it come from, I  
13 guess?  
14 MR. POLAND: This is one of the files  
15 that we got from Lanterman, although this is  
16 not --  
17 MR. KEENAN: It was not in the --  
18 MR. POLAND: It was not on that one,  
19 right, not on that flash drive. But I can  
20 provide those all to you, Brian.  
21 MR. KEENAN: Okay. Thank you.  
22 MR. POLAND: Absolutely.  
23 MR. EARLE: It's an equivalent  
24 spreadsheet for Handrick and documents from  
25 Handrick's computer.

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1 MR. POLAND: Correct. Well, it was  
2 off one of those computers. There were three  
3 of them. Yeah, I'll give you an electronic  
4 copy. We can do it after we're done with the  
5 deposition.  
6 Q. (By Mr. Poland) And I want to just  
7 orient us on the spreadsheet that's on the  
8 computer and then we can jump to the paper so  
9 everyone can see what we've got.  
10 Under the Joe Aggressive tab, up at  
11 the top there's a header that says Team Map.  
12 Do you see that?  
13 A. Yes.  
14 Q. And if you look at the Current New and  
15 Delta for the assembly it's 51.5%, New 51.2%,  
16 Delta 0.07%. Do you see that?  
17 A. Slow down.  
18 Q. Sure.  
19 A. Run that by me again.  
20 Q. Yeah.  
21 A. Are we at the top of the document?  
22 Q. Correct.  
23 A. Okay. I'm there. I'm there now.  
24 Yes, I'm good. I'm with you. Yes.  
25 Q. I just want to try to orient us

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1 between the on-screen sheet and then what we  
2 have on the paper so I can ask you the  
3 questions based on the paper. All right?  
4 A. Check.  
5 Q. So the Joe Aggressive appears to be  
6 the first page of the printout in Exhibit 43,  
7 correct?  
8 A. Yes.  
9 Q. All right.  
10 A. That appears to be the case, yes.  
11 Q. And then if you click the next tab on  
12 the spreadsheet that's on your computer, you'll  
13 see Joe Aggressive 2.  
14 A. Yes.  
15 Q. Does that appear to correspond with  
16 the second page of the printout on Exhibit 43?  
17 A. Yes, It does.  
18 Q. And then if you go to the third tab  
19 that says Team Map 6/15/1, that appears to  
20 correspond to the third page of Exhibit 43,  
21 correct?  
22 A. Yes.  
23 Q. All right. Terrific. Let's move to  
24 the paper then so we can all follow along.  
25 In format Exhibit 43 is very similar

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1 to the printout that we saw previously,  
2 correct? I'm trying to pull up the exhibit.  
3 With Exhibit 39, correct?  
4 A. Let me get to Exhibit 39.  
5 Q. Sure.  
6 A. Yes. Similar. Not the same, but  
7 similar, yes.  
8 Q. And when you say that it's not the  
9 same, why do you say that it's not the same?  
10 A. Well, it's not identical.  
11 Q. Well, they certainly are not  
12 identical. But in format they are --  
13 A. Variations on the theme.  
14 Q. Variations on the theme. That's fine.  
15 I'll go with that. All right. Now, if you --  
16 well, strike that.  
17 You don't know, do you, which of, if  
18 any of these three maps, are ones that were  
19 actually enacted by the Wisconsin legislature?  
20 A. No.  
21 Q. You recalled you testified before that  
22 you do remember Joe Aggressive being the name  
23 of a map that had been raised?  
24 A. Yes.  
25 Q. All right. What was a discussion that



