

EXHIBIT 41



Planet Depos[®]
We Make It *Happen*[™]

Transcript of Michael P. McDonald, Ph.D.

Date: June 5, 2017

Case: Benisek, et al. -v- Lamone, et al.

Planet Depos

Phone: 888-433-3767

Fax: 888-503-3767

Email: transcripts@planetdepos.com

www.planetdepos.com

Conducted on June 5, 2017

<p style="text-align: center;">1</p> <p>1 IN THE UNITED STATES DISTRICT COURT</p> <p>2 FOR THE DISTRICT OF MARYLAND</p> <p>3 -----:</p> <p>4 O. JOHN BENISEK, et al., :</p> <p>5 Plaintiffs :</p> <p>6 v. : Case No.</p> <p>7 LINDA H. LAMONE, et al., : 13-cv-3233</p> <p>8 Defendants :</p> <p>9 -----:</p> <p>10</p> <p>11</p> <p>12 Deposition of MICHAEL P. McDONALD, Ph.D.</p> <p>13 Baltimore, Maryland</p> <p>14 Monday, June 5, 2017</p> <p>15 9:38 a.m.</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20 Job No.: 146596</p> <p>21 Pages 1 - 72</p> <p>22 Reported by: Carla M. Sinclair, RPR, CRR</p>	<p style="text-align: center;">3</p> <p>1 A P P E A R A N C E S</p> <p>2</p> <p>3 ON BEHALF OF PLAINTIFFS BENISEK, et al.:</p> <p>4 MICAH D. STEIN, ESQUIRE</p> <p>5 MICHAEL B. KIMBERLY, ESQUIRE</p> <p>6 MAYER BROWN, LLP</p> <p>7 1999 K Street, N.W.</p> <p>8 Washington, D.C. 20006-1101</p> <p>9 202-263-3000</p> <p>10</p> <p>11</p> <p>12 ON BEHALF OF DEFENDANTS LAMONE, et al.:</p> <p>13 JENNIFER L. KATZ, ASSISTANT ATTORNEY</p> <p>14 GENERAL</p> <p>15 SARAH W. RICE, ASSISTANT ATTORNEY GENERAL</p> <p>16 OFFICE OF THE ATTORNEY GENERAL</p> <p>17 200 St. Paul Place, 20th Floor</p> <p>18 Baltimore, Maryland 21202</p> <p>19 410-576-6324</p> <p>20</p> <p>21 ALSO PRESENT:</p> <p>22 Maggie Brown, Ben Gantt, Ben Lewis</p>
<p style="text-align: center;">2</p> <p>1 Deposition of MICHAEL P. McDONALD, Ph.D.,</p> <p>2 held at the:</p> <p>3</p> <p>4 OFFICE OF THE ATTORNEY GENERAL</p> <p>5 200 St. Paul Place, 20th Floor</p> <p>6 Baltimore, Maryland 21202</p> <p>7</p> <p>8</p> <p>9</p> <p>10 Pursuant to agreement, before Carla M.</p> <p>11 Sinclair, Registered Professional Reporter,</p> <p>12 Certified Realtime Reporter, and Notary Public of</p> <p>13 the State of Maryland.</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p>	<p style="text-align: center;">4</p> <p>1 C O N T E N T S</p> <p>2 EXAMINATION OF MICHAEL P. McDONALD, Ph.D. PAGE</p> <p>3 By Ms. Rice 5</p> <p>4</p> <p>5</p> <p>6</p> <p>7</p> <p>8 E X H I B I T S</p> <p>9 (Attached to the transcript)</p> <p>10 McDONALD DEPOSITION EXHIBIT PAGE</p> <p>11 210 Opening Expert Report 14</p> <p>12 211 Rebuttal Report 14</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p>

Conducted on June 5, 2017

<p style="text-align: right;">5</p> <p>1 PROCEEDINGS</p> <p>2 MICHAEL P. McDONALD, Ph.D.,</p> <p>3 having first been duly sworn, testified as</p> <p>4 follows:</p> <p>5 EXAMINATION BY MS. RICE:</p> <p>6 Q Good morning, Mr. McDonald.</p> <p>7 Dr. McDonald. I'm sorry.</p> <p>8 My name is Sarah Rice. I'm an Assistant</p> <p>9 Attorney General with the State of Maryland, and</p> <p>10 I represent the defendants in this matter.</p> <p>11 With me is Jen Katz, also an Assistant</p> <p>12 Attorney General, representing the defendants in</p> <p>13 this matter. And we have with us today some of</p> <p>14 our summer clerks. We have Maggie Brown, Ben --</p> <p>15 MR. GANTT: Gantt.</p> <p>16 MS. RICE: -- Gantt, and Ben Lewis.</p> <p>17 Sorry. I almost had it.</p> <p>18 THE WITNESS: It's the first day. Isn't</p> <p>19 it?</p> <p>20 MS. KATZ: Thereabouts.</p> <p>21 MS. RICE: Thereabouts, yes.</p> <p>22 So, Micah, do you want to --</p>	<p style="text-align: right;">7</p> <p>1 hoping that we would find some chain of evidence</p> <p>2 of how the plan was developed during the course</p> <p>3 of redistricting, but we were not able to</p> <p>4 establish there was anything different.</p> <p>5 And they provided me with some of the</p> <p>6 documents in their court case, depositions, more</p> <p>7 recently from various witnesses and experts</p> <p>8 throughout the case, and I think that covers</p> <p>9 everything.</p> <p>10 I did provide in my reports a list of all</p> <p>11 of the materials that I considered during the</p> <p>12 course. If I'm missing anything, we can always</p> <p>13 look at the report.</p> <p>14 Q Great.</p> <p>15 You mentioned we. Who's we?</p> <p>16 A Who is we?</p> <p>17 Q Yes.</p> <p>18 A Who is we?</p> <p>19 Q You just said we in recounting to me how</p> <p>20 you examined the data files that depicted the</p> <p>21 precincts per district.</p> <p>22 A Okay. So you are asking me what?</p>
<p style="text-align: right;">6</p> <p>1 MR. STEIN: Sure.</p> <p>2 I'm Micah Stein from Mayer Brown,</p> <p>3 representing the plaintiffs. I'm with Michael</p> <p>4 Kimberly, also with Mayer Brown.</p> <p>5 BY MS. RICE:</p> <p>6 Q To start off, what material was provided</p> <p>7 to you by plaintiffs' attorneys that formed the</p> <p>8 basis for your opinions?</p> <p>9 A They provided me with some information</p> <p>10 that had been obtained through discovery. There</p> <p>11 was a spreadsheet essentially of party</p> <p>12 registration statistics for the 2010 election,</p> <p>13 which I understand was generated by the Maryland</p> <p>14 State Board of Elections for the redistricting by</p> <p>15 precinct.</p> <p>16 And there were data files which describe</p> <p>17 which census blocks are associated with each</p> <p>18 district that were also provided. Those were</p> <p>19 files that were, as far as I could tell, were</p> <p>20 already in the public domain. We checked to see</p> <p>21 if they were anything different than what had</p> <p>22 already been officially produced by the State,</p>	<p style="text-align: right;">8</p> <p>1 Q So I'm asking you, when you said we, who</p> <p>2 did you mean?</p> <p>3 MR. STEIN: Object. Vague.</p> <p>4 A Yeah, I just don't understand. You had</p> <p>5 asked me what information they had given me. I</p> <p>6 talked about we in terms of the lawyers and the</p> <p>7 interaction I had with them.</p> <p>8 Q Okay. So when you said that you examined</p> <p>9 and checked the data files for precinct per</p> <p>10 district, you meant yourself and the attorneys at</p> <p>11 Mayer Brown?</p> <p>12 A Okay. So now I understand the question.</p> <p>13 I was assisted in this project by a</p> <p>14 graduate student of mine. He's a Ph.D. He's</p> <p>15 moved on. He hasn't quite received his Ph.D.</p> <p>16 yet. His name is Brian Amos. He also assisted</p> <p>17 another professor at the University of Florida</p> <p>18 named Dan Smith with evidence that was gathered</p> <p>19 for the Florida redistricting litigation. So he</p> <p>20 has a lot of experience with GIS and with</p> <p>21 redistricting work.</p> <p>22 The two of us have published together on</p>