<p style="text-align: right;">Page 222</p> <p>1 you had with Mr. Handrick about that?</p> <p>2 A. I don't remember. I mean --</p> <p>3 Q. And by Aggressive, was that an</p> <p>4 Aggressive Republican representation in the</p> <p>5 legislature?</p> <p>6 A. I think that's a fair way of</p> <p>7 characterizing it, yes.</p> <p>8 Q. All right. Was it in particular in</p> <p>9 the senate or the assembly or was it without</p> <p>10 regard to which of the two houses?</p> <p>11 A. I don't know.</p> <p>12 Q. Do you remember having any discussions</p> <p>13 with anyone other than Mr. Handrick about the</p> <p>14 maps that were called Aggressive maps?</p> <p>15 A. Specific conversations, no. If we</p> <p>16 were discussing these maps we would have been</p> <p>17 at Michael Best in the mapping room. It would</p> <p>18 have been no more than myself and Adam and Tad.</p> <p>19 I mean, myself, Joe, Adam and Tad at most. So</p> <p>20 the discussion wouldn't have gone beyond those</p> <p>21 individuals.</p> <p>22 Q. And so we did see from the metadata</p> <p>23 that -- or at least from one of the tabs said</p> <p>24 Team Map 6/15/11, it does seem like this is</p> <p>25 coming very late in the process, correct?</p>	<p style="text-align: right;">Page 224</p> <p>1 computer open and we'll go back to a few</p> <p>2 documents that we've looked at before.</p> <p>3 Q. (By Mr. Keenan) Most of my questions</p> <p>4 are going to follow up on things that Mr.</p> <p>5 Poland has already been through.</p> <p>6 I believe you just recently testified</p> <p>7 that -- we were looking at a spreadsheet and it</p> <p>8 had a column All Fed 04 10. Do you recall</p> <p>9 that?</p> <p>10 A. Yes.</p> <p>11 Q. And you said that was not a heading of</p> <p>12 data that you would have calculated?</p> <p>13 A. Well, it's something I would have</p> <p>14 calculated, but it's not a header name that I</p> <p>15 would have used.</p> <p>16 Q. Okay.</p> <p>17 A. It just doesn't strike me as -- it</p> <p>18 doesn't look like the style of header that I</p> <p>19 would have created.</p> <p>20 Q. Okay. So do you know if the numbers</p> <p>21 that were listed in that column heading were</p> <p>22 generated from your regression model?</p> <p>23 A. Those numbers, if I'm recollecting</p> <p>24 correctly, would not have resulted from the</p> <p>25 regression analysis. It would have been</p>
<p style="text-align: right;">Page 223</p> <p>1 A. Yes.</p> <p>2 Q. And so this indicates that they're</p> <p>3 still looking at the partisanship makeup -- the</p> <p>4 partisan makeup of the maps, you know, as of</p> <p>5 the middle of June of 2011?</p> <p>6 A. Appears so, yes.</p> <p>7 Q. And they're using your regression</p> <p>8 analysis to do it, correct?</p> <p>9 A. Again, I can't say definitively these</p> <p>10 are the regression numbers, but it looks like</p> <p>11 it would be yeah. I would assume that the</p> <p>12 regression analysis is involved, yeah.</p> <p>13 MR. POLAND: Any more? I think that's</p> <p>14 going to do it for us.</p> <p>15 THE WITNESS: Okay.</p> <p>16 EXAMINATION</p> <p>17 BY MR. KEENAN:</p> <p>18 Q. Thank you for being here, Professor</p> <p>19 Gaddie. As I said before, I'm Brian Keenan</p> <p>20 representing the defendants. I'll just ask a</p> <p>21 few questions of you, too.</p> <p>22 A. Okay.</p> <p>23 MR. EARLE: Do you want the computer</p> <p>24 open?</p> <p>25 MR. KEENAN: Yes, please keep the</p>	<p style="text-align: right;">Page 225</p> <p>1 reconstituted election data from the actual</p> <p>2 elections. So from the actual federal</p> <p>3 elections. So it's what we call a</p> <p>4 reconstituted election analysis.</p> <p>5 Q. And just to be clear, it was not your</p> <p>6 regression model?</p> <p>7 A. Right.</p> <p>8 Q. Do you know if that column was</p> <p>9 equivalent to the partisan proxy that Mr.</p> <p>10 Ottman and Mr. Handrick had developed?</p> <p>11 A. I don't recall.</p> <p>12 Q. We were just looking at a couple of</p> <p>13 documents. One is Exhibit 43 which you could</p> <p>14 pull out and also exhibit -- was it 39, I</p> <p>15 think?</p> <p>16 A. Yes.</p> <p>17 Q. These spreadsheets that have the</p> <p>18 columns and they look similar. Looking at</p> <p>19 Exhibit 39 and Exhibit 43, for the column --</p> <p>20 the assembly seats column and then looking at</p> <p>21 the column that's New, the new percentages. Do</p> <p>22 you see that?</p> <p>23 A. Yes. Yes.</p> <p>24 Q. Do you know whether the percentages</p> <p>25 that are listed in those columns are a result</p>

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1 of your regression model?  
 2 A. I don't know for certain, no.  
 3 Q. And do you know whether those are a  
 4 result of the partisan proxy model that was  
 5 developed by Joe Handrick and Tad Ottman?  
 6 A. It's been four years. I don't know  
 7 for certain.  
 8 Q. You just don't know one way or the  
 9 other?  
 10 A. No.  
 11 Q. Okay. In your regression model --  
 12 we'll go back over this a little bit and  
 13 correct me if I'm wrong. What was the  
 14 dependent variable for your regression model?  
 15 A. The dependent variable would have been  
 16 the vote share at the ward level for assembly  
 17 or senate respectively, depending upon the map  
 18 being analyzed.  
 19 Q. And you say "vote share." Were you  
 20 calculating a percentage of the vote?  
 21 A. Yes.  
 22 Q. And was that a percentage of the two  
 23 party or the total vote?  
 24 A. Should have been the two-party vote.  
 25 Q. So with the two-party vote, as I

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1 understand it, if you know, for example, if the  
 2 Republican two-party vote is 45% and the  
 3 Democratic two-party vote is 55% and that they  
 4 both have to add up to 100?  
 5 A. Correct.  
 6 Q. Okay. What were the independent  
 7 variables that went into your model?  
 8 A. As I recall -- and again, it's been  
 9 four years -- there should have been a control  
 10 for the incumbency in the district, Democrat or  
 11 Republican. Okay? There should have been a  
 12 control for a variety of statewide elections as  
 13 inputs, previous gubernatorial races, secretary  
 14 of state and so on and so forth. And the  
 15 dependent variable is regressed onto all of  
 16 those variables in order to create an equation  
 17 to estimate partisanship in the district.  
 18 Q. So you looked at a variety of  
 19 different statewide elections as independent  
 20 variables?  
 21 A. Yes.  
 22 Q. And you also looked at a variety of  
 23 statewide elections in different years as  
 24 independent variables?  
 25 A. Yes.

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1 Q. Okay. Why didn't you just rely on the  
 2 most recent year?  
 3 A. Because if you rely on the most recent  
 4 year, it's possible it may be an outlier. For  
 5 example, we had just come out of the landslide  
 6 2010 election. And if you were to baseline --  
 7 if you were to baseline expectations and  
 8 competition based on Republican performance in  
 9 Wisconsin in 2010 you probably would have  
 10 gotten a more Republican skew than would  
 11 normally exist in the state. I mean, this is  
 12 the state that Scott Walker won, but Barack  
 13 Obama also won twice. So relying only on 2010  
 14 wouldn't necessarily give you the best measure  
 15 of partisanship.  
 16 You know, in fact, this is the problem  
 17 with Wisconsin constantly, is that the mid term  
 18 elections are often a little hinky. 2002 was  
 19 not exactly normal either. So we don't want to  
 20 rely on a single election cycle to baseline  
 21 what's going to happen in a district.  
 22 Q. So in calculating a partisan baseline  
 23 you would need to look at elections in a  
 24 variety of different electoral conditions?  
 25 A. Yes.