Conducted on June 5, 2017

9	<p>1 GIS work, Geographic Information Systems work, 2 and specifically related to election data. So we 3 have a lot of, we have weekly meetings where we 4 discuss, I oversee his research, and particularly 5 in this, we had weekly meetings where I would 6 give him some tasks to do and we would work 7 together on this project.</p> <p>8 Q Okay. What's your own experience with 9 the GIS software?</p> <p>10 MR. STEIN: Objection. Vague.</p> <p>11 A So back in the late 1980s, I was involved 12 with a political consulting firm in California 13 that developed one of the first GIS systems for 14 redistricting purposes.</p> <p>15 Later I was a principal investigator on a 16 project that created open source redistricting 17 software that is deployable through the web. We 18 used that software, we being, we, advocacy groups 19 and others. It was a large national effort on, 20 advocacy efforts throughout the country. We used 21 that software to support these advocate efforts 22 throughout the country.</p>	11
10	<p>1 I personally have used the ArcGIS 2 redistricting software myself, Maptitude. I have 3 a version of Maptitude at home that I use 4 regularly. I use the Quantum GIS, which is the 5 open source version of GIS.</p> <p>6 We've been more recently doing geocoding, 7 which also has GIS components to it. And we are 8 doing a joint project with the Colorado Secretary 9 of State's office to look at GIS, how to use that 10 to better improve their profile data and their 11 election administration data available to them. 12 And I've published on how you merge election data 13 with census data, which has GIS components as 14 well. There are at least two examples of that.</p> <p>15 I have officially done redistricting, 16 actually drawn maps using GIS software in 17 California as a consultant to the California 18 State Legislature back in the early 1990s, and 19 for the Arizona Independent Redistricting 20 Commission when I was a consultant to the Arizona 21 Redistricting Commission back in the early 1990s, 22 excuse me, early 2000s.</p>	12
	<p>1 Q And what work did Mr. Amos do for you in 2 developing your report?</p> <p>3 A Mr. Amos, basically he comes a lot 4 cheaper than I do, and the plaintiffs are cost 5 aware given that they are pro bono. I have taken 6 a discount on my typical rate. So I'm only 7 charging \$280 an hour. I typically charge \$350 8 an hour for my consulting. And they wanted a way 9 to further realize some cost savings, so I 10 recommended they hire Brian Amos to do some of 11 the analyses. And so he was hired at a rate of 12 about I believe \$50 an hour, which is quite a 13 savings for them.</p> <p>14 At my direction, because I would guide 15 his work, I had him merge the data that was 16 available, this data I mentioned earlier of the 17 precinct level election result, proto 18 registration data with the, essentially the 19 census data, although it's a little bit 20 complicated. It's data that's found in the 21 Ansolabehere and Rodden data set that I would 22 attune my report. One of your experts also uses</p>	
	<p>1 it, Mr. Cooper, and we've had a lot of experience 2 working with that data.</p> <p>3 In fact, as an aside on that, I arranged 4 for Ansolabehere and Rodden to get their grant to 5 create that database because it was in support of 6 our redistricting advocacy. So I'm intimately 7 aware of that data. Also intimately aware of its 8 limitations as well because we deployed it in 9 other states, not Maryland, but I knew that there 10 were problems with it, and so we were on alert 11 for problems with that database.</p> <p>12 Ad so when the data was merged in when 13 Brian, when Mr. Amos was merging in that data, he 14 encountered difficulties, I knew exactly what was 15 going on immediately as we saw it. It was an 16 issue with the Montgomery County had split some 17 of the precincts and the precinct splits were not 18 in the Ansolabehere and Rodden data set. 19 Fortunately, we were able to look at the 20 Montgomery County Board of Elections web site and 21 resolve those issues again working together 22 through my direction, saying we need to put these</p>	

Conducted on June 5, 2017

<p style="text-align: right;">13</p> <p>1 adjacent precincts together and look in a 2 rational way. And so we did that. He did that 3 under my direction. And then he did simple 4 aggregations of that data up to the district 5 level. 6 Now, later on -- so that was our first 7 pass at the data. Later on, we also decided we 8 were going to compute these statewide elections 9 as well. Similar methodology. We obtained 10 election results from the State Board of 11 Elections. We had to deal with the issue of the 12 precinct splits in Montgomery County using our 13 own approach that we'd already developed once we 14 realized about the issues that were involved with 15 it, and, again, he aggregated those statistics 16 once he had merged the data together. 17 He, also, once we realized that 18 Dr. Lichtman had made an error with the 19 calculation of the efficiency gap, I had him 20 independently attempt to replicate it, and I 21 replicated it on my own as well, and then we 22 compared notes, and he was the one who actually</p>	<p style="text-align: right;">15</p> <p>1 Let's go to the first numbered question 2 there. It reads, "Whether Maryland's 2011 3 Congressional Plan resulted in vote dilution that 4 was sufficiently serious to produce a 5 demonstrable and concrete adverse effect on a 6 group of voters." 7 Is that correct? 8 A Correct. 9 Q What do you understand vote dilution as 10 used in this question to mean? 11 A I used a paradigm that is common in the 12 racial gerrymandering litigation world where 13 that's something I've been involved with in prior 14 cases, and so, to my knowledge, no one has looked 15 at vote dilution in a partisan context. So it 16 seemed natural to me that the vote dilution 17 context for racial gerrymandering, which is a 18 group of people that we are talking about, races 19 or ethnicities, could be applied to another 20 context of groups we are talking about, Democrats 21 and Republicans. 22 The vote dilution, usually what we are</p>
<p style="text-align: right;">14</p> <p>1 troubleshoot what probably was happening with 2 Lichtman. I was trying to figure it out, too. 3 He's the one that figured it out first, how he 4 likely miscalculated the efficiency gap analysis. 5 So I think that's the whole scope of 6 everything that Mr. Amos had been involved with. 7 Q I'm going to give you a copy of your 8 report and we will mark these. We have been 9 going sequentially, and I have to say I'm having 10 trouble with this, but I know we didn't get up to 11 210. So we will mark this as 210 and 211. 12 (Whereupon, McDonald Deposition Exhibit 13 No. 210, Opening Expert Report, marked.) 14 (Whereupon, McDonald Deposition Exhibit 15 No. 211, Rebuttal Report, marked.) 16 BY MS. RICE: 17 Q Is anything missing? 18 A It does not appear so, cursory glance. 19 Q Let me know. 20 Okay. I'd like you first to turn to page 21 3 of your Opening Expert Report. In the first 22 paragraph -- oh, actually, sorry.</p>	<p style="text-align: right;">16</p> <p>1 talking about is taking the votes of a group, 2 identifying a group of people and drawing the 3 district in such a way that denies that group the 4 ability to elect a candidate of their choice. So 5 that's the legal meaning, not the legal, that's 6 how I understand it in terms of my expert work in 7 racial redistricting cases, how, what the meaning 8 of vote dilution is. 9 Q Were you the person that chose the racial 10 paradigm, the racial vote dilution paradigm? 11 MR. STEIN: Object to the extent it calls 12 for privilege. 13 MS. RICE: Micah, that would be a basis 14 for his opinion. 15 MR. STEIN: You can answer. 16 A Yes. I was asked to address this 17 question, and in conversations I had with the 18 counsel for the plaintiffs, I said that it 19 occurred to me that this seemed to be the most 20 reasonable way forward to establish this fact. 21 Q When making that choice, did you consider 22 whether partisanship is immutable?</p>

Conducted on June 5, 2017

<p style="text-align: right;">17</p> <p>1 MR. STEIN: Objection. Vague.</p> <p>2 Q Did you -- when you were choosing which</p> <p>3 paradigm to use for your vote dilution analysis,</p> <p>4 did you consider the constancy of partisan</p> <p>5 registration?</p> <p>6 MR. STEIN: Objection. Vague.</p> <p>7 A The way that I understood this, although,</p> <p>8 again, I'm not a lawyer here, so I don't</p> <p>9 understand all of the legal questions that are</p> <p>10 being raised in this case, but I understood it to</p> <p>11 mean that people who were Republicans in 2012,</p> <p>12 circa the time that the redistricting was taking</p> <p>13 place, that was the focus of what was happening</p> <p>14 here.</p> <p>15 So the question you are asking in some</p> <p>16 ways is immaterial whether or not people change</p> <p>17 their partisanship over time because the question</p> <p>18 as I understood was being posed to me is whether</p> <p>19 or not people at a certain point in time were</p> <p>20 being, having their first amendment rights being</p> <p>21 somehow impinged upon by the actions of Maryland.</p> <p>22 Q Okay. If you look at the first full</p>	<p style="text-align: right;">19</p> <p>1 the vote dilution has had an effect, which is the</p> <p>2 question that was posed up in the first part of</p> <p>3 it, is to look at whether or not the affected</p> <p>4 group has been able to elect a candidate of their</p> <p>5 choice. And in the three congressional elections</p> <p>6 that have occurred since the adoption of the</p> <p>7 redistricting plan, the Republican voters in the</p> <p>8 Sixth Congressional District have been unable to</p> <p>9 elect a candidate of their choice. And one of</p> <p>10 those elections, in particular, 2014, was an</p> <p>11 exceptional year for the Republicans. There was</p> <p>12 a national wave in their direction. If there was</p> <p>13 going to be an opportunity for the Republicans to</p> <p>14 be able to win or be able to elect a candidate of</p> <p>15 their choice in that particular election year,</p> <p>16 that would have been it, and they were unable to</p> <p>17 do so.</p> <p>18 So in the best electoral circumstances,</p> <p>19 even in the best electoral circumstances,</p> <p>20 Republicans have been unable to elect a candidate</p> <p>21 of their choice in the Sixth Congressional</p> <p>22 District.</p>
<p style="text-align: right;">18</p> <p>1 paragraph underneath the questions, the last</p> <p>2 sentence, "This vote dilution had a concrete</p> <p>3 impact on electoral outcomes because Republican</p> <p>4 voters in the adopted district have, as a</p> <p>5 consequence, been unable to elect a candidate of</p> <p>6 their choice, as compared to the previous</p> <p>7 benchmark district."</p> <p>8 Is that right?</p> <p>9 A You are adding that particular part to</p> <p>10 it.</p> <p>11 Q I'm sorry. I'm sorry. I'm sorry. I</p> <p>12 skipped. That was my reading.</p> <p>13 Let's start over.</p> <p>14 "This vote dilution had a concrete impact</p> <p>15 on the electoral outcomes because Republican</p> <p>16 voters in the adopted district have, as a</p> <p>17 consequence, been unable to elect a candidate of</p> <p>18 their choice."</p> <p>19 Is that vote dilution?</p> <p>20 MR. STEIN: Objection. Vague.</p> <p>21 A That's moving from the vote dilution to</p> <p>22 the facts. So one way to measure whether or not</p>	<p style="text-align: right;">20</p> <p>1 Q Okay. Moving to the first sentence in</p> <p>2 that paragraph, I'm sorry, "With respect to the</p> <p>3 first question, the evidence is incontrovertible</p> <p>4 that Maryland's adopted Sixth Congressional</p> <p>5 District was drawn in a manner that has the</p> <p>6 effect of diminishing the ability of registered</p> <p>7 Republican voters to elect candidates of their</p> <p>8 choice compared to the previous benchmark</p> <p>9 district."</p> <p>10 Is that right?</p> <p>11 A Yes.</p> <p>12 Q Is that what you mean by dilution?</p> <p>13 MR. STEIN: Objection. Vague.</p> <p>14 A I don't understand the question. I have</p> <p>15 given you an answer previously as to what I said</p> <p>16 was vote dilution.</p> <p>17 So do you need me to restate the answer?</p> <p>18 I can ask the person giving, taking the</p> <p>19 transcript here to read that back.</p> <p>20 Q No. I think I'm trying to understand how</p> <p>21 this sentence relates to vote dilution in the</p> <p>22 question, but let me restate the question.</p>

Conducted on June 5, 2017

<p style="text-align: right;">21</p> <p>1 Is the comparison to the previous 2 benchmark district part of what makes vote 3 dilution vote dilution? 4 MR. STEIN: Objection. Vague. 5 A I have given you an answer previously 6 what vote dilution is. If I were to suggest 7 where your confusion is arising from is that you 8 are moving to the second part of the sentence, 9 which talks about adverse effects. 10 Q So adverse effects to you are measured in 11 relation to the previous benchmark district? 12 MR. STEIN: Objection. Mischaracterizes 13 his testimony. 14 A Not necessarily. It depends on what the 15 previous district was. And so in the voting 16 rights context, you may or may not be looking at 17 a district that was ever drawn to help a minority 18 group elect a candidate of their choice. 19 Here what's relevant is that the 20 benchmark district was performant for the 21 affected group. And so, therefore, that's 22 evidence that there was a way to draw a district</p>	<p style="text-align: right;">23</p> <p>1 There are other metrics that are also 2 available beyond just the election results that 3 also are probative value. In my report, and I 4 imagine we will get to it at some point here, in 5 the vernacular of the voting rights litigation, 6 there's endogenous and exogenous elections. So 7 we have the actual election results, which have 8 the effect. We also have exogenous elections, 9 which also have an effect, which both myself and 10 Dr. Lichtman have discussed in our reports. 11 So the totality of the evidence that's 12 put before me, putting more weight on the 13 endogenous elections, I come to the conclusion 14 that in various different elections we can 15 observe that Republicans have had the ability to 16 elect their candidate of choice diminished. 17 Q Would it matter to your analysis why the 18 district, the benchmark district had been 19 performative for the affected group? 20 MR. STEIN: Objection. Vague. 21 A I'm not really sure I understand the why 22 there.</p>
<p style="text-align: right;">22</p> <p>1 that was not resulting in diminishing the ability 2 to elect a candidate of their choice. 3 In addition, the Maryland Sixth 4 Congressional District is located at the corner 5 of the state. Much of it doesn't need to be 6 touched. It was only a total of about roughly 7 10,000 total population over what was needed to 8 achieve the population equality within the state. 9 So not only did there exist a prior district, it 10 was -- you would have to make substantial changes 11 to that district in order to be able to effect an 12 outcome such that the Republicans within the 13 district were unable to elect a candidate of 14 their choice. 15 Q Okay. You mentioned that the prior 16 district was performative for the affected group. 17 What time period do you consider to be relevant 18 for that assessment? 19 MR. STEIN: Objection. Vague. 20 A Well, the most recent elections would be 21 the most probative of value. So a Republican was 22 elected in the 2010 election.</p>	<p style="text-align: right;">24</p> <p>1 Q Sure. 2 I think that, and I don't mean to 3 mischaracterize your testimony, so please correct 4 me if I misunderstood, I think that you 5 mentioned, when speaking about vote dilution 6 analysis in the racial gerrymandering context, 7 that a district may or may not have been drawn to 8 protect the voting rights of minorities. 9 Would that same analysis of why the 10 district was performative for Republicans be 11 something that you would examine? 12 MR. STEIN: Objection. Compound. Vague. 13 A I'm really trying to understand what that 14 question is. Why don't I suggest about vote 15 dilution, understand what vote dilution analyses 16 are. 17 The vote dilution analyses are what are 18 often called racial bloc voting analyses, and 19 what one does is one expert will do a statistical 20 analysis of some sort and determine what level of 21 support one group has for their candidate of 22 choice and what the other group has for their</p>

Conducted on June 5, 2017

25

1 candidate of choice, but also could be target
 2 groups candidate of choice as well.
 3 So in some situations what we will find
 4 in looking at these sort of vote dilution claims
 5 is that there's extreme polarization where none
 6 of the say like whites will vote for the
 7 African-American candidate of choice, and
 8 African-Americans are voting very strongly for
 9 the African-American candidate of choice.
 10 In that situation, you may need to draw a
 11 remedial district that will be sufficiently high
 12 having sufficiently large African-American
 13 population in order to elect a candidate of their
 14 choice.
 15 In some cases, though, you also find
 16 that, another situation, usually happens in urban
 17 areas, that you will find that the polarization
 18 is not as severe, and there may be a significant
 19 number of whites who will vote with
 20 African-Americans who are with minorities and
 21 coalition to elect the African-American candidate
 22 of choice.