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1 Q. At the time when you were serving as a  
 2 consultant to the legislature in drawing the  
 3 maps, had you ever heard of a concept called  
 4 the efficiency gap?  
 5 (Cell phone interruption.)  
 6 THE WITNESS: That's my phone.  
 7 (Discussion off the record.)  
 8 Q. (By Mr. Keenan) Now we've had our  
 9 interruption from the computer Hal --  
 10 A. Counsel, what was the question?  
 11 Q. During your time serving as a  
 12 consultant to the legislature in drawing the  
 13 maps, had you heard of a concept called the  
 14 efficiency gap?  
 15 A. I mean, I'm aware what the efficiency  
 16 gap is, but it's not something we were actually  
 17 discussing. I'm aware of the term, yeah.  
 18 Q. Were you aware of it at the time you  
 19 were doing the redistricting consultation?  
 20 A. It's sort of funny. The debate over  
 21 efficiency gap really arises subsequent to this  
 22 re-map and redistricting cycle. But I mean,  
 23 you know, it's a concept that we're all aware  
 24 of, this notion that distortions are created  
 25 through redistricting and they create

<p style="text-align: right;">Page 230</p> <p>1 disparities in the translations of seats or 2 votes. And that one hallmark of a partisan 3 gerrymander might be the introduction of 4 certain inefficiencies that end up in vote 5 wastage for one party or the other. 6 Q. When you were serving as a consultant 7 to the legislature did you calculate an 8 unexpected efficiency gap for the assembly 9 districts that were to be enacted? 10 A. No. 11 Q. When you were doing your regression 12 model to predict the assembly vote share, did 13 you assume that there would be equal turnout 14 across all the districts in the Wisconsin 15 assembly? 16 A. Because we're working with vote 17 percentages within districts as a dependent 18 variable rather than ballots cast, what we're 19 doing is we're not assuming equal turnout 20 across constituencies. 21 Q. If you could, open up -- go back to 22 the computer here. And this is going to be on 23 the -- what is my purple hard drive, the 24 legislature spreadsheets from Mr. Lanterman, 25 which is exhibit -- which exhibit is that?</p>	<p style="text-align: right;">Page 232</p> <p>1 MR. EARLE: Yes. 2 Q. (By Mr. Keenan) And I just want to go 3 over this document and understand what's in it. 4 A. Yeah. 5 Q. First, are the numbers that are 6 generated that are listed in this spreadsheet, 7 are they generated from your regression model? 8 A. I believe they are. 9 Q. Okay. 10 A. Again, it's been awhile. 11 Q. Sure. Can you explain on all of these 12 curve spreadsheets at what percentage vote 13 share the colors codes changes? 14 A. Yes. Again, the blues are Democratic 15 majority constituencies. The reds are 16 Republican majority. The breakpoint between 17 the dark blue and the light blue is at 45%. 18 The break between the light blue and the orange 19 is at 50. The breakpoint between the orange 20 and the red is at 55. 21 Q. Okay. And I believe you testified 22 previously that anything above 55 is considered 23 a safe seat for that party? 24 A. Yes. 25 Q. And I guess on this -- on these</p>
<p style="text-align: right;">Page 231</p> <p>1 MR. POLAND: 37, I think. Let's 2 double check and make sure. 3 Q. (By Mr. Keenan) And we can go into the 4 folder that is -- 5 MR. EARLE: Give me a second here. 6 MR. POLAND: Yeah, 37. 7 MR. EARLE: But this one is not 8 marked, Doug? 9 MR. POLAND: Huh? 10 MR. EARLE: This one is not marked? 11 MR. POLAND: No, it's not marked. 12 MR. EARLE: I'll give it back to you. 13 Which folder? 14 MR. KEENAN: WRK 32586. 15 MR. EARLE: Okay. 16 MR. KEENAN: And then we can go into 17 the subfolder Responsive Spreadsheets. 18 MR. POLAND: File Detail Report, 19 Brian? 20 MR. KEENAN: No, just the subfolder 21 and then we'll go into some of the individual 22 spreadsheets. 23 MR. POLAND: Okay. 24 MR. KEENAN: And if we could open up 25 the one titled Composite Current Curve.</p>	<p style="text-align: right;">Page 233</p> <p>1 spreadsheets it's expressed in terms of 2 Republican two-party vote share? 3 A. Yes, that's correct. 4 Q. So a number of 45% is actually a 55% 5 Democratic seat? 6 A. Yes. 7 Q. And so that would be a safe Democratic 8 seat? 9 A. Right. 10 Q. There's some numbers across the top. 11 I guess we'll be able to start on Column A and 12 just could you -- what is the title in Column A 13 supposed to represent? 14 A. If I could make a suggestion that will 15 expedite this. 16 Q. Sure. 17 A. If we start at Column M -- 18 Q. Okay. We can do that. 19 A. -- that says index_50. 20 Q. Sure. 21 A. This is assuming that the estimated 22 value of partisanship is set with a statewide 23 vote between the Republicans and Democrats at 24 50%, a 50/50 split. Okay? What is the 25 performance of each district assuming a 50/50</p>