26

1 So then the remedial district that you
 2 may need in order to enable the group to elect
 3 the candidate of choice, you may not need to put
 4 as many say African-Americans within the district
 5 in order to elect the candidate of choice.
 6 So the vote dilution analysis is really
 7 about sort of the relative polarization that is
 8 happening and the level of support that the
 9 Democrats and the Republicans have in this
 10 context for their candidates.
 11 The effect part of it is talking about,
 12 so once we know that vote dilution is occurring
 13 or there's racial polarization that's occurring,
 14 a district has been drawn in such a way that
 15 because there's not sufficient crossover voting
 16 to elect a candidate of choice, what adverse
 17 effect it is having on the group that's in
 18 question. In this case, the Republicans.
 19 And we have two different districts. We
 20 have a change where we actually dramatically
 21 changed the composition, the parts and
 22 composition of a district.

27

1 And so looking at the -- we actually do
 2 have a counter factual in a way because it's a
 3 district that should have been very similar or
 4 could have been very similar to the one that
 5 could have been enacted. So that provides some
 6 evidence about what was possible in the prior
 7 plan versus what was actually adopted.
 8 And as additional information, I'm sure
 9 we'll get to it in the course of our discussion
 10 today, there's also an alternative plan I put
 11 forward on how you might go about drawing the
 12 Sixth Congressional District and the Eighth
 13 Congressional District in a different manner that
 14 would not result in vote dilution.
 15 Q I think my question is, what do you see
 16 the role of the benchmark district in racial vote
 17 dilution analysis?
 18 MR. STEIN: Objection. Vague.
 19 A It really depends on the context, you
 20 know. So although I wasn't involved in the
 21 racial gerrymandering claims in Texas, some of
 22 the claims there were, as I understand them, that

28

1 the Republican state government had reduced the
 2 Hispanic voting age population of at least two
 3 districts, and that there you might look at the
 4 benchmark.
 5 In other cases where there is no
 6 benchmark existing, it is performant for the
 7 Hispanic population or African-American
 8 population, there would be no role for a
 9 benchmark district because there's nothing that
 10 exists there. And when you are litigating as a
 11 claim, that you need to create a remedial plan in
 12 order to assist the affected population to elect
 13 a candidate of choice.
 14 So it really depends on the context of
 15 what it is you are looking at whether or not the
 16 benchmark is going to be informative or not to
 17 whether or not you believe that or form an
 18 opinion that vote dilution has occurred and it
 19 has had a demonstrable effect.
 20 Q Going back to the set of questions
 21 looking at question 2, "Whether the Maryland
 22 General Assembly or its mapmakers specifically

Conducted on June 5, 2017

29

1 intended to burden the representational rights of
 2 certain citizens because of how they voted in the
 3 past and the political party with which they had
 4 affiliated."
 5 In that question, what do you understand
 6 burden the representational rights of certain
 7 citizens to mean?
 8 **A Well, that's a legal question, so I'm not**
 9 **going to opine about the legality of it. So from**
 10 **what I understand is that the, whether or not,**
 11 **again, the group has been able to elect a**
 12 **candidate of their choice is how I interpreted**
 13 **that. And the main thrust of this second**
 14 **question is about really the intent to have that**
 15 **adverse effect on the group.**
 16 Q Would any district that's drawn in an
 17 intentional manner to affect the ability of
 18 voters of one party to elect candidates of their
 19 choice compared to the previous benchmark
 20 district burden the representational rights of
 21 the voters?
 22 MR. STEIN: Objection. Calls for a legal

30

1 conclusion.
 2 **A Would any? I can think of hypotheticals**
 3 **where the party that's drawing the gerrymandering**
 4 **is just inept and the district actually doesn't**
 5 **result in having an adverse effect on the group.**
 6 **So I can't say, you know, with certainty that you**
 7 **would ever have the effect through the analysis**
 8 **in this approach.**
 9 Q So looking at sort of the third full
 10 paragraph, the first sentence says, "With respect
 11 to the third question, it is my opinion that
 12 paying due respect to traditional redistricting
 13 principles, a clearly superior alternative
 14 district exists that would produce a Sixth
 15 Congressional District that would not impair as
 16 greatly the ability of registered Republicans to
 17 elect candidates of their choice."
 18 Did you read that?
 19 **A Yes.**
 20 Q Am I right that that implies that the
 21 district would create some impairment?
 22 MR. STEIN: Objection. Mischaracterizes

31

1 the report.
 2 **A This alternative district did draw down**
 3 **the Republican performance within the district.**
 4 **And so that's why I couched the language to say**
 5 **there had been some reduction there. I believe**
 6 **that the district would still be very performant**
 7 **for the Republicans.**
 8 At one point, if I recall correctly, the
 9 statewide vote average within the district was 13
 10 percentage point advantage for the Republicans,
 11 which should be a highly performant district, but
 12 you can never say never in elections. So it's
 13 always possible that under unique circumstances,
 14 a Republican dies or something of that nature, a
 15 Democrat could win. I wanted to couch, again,
 16 the language in terms of those likelihoods and
 17 probabilities rather than state something with
 18 certainty.
 19 Q Okay. And what do you mean by impair in
 20 that sentence?
 21 **A This goes back to this discussion we have**
 22 **been having about vote dilution, whether or not**

32

1 **there's an opportunity for the group, the**
 2 **affected group to be able to elect a candidate of**
 3 **choice.**
 4 Q The next sentence reads, "It is my
 5 opinion that, but for consideration of partisan
 6 goals, aided by map drawers' use of party
 7 registration and voting history data, the lines
 8 of the adopted district would not have been drawn
 9 as they were, and the ability of registered
 10 Republican voters to elect candidates of their
 11 choice would not have been so substantially
 12 diminished."
 13 I'm interested in that last phrase,
 14 "substantially diminished." What do you consider
 15 to be substantial?
 16 MR. STEIN: Objection. Legal conclusion.
 17 **A I'm characterizing the change of the vote**
 18 **within the district. We can look up the**
 19 **statistics, if you wish, but what happened was a**
 20 **district that was highly performant, the**
 21 **Republicans had been changed so that it was**
 22 **performant for the Democrats. And so diminishing**

Conducted on June 5, 2017

33

1 was the direction, since the Republicans were
 2 able to elect their candidate of choice in the
 3 prior district.
 4 So diminution is with respect to the
 5 direction. Substantially is the level. There's
 6 no – substantially is just talking about just
 7 characterizing that there was a large change in
 8 the performance of the district.
 9 Q Did you ever set any criteria for what
 10 you would consider to be substantial?
 11 MR. STEIN: Objection. Vague.
 12 A Well, from what I understood the
 13 questions that I was asked to answer, the
 14 substantial was whether or not Republicans would
 15 be able to continue to be able to elect a
 16 candidate of their choice in the district. And
 17 so the fact that they are no longer able to is
 18 substantial, in my opinion, that they are no
 19 longer able to elect that candidate of choice.
 20 Q Does any diminution in voting strength of
 21 a voter's party impair the voter's ability to
 22 elect candidates of the voter's choice?

34

1 A It's a matter of degree. So if I move,
 2 again, a hypothetical plus 50 district to a plus
 3 49 district, yes, there's been a small
 4 diminishment of the ability to elect a candidate
 5 of choice. But we are talking about decimal
 6 places of probability in probabilistic terms.
 7 And so, yes, in that respect, any
 8 diminishment would have that adverse effect, but
 9 we would want to characterize it in terms of how,
 10 to what degree is that affecting. Is it some
 11 effect that we might actually think would be,
 12 actually lead to a real, as I said in the first
 13 question, concrete adverse effect on the group?
 14 Q And did you do any probabilistic analysis
 15 of effect in this report?
 16 MR. STEIN: Objection. Vague.
 17 A I did a deterministic analysis because we
 18 were able to look at the three elections, and the
 19 endogenous elections, and the seven exogenous
 20 elections, and it came to an overall, formed an
 21 overall opinion about the concrete adverse effect
 22 that the changes had brought upon Republicans

35

1 within the Sixth Congressional District. It's
 2 not a statistical analysis in the fact there's
 3 some sort of regression analysis or something of
 4 that nature. It's one that's based on the actual
 5 election results. So in that way it's a
 6 deterministic, not a probabilistic analysis.
 7 Q Question three here mentions traditional
 8 redistricting principles. How do you understand
 9 traditional redistricting principles to be
 10 defined?
 11 A It's a big can of world in the
 12 redistricting world, and so in some cases they
 13 are contentious as to what they are.
 14 I generally am in the realm of thinking
 15 that traditional redistricting principles apply
 16 to compactness and respective local political
 17 boundaries. There's some ones that really don't
 18 come up very often, like contiguity and those
 19 sorts of issues. Most districts are contiguous.
 20 That's rather trivial.
 21 Where some states have requirements for
 22 nesting of districts, so that you have to have

36

1 one district inside another, and that might be in
 2 the state constitution or in statutes. So you
 3 would think that that would be a principle for
 4 that state.
 5 A number of states have communities of
 6 interest that are similar within their
 7 constitutions or statutes. So you might then
 8 think of communities of interest, although
 9 there's no one clear-cut determination of what
 10 community of interest is.
 11 So in some respects the answer to the
 12 question depends upon which state that you are
 13 looking at, what's the history of that state, and
 14 the overall history of what the, in my case what
 15 I applied to because Maryland actually does not
 16 have any constitutional nor statutory language
 17 regarding Congressional redistricting other than
 18 to state a process, since there are no
 19 traditional principles that are in the state
 20 constitution, I fell back on what I generally
 21 believed to be the Supreme Court's version of
 22 looking at compactness and respect for local

Conducted on June 5, 2017

<p style="text-align: right;">37</p> <p>1 political boundary lines.</p> <p>2 Q Okay. So when you were looking at and</p> <p>3 when you used the phrase "traditional</p> <p>4 redistricting principles" in the context of this</p> <p>5 report, you were looking at compactness and</p> <p>6 respect for local political boundaries?</p> <p>7 MR. STEIN: Objection. Mischaracterizes.</p> <p>8 A Correct.</p> <p>9 Q We are going so fast here. If we could</p> <p>10 turn to page 6.</p> <p>11 A I'm there.</p> <p>12 Q Did you perform any analysis of the</p> <p>13 needed population shift to achieve ideal</p> <p>14 population for any district other than the Sixth?</p> <p>15 A For this report, I did not. I did</p> <p>16 produce for the entire country an analysis of the</p> <p>17 population deviations.</p> <p>18 Q Okay.</p> <p>19 A I have done it. I did not use it in this</p> <p>20 report.</p> <p>21 Q So based on either this report or just</p> <p>22 your general knowledge from doing this other</p>	<p style="text-align: right;">39</p> <p>1 underpopulated?</p> <p>2 A I don't recall.</p> <p>3 Q Do you know if District 2 was</p> <p>4 underpopulated?</p> <p>5 A I don't recall.</p> <p>6 Q Do you know if District 7 was</p> <p>7 underpopulated?</p> <p>8 A I don't recall.</p> <p>9 Q Moving to pages 7 and 8 where you</p> <p>10 describe the cooperative Congressional election</p> <p>11 study --</p> <p>12 A Yes, I'm there.</p> <p>13 Q Okay.</p> <p>14 -- why did you choose the study for 2012</p> <p>15 and 2014?</p> <p>16 A Typically, in racial gerrymandering</p> <p>17 cases, survey data is not available. So there's</p> <p>18 another technique that people use to do these</p> <p>19 analyses. It's called a racial bloc voting</p> <p>20 analysis, and it uses a technique, a statistical</p> <p>21 technique, typically called ecological inference.</p> <p>22 Essentially what it is is correlating at the</p>
<p style="text-align: right;">38</p> <p>1 analysis, do you know what districts District 6</p> <p>2 gave population to in Maryland?</p> <p>3 MR. STEIN: Objection. Vague.</p> <p>4 A I thought I had that in my report. I did</p> <p>5 that for registration.</p> <p>6 Well, there is a Table 4 on page 12,</p> <p>7 which has the party registration changes. I did</p> <p>8 produce a similar graphic for the total</p> <p>9 population or table. It did not make it into the</p> <p>10 report. I guess it felt like it wasn't necessary</p> <p>11 to make the points I needed to make.</p> <p>12 In any case, this gives us some -- since</p> <p>13 you can't move population without -- registered</p> <p>14 voters are people, so they are some of the</p> <p>15 population that had to be moved, this would tell</p> <p>16 you which districts voters within the Sixth</p> <p>17 Congressional District were being moved out of</p> <p>18 into and also which other districts that</p> <p>19 population existing in the benchmark district</p> <p>20 were being moved into the Sixth Congressional</p> <p>21 District.</p> <p>22 Q Do you know if District 1 was</p>	<p style="text-align: right;">40</p> <p>1 precinct level election results with race.</p> <p>2 The analogy that we could use here then</p> <p>3 would be to correlate election results with the</p> <p>4 partisan composition of each precinct.</p> <p>5 I only had available to me the partisan</p> <p>6 composition in the 2010 election. That was the</p> <p>7 only thing that was provided in discovery.</p> <p>8 We also at the time, and I think it's</p> <p>9 still a challenge somewhat, but we only had the</p> <p>10 election date results within each precinct. And</p> <p>11 so looking at the limited data availability that</p> <p>12 I had -- and I would also mention, I think that</p> <p>13 there's more data available. I think that Eric</p> <p>14 Hawkins, who has been identified as a consultant</p> <p>15 to the committee, had produced some reports that</p> <p>16 show that there's some additional data in his</p> <p>17 reports that were not made available through</p> <p>18 disclosure. So that data was not provided</p> <p>19 through disclosure to us. So I had to work</p> <p>20 with -- I decided that doing a racial bloc or</p> <p>21 party bloc voting analysis didn't appear to be</p> <p>22 viable to establish the racial, a partisan bloc</p>

Conducted on June 5, 2017

41

1 voting patterns that would be necessary to
 2 establish vote dilution.
 3 So what I decided to do then was to look
 4 at the CCES because this Cooperative
 5 Congressional Election Survey is a large scale
 6 survey. It has a sample of people in each
 7 Congressional district, and so as I looked at it
 8 as an opportunity to do similar racial bloc or
 9 partisan bloc voting analyses within the Sixth
 10 Congressional District as I might have done with
 11 an ecological inference analysis, I decided this
 12 would be sufficient in order to establish what I
 13 think is just common sense that Republicans tend
 14 to vote for Republicans and Democrats tend to
 15 vote for Democrats.
 16 So I did the analyses there in this
 17 table. And we can talk about that, if you wish.
 18 Q Sure.
 19 I think my question was related to the
 20 time period that, of the studies that you
 21 selected. Why did you select 2012 and 2014
 22 instead of looking at potential polarization at