<p style="text-align: right;">Page 234</p> <p>1 split statewide of the ballot. Okay? And so  2 how would each district perform accordingly.  3 If we go over to index_40, we're  4 assuming a 40% Republican and 60% Democratic  5 split. And we increase at one percentage  6 points gradients of Republican performance from  7 column to column. So what we're seeing is how  8 does the Republican strength shift in these  9 districts as we move further to the right.  10 Q. As we move each column, would that be  11 referred to as a 1% uniform swing?  12 A. A one point swing, yes.  13 Q. This is titled Composite Current  14 Curve.  15 A. Uh-huh.  16 Q. Do you know what that refers to?  17 A. This Composite Current Curve, given  18 that it's titled composite, this could be  19 referring to a vote index composite rather than  20 a regression analysis.  21 Q. Do you know what "current" refers to?  22 A. Current I would assume applies to the  23 existing map, the maps as constituted in the  24 State of Wisconsin before the '12 re-map.  25 Q. So that would have been the map that</p>	<p style="text-align: right;">Page 236</p> <p>1 And again, part of the correspondence and his  2 previous testimony, there was an exceedingly  3 strong relationship between the composite and  4 the point estimates for open seat competition  5 in the districts.  6 Q. The one generated by your regression  7 model?  8 A. Yeah. Yeah.  9 Q. And then, as I take it, the Column A  10 has numbers in it that refers to a particular  11 assembly district?  12 A. Yes.  13 Q. Okay.  14 A. Yeah, those are the assembly district  15 numbers, and they've been ranked from least to  16 most Republican, from top to bottom.  17 Q. And we went over these headings in  18 this particular document, but when we looked at  19 some of these others, would the same reasoning  20 apply to the headings and the numbers that are  21 in those other curve spreadsheets?  22 A. Yeah, there was a root curve  23 spreadsheet that was created in the other. And  24 the subsequent simply descend from it, yes.  25 Q. If you could open up in that same</p>
<p style="text-align: right;">Page 235</p> <p>1 was in place from 2002 to 2010?  2 A. The one crafted by the federal court,  3 yes, correct.  4 Q. So in order to read this map, if we  5 just count the number of seats that are in the  6 dark blue color, that would tell us how many  7 safe Democrat seats there are under Column M,  8 for example, in a 50/50 election?  9 A. You're correct.  10 Q. And if we move over one to the right,  11 that would be a 51% Democratic election, 49%  12 Republican election?  13 A. Yes.  14 Q. What's the column labeled B Actual?  15 Do you know what that stands for?  16 A. Let me see. Okay. B Actual is most  17 likely based upon the actual average from the  18 composite, which, as I recall, was 49.1%  19 Republican, but I'm not certain of that.  20 Q. And what's your understanding of what  21 the composite was?  22 A. Again, it's -- as I said, it's been  23 awhile. Given that we're using composite, this  24 could be a composite of the statewide elections  25 that Mr. Handrick and the team had estimated.</p>	<p style="text-align: right;">Page 237</p> <p>1 folder the Team Map Curve.  2 A. Team Map Curve.xlsx?  3 Q. Yes.  4 A. Yes.  5 Q. Okay. And I guess I just want to --  6 maybe we can just confirm that, do you know --  7 it refers to the Team Map. Do you know if  8 that's the final map that was enacted?  9 A. I don't know.  10 Q. And then the testimony we just gave  11 with respect to the column headings --  12 A. Uh-huh.  13 Q. -- that same testimony that we just  14 heard with respect to the Current Map Curve,  15 would that -- those same answers would apply to  16 this Team Map Curve?  17 A. Yes, the same reasoning and the same  18 coding is used, yes.  19 Q. So if someone wanted to use one of  20 these spreadsheets to determine what the  21 expected non-incumbent seat share would be for  22 an election with a 51% Democratic vote share,  23 they should look at a column that's labeled  24 Index 49?  25 A. Yes.</p>