42

1 the time the map was drawn?
 2 MR. STEIN: Objection. Compound.
 3 A The CCES didn't have a survey available
 4 that had sufficient -- I'm not sure if it existed
 5 before 2012, but it didn't have the necessary
 6 data I needed in order to do an analysis in 2010
 7 or earlier.
 8 Q Do you know whether party polarization
 9 changes over time?
 10 MR. STEIN: Objection. Vague.
 11 A Yes, I'm aware that there are things
 12 called realignments and other patterns that I
 13 study in my work as an academic that do indicate
 14 that, yes, partisan affiliations can change over
 15 time.
 16 Q You mentioned Eric Hawkins. Do you
 17 believe that Eric Hawkins was a consultant to the
 18 Governor's Redistricting Advisory Committee?
 19 A I have not looked at the record in
 20 detail. I know that he produced statistics, and
 21 counsel has represented to me that he was a
 22 consultant to the committee. So I'm assuming

43

1 that he was a consultant.
 2 I have worked with Eric Hawkins in
 3 litigation in Ohio, and worked with him when we
 4 were both consultants to the New Jersey State
 5 Apportionment Board, and I had been talking to
 6 him even before redistricting started about how
 7 to go about doing redistricting for the upcoming
 8 cycle of redistricting.
 9 So I actually know him personally, and
 10 it's sort of the statistics that he would have
 11 been producing, would not make any sense to me
 12 that he would produce those or be able to produce
 13 them unless he was actually doing the work. He
 14 was very busy during that last round of
 15 redistricting, as was I and others, and so I
 16 can't imagine he would have taken out of his time
 17 to produce reports of, again, plans that appear
 18 to have been developmental plans that were not
 19 provided in disclosure to us.
 20 So we're talking about he was doing test
 21 mapping and he was producing reports. You don't
 22 do that sort of work unless you are, have been

44

1 retained by someone to do that work. So it makes
 2 sense to me that either directly or indirectly he
 3 had a role in the plan development for the
 4 Maryland Congressional redistricting plan.
 5 Q Would it change any of the opinions that
 6 you've expressed in your reports if Eric Hawkins
 7 was retained to develop a plan that was submitted
 8 as a third-party plan?
 9 MR. STEIN: Objection. Incomplete.
 10 A No. I'm more talking about -- I would
 11 have liked to have seen more data because it
 12 appears that there was more data that was
 13 considered during the plan development by someone
 14 that eventually resulted in the adopted plan.
 15 And it does not appear that that information has
 16 been disclosed to the plaintiffs in this case.
 17 Q What information were you provided with
 18 regards to the kind of data that you are looking
 19 for?
 20 A We only received these, as I described to
 21 you previously, this precinct level data of party
 22 registration for the 2010 election. The reports

Conducted on June 5, 2017

45	<p>1 that Eric Hawkins are producing have more 2 detailed information than that. So he had 3 election results data that he was aggregating, 4 much like Mr. Amos did for me during plan 5 development. 6 I'm also told, although counsel has not 7 provided this to me, so this is hypothetical, but 8 I'm told that there are reports that show 9 incremental changes that the Sixth Congressional 10 District started off as about 51 percent Democrat 11 performance district. It was incremental and 12 made into a 53 percent performance district. 13 That's how it was characterized to me. 14 We only had the end result plan. We 15 don't have any of the steps that were being taken 16 intermediate in the plan development process that 17 would explain how it was you start at 51 percent 18 and end up at a 53 percent plan. 19 The courts in both Florida and in 20 Wisconsin have found that evidence to be or that 21 information of facts to be highly informative. 22 In my reading, of course, I'm not a</p>	47	<p>1 There's an iterative process where people go 2 through. They start with a plan, and usually 3 it's the benchmark plan, and then you start 4 making changes to that plan. 5 Sometimes people will start with a 6 completely clean slate. That's possible, too. 7 Certainly Arizona does that approach. But still 8 you start with a base map and you make changes to 9 it. And none of that evidence was, information 10 was provided to us in this case. 11 I would also add to this that I asked 12 early on, when you asked earlier about what 13 information was provided to me by my lawyers, 14 when I, when we had a discussion about what 15 information I would like to have, this was 16 discussed, that I would want all of the 17 information, the databases that were used for the 18 drawing of the districts, and any of the 19 intermediate plans that were developed during the 20 redistricting process. Those would be of high 21 use to me to form an opinion as to what happened 22 during the redistricting process.</p>
46	<p>1 lawyer, so I'm just giving you my opinion as a 2 lay academic, but my opinion is that that 3 information was highly valuable to the court in 4 forming their opinion in both the State Court, 5 State Supreme Court in Florida, and the Federal 6 Court in Wisconsin. 7 Q I just want to understand what you were 8 provided with. Were you provided with more than 9 one set of GIS readable files, more than one map? 10 MR. STEIN: Objection. Vague. 11 A They were all the same map, as far as we 12 could tell. We overlaid them. They were 13 identical. Without changes, they were identical 14 to the plan that was adopted. 15 There are, there existed at some point in 16 time districts, plans that were being developed, 17 and those were not disclosed. 18 Again, I've had experience actually doing 19 redistricting for redistricting authorities, 20 state legislatures, and commissions. You 21 don't -- a plan does not just pop out of 22 someone's head and you have a fully formed map.</p>	48	<p>1 Q Did you undertake any analysis of whether 2 Republicans are historically unable to form blocs 3 with crossover voting from non-affiliated voters 4 in Maryland? 5 A Within Maryland, no. Within the Sixth 6 Congressional District, also, I did not do that. 7 However, one could infer, if one wished to do 8 that sort of analysis, you could look at Table 2 9 or simply look at the election results. 10 When I draw my opinions about whether or 11 not Republicans are able to elect a candidate of 12 their choice, I'm essentially doing that sort of 13 analysis, although it's not framed exactly in 14 crossover votes from Independents, separately 15 from Independents or from Democrats. 16 In order to be able to elect a candidate 17 of their choice in the 2012, '14, or '16 18 election, we would have been able to observe, if 19 there were sufficient crossover votes, that a 20 Republican candidate would have been elected. 21 And so I can infer from the fact that a 22 Republican was not elected in any of those three</p>

Conducted on June 5, 2017

49

1 **Congressional elections that there were**
2 **insufficient crossover votes from any source, be**
3 **it from Independents, or from Democrats, to the**
4 **elected Republican candidate of choice.**
5 Q Let's look for a second at Table 2.
6 **A Yes.**
7 Q And in the no party registration column,
8 the candidate that receives the greater share of
9 the vote in that column appears to be the winning
10 candidate in every race except for the 2014 U.S.
11 House race. Is that right?
12 **A I haven't done that analysis. I just**
13 **need to check it over for a minute.**
14 Q Take your time, please.
15 **A Yes, I believe that would be correct.**
16 Q Do you know what the absolute vote margin
17 was in the 2014 U.S. House election?
18 **A I do not know it offhand. I have looked**
19 **at the election results, so I would have to**
20 **refresh my memory on the results.**
21 Q Do you recall noticing anything about
22 that election in particular?

50

1 MR. STEIN: Objection. Vague.
2 **A Yeah, I don't.**
3 Q Did you undertake any analysis of
4 non-affiliated voting behavior in Maryland?
5 MR. STEIN: Objection. Vague.
6 **A Well, there are some numbers sitting here**
7 **in Table 2. So there is some, there is an**
8 **analysis there.**
9 **As I said previously, I'm drawing**
10 **inferences about crossover votes would have been**
11 **from any source, either Independents or**
12 **Democrats.**
13 Q When you were looking at the election
14 results from endogenous and exogenous elections
15 in any of the tables in your reports, did you
16 ever examine the individual characteristics of
17 the race?
18 MR. STEIN: Objection. Vague.
19 **A I'm sorry. Are we moving on to a new**
20 **topic now?**
21 Q You can turn to any page, if you want,
22 but the question is really any of the --

51

1 **A I'm more asking if we are taking a break.**
2 Q Oh. Sorry. If you need a break, yes.
3 We can take a break.
4 **A Okay. Thanks.**
5 **I'm about to run out of water, and I need**
6 **to go to the bathroom. Sorry.**
7 MS. RICE: Sure.
8 (Break taken.)
9 BY MS. RICE:
10 Q So my question was, in all of the races
11 that you are examining and you put in different
12 tables of the election results, did you ever look
13 at the individual characteristics of the race?
14 MR. STEIN: Objection. Vague.
15 **A I looked at some of the individual**
16 **characteristics of the races. So most notably**
17 **these characteristics are related to what you**
18 **might think of this Democratic performance index.**
19 **That's one of the factors that would be related**
20 **to the performance of the election results.**
21 **That's why redistricting consultants like, people**
22 **like Eric Hawkins look at that information.**

52

1 **That's why I looked at it. That's why**
2 **Dr. Lichtman looked at it as well.**
3 Q Okay. And did you look into any of the
4 electoral circumstances of any of the individual
5 races?
6 **A No, I did not, other than the underlying**
7 **partisanship measure we have in the district.**
8 Q Did you examine incumbency effects in
9 your analysis?
10 **A I did not.**
11 Q My next set of questions relates to your
12 alternative proposed district. I think you
13 discuss it on pages 14 through 16, and it's
14 depicted on figure 8.
15 **A Yes.**
16 Q So looking at the top of page 15, that
17 first phrase on the top of page 15, review the
18 whole sentence, if you would like, it says,
19 "adheres to redistricting principles." We
20 already talked about your use of the phrase
21 "traditional redistricting principles" somewhere
22 else in the report, but when you say

Conducted on June 5, 2017

53

1 redistricting principles here, what do you mean?
 2 **A Those two principles that we discussed**
 3 **earlier, compactness and respective local**
 4 **political boundaries.**
 5 Q And that's it?
 6 **A Yes.**
 7 Q Do you report the population of the two
 8 districts anywhere in the report?
 9 MR. STEIN: Objection. Vague.
 10 Q Of the alternative districts.
 11 **A I do not, I do not believe so.**
 12 Q Do you know whether the populations of
 13 the districts are the ideal population?
 14 MR. STEIN: Objection. Vague as to
 15 districts.
 16 Q The alternative districts.
 17 **A Yes. I did not say this earlier, so I**
 18 **need to correct now, Mr. Amos created this map at**
 19 **my direction. And it's the concept and an idea**
 20 **that I had and I directed him what to do.**
 21 **He did produce reports of the district.**
 22 **He did, as I recall, zero out, what we call**

54

1 **zeroing out the population. It would have been**
 2 **within one point of the ideal, one person of the**
 3 **ideal, not point.**
 4 **If it's not, you can create a similar,**
 5 **substantially similar map by adjusting that line.**
 6 **That is, if we look at figure 8 on page 25, in my**
 7 **vast experience of drawing maps, it would not be**
 8 **difficult to make trades between these two**
 9 **districts to balance that out. And I would also**
 10 **say that this is one map, among many, that could**
 11 **be created that has this concept embedded in it.**
 12 Q What did you -- we talked about one thing
 13 that you directed Mr. Amos to do. What were the
 14 other things that you directed Mr. Amos to do in
 15 constructing this alternative plan?
 16 **A I just had him merge together the Sixth**
 17 **and the Eighth Congressional districts or**
 18 **basically wipe them out so that we just had a**
 19 **cookie cutter then of just the western portion of**
 20 **the state that was formally the Sixth and the**
 21 **Eighth Congressional District, and then I**
 22 **directed him to draw a line through Montgomery**

55

1 **County that would, as straight of a line that was**
 2 **possible, knowing that census geography doesn't**
 3 **really necessarily have straight borders all the**
 4 **way. You have to have a nice road or something**
 5 **like that to make a perfectly straight line**
 6 **often. So knowing that that didn't exist, I**
 7 **asked him to do it as good as he could while**
 8 **equalizing the population between the two**
 9 **districts.**
 10 Q And what software did Mr. Amos use?
 11 **A He used Maptitude.**
 12 Q What data did Mr. Amos consider?
 13 MR. STEIN: Objection. Vague.
 14 **A He only considered the census data.**
 15 **That's the data we had available to us, as well**
 16 **as the -- I did not direct him to consider any**
 17 **other data. And this map was drawn, as far as I**
 18 **can tell, it's drawn to my specifications, which**
 19 **is literally to draw a line that would divide**
 20 **Montgomery County into such that the two**
 21 **districts have equal population.**
 22 Q Did you give any other direction about

56

1 the placing of that line?
 2 **A No.**
 3 Q Did you examine whether the residences of
 4 incumbents were maintained within the Sixth and
 5 the Eighth Districts?
 6 **A I did not.**
 7 MR. STEIN: I will object to the time
 8 frame on the last question.
 9 Q Incumbents in the 2010.
 10 **A No. But, again, if there are violations**
 11 **of putting two incumbents together, the concept**
 12 **here, I believe it would be easy to rectify any**
 13 **of those sorts of issues.**
 14 Q So did you count how many cities the
 15 border might bisect?
 16 MR. STEIN: Objection. Vague.
 17 **A I did not in my report, but you can see**
 18 **that in the map, although it's not very clear.**
 19 **We tried to go around Gaithersburg. And so**
 20 **Mr. Amos and I had that discussion about, oh,**
 21 **yeah, it would be possible to draw this so that**
 22 **you didn't split that, make that split there. So**

Conducted on June 5, 2017

57

1 you can see a little bump around Gaithersburg
 2 keeping it intact.
 3 Q Did you ever produce -- other than your
 4 consideration of Gaithersburg in particular, did
 5 you ever produce any analysis of all of the
 6 cities that could be impacted?
 7 MR. STEIN: Objection. Vague.
 8 Q I know that it's not in the report.
 9 A I mean, that seemed to be the critical
 10 one to us. These are -- it's hard to see in
 11 these reports because it's small, but I had much
 12 larger maps to look at. And, again, those are,
 13 the gray areas are the census places within the
 14 district, the two districts, and they are one of
 15 the -- might also think of them as cities. They
 16 are often considered that for redistricting
 17 purposes.
 18 Insofar as we were looking at census
 19 places, we were trying to avoid those unnecessary
 20 splits. And, as far as I recall, it was only
 21 Gaithersburg that was really an issue. And we
 22 had to, instead of drawing a straight line

58

1 through Gaithersburg, it would have split the
 2 census place, we went around it.
 3 Q Okay. So the only census places, I'm
 4 just trying to understand it, so please correct
 5 me if I'm wrong, the only census places that you
 6 considered are the ones that appear in gray on
 7 the map?
 8 MR. STEIN: Objection. Mischaracterizes.
 9 A There were other census places that were
 10 on the map, yes. We were using Maptitude. So
 11 many of them are not, of course, relevant for
 12 this division of the line.
 13 And, as I said before, this is just one
 14 suggestion the Legislature or the Commission said
 15 we should do. So I'm certain there are many
 16 alternative maps that would satisfy other
 17 criteria that the Governor's commission may wish
 18 to consider if they were drawing a remedial map
 19 under direction of the Court that would not,
 20 would be substantially similar to the concept
 21 that's being illustrated within this particular
 22 configuration.