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1 Q. Okay. And then if there was an  
2 expected -- determinant expected seat share  
3 from an election with a 52% Republican vote  
4 share, you should look at a column for Index  
5 52, is that correct?  
6 A. Yes.  
7 Q. Can you go to the -- we can close out  
8 those spreadsheets there. If you have the one  
9 that's your -- the copy of the production you  
10 made in the Baldus case. That was Exhibit 57  
11 in that case and I think 34 --  
12 MR. POLAND: 34 here.  
13 Q. (By Mr. Keenan) -- in this case.  
14 A. Yes.  
15 Q. Okay. And if you go into the  
16 Wisconsin 2010 folder.  
17 A. Give me a moment. Yes.  
18 Q. In that folder do you see a  
19 spreadsheet entitled Wisconsin\_election\_data?  
20 A. Yes.  
21 Q. Okay. Do you also see a spreadsheet  
22 entitled Wisconsin\_election\_data\_rev1?  
23 A. Yes.  
24 Q. And I may be mistaken, but I believe  
25 Mr. Poland said that there wasn't such a file

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1 named Wisconsin\_election\_data on Exhibit 34.  
2 Does this -- looking at Exhibit 34 here, do you  
3 see such a file?  
4 A. Yes.  
5 Q. And if you go back to the main  
6 Wisconsin -- Wisc file.  
7 A. Yes.  
8 Q. Do you see a file that's labeled  
9 Wisconsin\_1?  
10 A. Yes.  
11 Q. Okay. I believe Mr. Poland also said  
12 that he didn't believe there was a file named  
13 Wisconsin\_1 on Exhibit 34. Do you see such a  
14 file on that exhibit?  
15 A. Yes.  
16 MR. KEENAN: Those are the two that I  
17 thought actually were in there.  
18 MR. EARLE: We don't dispute that.  
19 MR. KEENAN: I just wanted to get  
20 that.  
21 MR. POLAND: That's fair. No. Thanks  
22 for making the record.  
23 Q. (By Mr. Keenan) As part of your -- we  
24 can stay on that Exhibit 34. As part of your  
25 work as an expert witness in the Baldus case,

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1 did you do some work in terms of analyzing the  
2 compactness of the districts that were enacted  
3 under Act 43?  
4 A. Compactness data were generated from  
5 the maps in preparation for trial, yes.  
6 Q. And if you open up -- there's a file  
7 that's pretty close to that Wisconsin 1. It's  
8 called --  
9 A. Wisc Compact?  
10 Q. Wisc Compact. If you could open that  
11 up, please. And my question is going to be,  
12 can you tell me what this document represents?  
13 A. Okay. This document represents a  
14 collection of different compactness measures  
15 that are generated by most redistricting  
16 software. They represent different types of  
17 compactness measures, whether they have to do  
18 with measures of circclitude (phonetic spelling)  
19 or filitude (phonetic spelling) or compactness  
20 and population placement.  
21 There are seven or eight standard  
22 measures that exist. The most common that are  
23 used are what's called the Reock and the  
24 Polsby-Popper, which are basically a small  
25 circumscribing circle and then a perimetered

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1 area measure.  
2 Q. And is it Reock? How do you pronounce  
3 R-e-o-c-k?  
4 A. Reock.  
5 Q. And what is the Reock method?  
6 A. It's the Brett Farve of methods in  
7 terms of its spelling. Sorry.  
8 As I recall, the Reock measure -- and  
9 again, it's been awhile since I've messed with  
10 these. The Reock measure is a small  
11 circumscribing circle measure which basically  
12 argues what is the smallest circle that can  
13 inscribe a district by design. So if you have  
14 a district shaped like your hand, you can draw  
15 a nice tight circle around it and it's a fairly  
16 compact district.  
17 The perimeter to area measures, the  
18 Polsby-Popper measure, examines -- takes the  
19 perimeter of a district, makes a circle out of  
20 it and it covers a little area. That larger  
21 circle is filled in by the area of the district  
22 that provided the perimeter.  
23 Taken together, these two measures  
24 help you ascribe general compactness.  
25 Q. And if we look at the Reock method, I

<p style="text-align: right;">Page 242</p> <p>1 see that there's three different columns there.  2 Do you know why there's three different  3 calculations?  4 A. You've got the Reock, the  5 Schwartzberg, the perimeter of the population,  6 circle of the population, polygon,  7 Polsby-Popper and the length/width measure, as  8 well as the Arenburg. So which one do you want  9 to have me look at?  10 Q. The Reock. And it looks like there's  11 C Reock, A Reock and D Reock. There's three  12 different ones.  13 A. Not on the sheet I'm looking at.  14 Q. Oh. Mine says Compactness Comparison.  15 It's the left most --  16 MR. EARLE: Down here.  17 A. Oh, oh, oh.  18 Q. (By Mr. Keenan) Sorry.  19 MR. EARLE: We were on the wrong  20 sheet. Now we're on the right sheet.  21 Q. (By Mr. Keenan) I think some of the  22 data is the same between the sheets. And if  23 you see the Reock it mentions -- there's like  24 three different columns.  25 A. Yeah.</p>	<p style="text-align: right;">Page 244</p> <p>1 A. Yes.  2 Q. So 44 is a copy of the Joint Pretrial  3 Report in the Baldus case, although you could  4 note I took some pages out because it was 145  5 pages.  6 MR. POLAND: I was going to say, it  7 should be longer than this.  8 Q. (By Mr. Keenan) So it includes the  9 table of contents and then it has some relevant  10 paragraph numbers that will tell you about some  11 of them. And then also 45 then is the tables  12 that are exhibits to the pretrial report.  13 MR. EARLE: Do you see what we have to  14 look forward to?  15 Q. (By Mr. Keenan) And so I think it will  16 be easiest to --  17 THE WITNESS: I'm not coming out of  18 retirement. Sorry.  19 Q. (By Mr. Keenan) -- easiest to look at  20 Exhibit 45 first.  21 A. Yes.  22 Q. And look at Table 21, which is Page 30  23 on the bottom.  24 A. Yes.  25 Q. And then also we should open up Number</p>
<p style="text-align: right;">Page 243</p> <p>1 Q. Do you know why there's three  2 different columns?  3 A. I'm not sure why. Well, the third  4 column is the difference between the first and  5 the second.  6 Q. Oh.  7 A. I don't recall why there are two  8 measures here. But if you look, there's a high  9 degree of similitude between most of them.  10 Q. Okay. What did you determine was the  11 mean Reock score for the assembly districts?  12 A. I don't recall.  13 Q. Does the spreadsheet reflect that?  14 A. Well, the mean A Reock is a .41. The  15 mean B Reock is a .39. Yeah.  16 MR. KEENAN: Okay. Would you mark  17 this as the next exhibit? Which one is that  18 going to be?  19 THE REPORTER: 44.  20 (Exhibit No. 44 marked.)  21 MR. KEENAN: And we'll mark this one  22 as 45.  23 (Exhibit No. 45 marked.)  24 Q. (By Mr. Keenan) So the first one is  25 44?</p>	<p style="text-align: right;">Page 245</p> <p>1 44 to paragraph -- it looks like 182.  2 A. Yes.  3 Q. And 183. But you can see Paragraph  4 183 references Table 21.  5 A. Yes.  6 Q. Okay. And can you tell me what -- in  7 Table 1 it says Source Gaddie. Do you see  8 that?  9 A. Yes.  10 Q. Okay. So what does Table 21 show for  11 the -- okay. First I should say on Table 21 it  12 says smallest circle as one of the measures of  13 compactness.  14 A. Yes.  15 Q. Is it your understanding that that  16 would be a reference to the Reock test?  17 A. That's the Reock test. Small  18 circumscribing circle, yes.  19 Q. And then the perimeter to area  20 category would reference the Polsby-Popper?  21 A. I believe so, yes.  22 Q. Okay. And so what did you calculate  23 the Reock test for the 2011 map to be the  24 average?  25 A. For the 2011 map it's computed here as</p>

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1 being .39.  
2 Q. Okay.  
3 A. Which is the more sensitive of the two  
4 Reock measures that were reported.  
5 Q. And then if we go to the pretrial  
6 report.  
7 A. Uh-huh.  
8 Q. In Paragraph 184.  
9 A. Yes.  
10 Q. It says, "The average smallest circle  
11 score for the entire assembly map is .28."  
12 A. Yes.  
13 Q. Range from .06 to .63. Is that  
14 correct?  
15 A. No. That means that there's an error  
16 in the pretrial report because it should say  
17 the average perimeter to area score. Because  
18 if you look at those numbers, the numbers  
19 indicated in Paragraph 184 conform to the  
20 numbers exhibited in the bottom half of the  
21 2011 assembly map column, which were perimeter  
22 errors. So there's actually an error in the  
23 pretrial report.  
24 Q. If you were to correct the error for  
25 the average smallest circle score for the

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1 entire assembly map, how would you have it  
2 read?  
3 A. It would read .39.  
4 Q. Okay. And what would the range be?  
5 A. The range would be from .20 to .61.  
6 Q. Thanks. That's all we needed.  
7 MR. KEENAN: Do you mind if I just  
8 take a break?  
9 MR. POLAND: No. Go right ahead.  
10 MR. KEENAN: I may have a couple of  
11 more questions for him.  
12 THE VIDEOGRAPHER: Going off the  
13 record. The time is 3:21 p.m.  
14 (Recess.)  
15 THE VIDEOGRAPHER: We are back on the  
16 record. The time is 3:24.  
17 MR. KEENAN: We're back on the record  
18 and I want to say that I have no further  
19 questions and thank you for your time today.  
20 MR. POLAND: I don't think we have  
21 anything further either.  
22 THE WITNESS: Jason, do we have  
23 anything?  
24 MR. GLIDEWELL: No, sir.  
25 THE WITNESS: Gentlemen, thank you

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1 very much. I appreciate you coming down.  
2 THE VIDEOGRAPHER: Going off the  
3 record. The time is 3:25 p.m. End of Disc 4  
4 and end of deposition.  
5 (Discussion off the record.)  
6 MR. POLAND: Do you want to waive  
7 signature or do you want to read it before --  
8 read and sign?  
9 THE WITNESS: Yeah, I'm comfortable  
10 with everything I've said. I can waive  
11 signature.  
12 (Deposition concluded.)  
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1 C E R T I F I C A T E  
2 STATE OF OKLAHOMA )  
3 COUNTY OF OKLAHOMA ) SS:  
4 I, Susan Narvaez, a certified  
5 shorthand reporter within and for the State of  
6 Oklahoma, certify that RONALD KEITH GADDIE,  
7 Ph.D., was sworn to testify the truth; that the  
8 deposition was taken by me in stenotype and  
9 thereafter transcribed by computer and is a  
10 true and correct transcript of the testimony of  
11 the witness; that the deposition was taken on  
12 March 9, 2016 at 425 NW 7th Street, Oklahoma  
13 City, Oklahoma; that I am not an attorney for  
14 nor relative of either party, or otherwise  
15 interested in this action.  
16 Witness my hand and seal of office on  
17 the 17th day of March 2016.  
18  
19 \_\_\_\_\_  
20 SUSAN NARVAEZ, CSR  
21 for the State of Oklahoma  
22 CSR #00404  
23  
24  
25

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