59

1 Q But you didn't, and I don't mean this to
 2 be repetitive, I'm going to asking you about
 3 census designated places as opposed to cities,
 4 you didn't prepare any report of how many census
 5 designated places were split by this map?
 6 A There was the splits report, and I don't
 7 recall all the information that was on the splits
 8 report. But typically they do like VTDs. Voting
 9 tabulation districts are included in that report.
 10 Counties are included in that report. It was a
 11 statewide report.
 12 Q Okay.
 13 A But, of course, we were only touching the
 14 Sixth and Eighth Districts. I can't recall if
 15 there are census places. I think it's in the
 16 report, but I'm not sure. I can't recall if
 17 that's in that report or not.
 18 Q Okay. So did I understand you correctly
 19 that neither you nor Mr. Amos looked at voter
 20 registration data when you drew this border?
 21 A I simply directed him to draw this line.
 22 That data was available to him. I assume, given

60

1 how, my instructions and our conversations that
 2 we had, certainly when he was showing me the
 3 maps, we were not looking at those statistics.
 4 Is it possible that he was looking at
 5 those statistics somehow? I suppose it's
 6 possible. I do not oversee him every minute of
 7 the step, of the work.
 8 Mapping is tedious work. So this is
 9 something that he is well suited for, given the
 10 costs that were involved. But, to my knowledge,
 11 he did not look at it. I certainly did not look
 12 at it either.
 13 Q And was there any other data that was
 14 available to Mr. Amos that he may or may not have
 15 looked at?
 16 A Yes. By this stage, that we would have
 17 also created this precinct level layer of
 18 statewide election results as well.
 19 Q Was this the first alternative plan that
 20 Mr. Amos drew?
 21 A It's the first and only, yeah.
 22 Q Did you check at some -- I assume you

Conducted on June 5, 2017

61

1 did, because it's in the report. Did you check
 2 at some point how many registered Republicans
 3 were in each district?
 4 **A Well, not in each district.**
 5 Q Or in the Sixth and the Eighth Districts.
 6 I'm sorry.
 7 **A We produced statistics for the Sixth**
 8 **District. It's at the bottom of page 15, I**
 9 **believe. That is correct.**
 10 Q Okay. So did you not look at these
 11 numbers for the alternative Eighth District?
 12 **A I did not because the point was to**
 13 **discuss the Sixth District.**
 14 Q And did you make any analysis of how many
 15 Democrats that were formerly living in the Eighth
 16 District under the 2002 plan were moved into the
 17 alternative Sixth plan?
 18 MR. STEIN: Objection. Vague.
 19 **A No. There's no sort of similar analysis**
 20 **that you would find on page 12, Table 4. That**
 21 **was done for changes to the Eighth District.**
 22 Q Is the voting strength of registered

62

1 Democrats that were formerly living in the Eighth
 2 District that are now moved into the alternative
 3 Sixth District diluted under your alternative
 4 plan?
 5 MR. STEIN: Objection. Legal conclusion.
 6 **A And I have to understand the question**
 7 **again. Can you say that again?**
 8 Q Sure.
 9 For Democratic residents of the portion
 10 of Montgomery County that under the 2002 plan was
 11 in the Eighth District, who are now moved into
 12 the Sixth District, are their votes diluted under
 13 this alternative plan?
 14 MR. STEIN: Same objection.
 15 **A Yes. So you are asking me to draw a**
 16 **legal conclusion, why counsel is pointing out --**
 17 Q I don't mean to be asking you to draw a
 18 legal conclusion. I just mean under your
 19 understanding and how you use both dilution in
 20 these analyses.
 21 **A The Democratic voters that were formerly**
 22 **within the Eighth District would have their**

63

1 **ability to elect a candidate of their choice**
 2 **diminished, yes. You would be correct.**
 3 Q Okay. I have some questions about your
 4 choice of competitiveness range. So you state
 5 that your preferred competitiveness range is 48
 6 to 52 percent. Is that correct?
 7 **A Correct. I also state that that would be**
 8 **my uninformed range, and I discuss a statistical**
 9 **procedure to establish what the range could be or**
 10 **what I would say it would be, and that would be a**
 11 **methodology that I developed for my work as a**
 12 **consultant to the Arizona Independent**
 13 **Redistricting Commission where I was tasked with**
 14 **evaluating the competitiveness of districts to**
 15 **comply with the state constitutional requirement**
 16 **that had been adopted through a ballot initiative**
 17 **in 2000. I then subsequently published that**
 18 **methodology in another, in an academic**
 19 **peer-reviewed journal.**
 20 So the range, 48 to 52, is the uninformed
 21 sort of, without doing the additional analyses
 22 that would be necessary, that was roughly what

64

1 **the range was in Arizona back in 2000, post 2000**
 2 **election. That's a rough estimate of what I**
 3 **would expect without doing those additional**
 4 **analyses.**
 5 Q I see. And have others adopted this
 6 approach?
 7 **A Have others adopted the approach?**
 8 Q Of evaluating competitiveness.
 9 **A It was peer reviewed, so it has passed**
 10 **that standard. I don't know. I don't know of**
 11 **anyone who was cited and used that approach in**
 12 **their own work. I can't answer that. I have to**
 13 **look and see if anyone cited that work.**
 14 **The approach itself, however, is based on**
 15 **a methodology that was first suggested in a 1994,**
 16 **if I recall correctly, article that is widely**
 17 **cited and used widely. So with that respect, the**
 18 **underlying technique and methodology has been**
 19 **widely accepted.**
 20 **Whether or not the specific application**
 21 **methodology determining whether or not a district**
 22 **is competitive is something I can't tell you with**

Conducted on June 5, 2017

65

1 certainty if anyone has adopted that specific,
2 the method to that specific application, other
3 than myself.
 4 Q So you mentioned that you developed that
 5 range with respect to Arizona. Does the method
 6 of developing the range change based on the
 7 nature of the electorate?
 8 **A It may.**
 9 Q And did you do any similar analysis with
 10 respect to Maryland?
 11 **A I did not.**
 12 Q I'm looking at your rebuttal report, page
 13 6. In the third full paragraph on that or the
 14 third paragraph on that page, you discuss that
 15 the typical vote share, and I understand that you
 16 got this from Dr. Lichtman's table, Maryland
 17 Republicans can expect 39.1 percent.
 18 **A Correct. Using his own data so we can**
19 all be on the same page.
 20 Q I got it.
 21 And would you -- if you are looking at
 22 typical vote share, would you usually look at a

66

1 point or a range?
 2 **A So if I understand, we are shifting**
3 topics again --
 4 Q Yes. I'm sorry.
 5 **A Okay. Thank you.**
 6 **So, yes. In doing these analyses of**
7 partisan gerrymandering, I think it's instructive
8 to look at a range and not just the point.
 9 Q What would be an appropriate range?
 10 **A The idea is to look at the, develop a**
11 sense of the characteristics of the votes to
12 seats curve around the election that you might
13 typically observe around the election. So what I
14 will do typically in these sorts of analyses and
15 what I did in the Perez versus Perry litigation
16 is develop a broad range, but I was really most
17 focused on the area around the typical election
18 of what you would observe, in that case Texas. I
19 used a similar approach in Alaska as well. Had a
20 broad range. That range typically will cover
21 50 percent because partisan gerrymandering
22 measures and partisan bias are often formulated

67

1 around 50 percent.
 2 **But, as I say, in Perez v. Perry, and**
 3 **also the approach that I used in the Alaska**
 4 **litigation, and it has been a critique of mine**
 5 **and others have critiqued a method called the**
 6 **partisan symmetry, you don't want to think about**
 7 **extreme hypotheticals because they are not**
 8 **informative of what would actually happen in**
 9 **elections, and when drawing districts, from my**
 10 **own personal experience of drawing and also**
 11 **talking with lots of other consultants, they are**
 12 **not drawing to, on hypothetical elections that**
 13 **are, not hypothetical, but hypothetical elections**
 14 **which are atypical for the state. That's not**
 15 **their purpose when they are drawing districts.**
 16 **They are drawing districts of what they think is**
 17 **most likely going to happen in the course of the**
 18 **elections throughout the next decade.**
 19 Q Is there any percentage of vote swing
 20 that you would find particularly instructive in
 21 that analysis?
 22 MR. STEIN: Objection. Vague.

68

1 Q Potential vote swing.
 2 **A Vote swing. Well, we certainly want to**
 3 **start off with what you see typically happening**
 4 **in the state. So that's going to be the most**
 5 **probative value.**
 6 **The swings are telling us something about**
 7 **the characteristics of how voters are being**
 8 **organized into districts, and so sweeping these**
 9 **swings.**
 10 **So the technique is to basically create a**
 11 **Democrat performance index or partisan strength**
 12 **index, whatever it is that you want to call it.**
 13 **That's your average. That's what you expect to**
 14 **happen.**
 15 **And then to create these hypothetical**
 16 **vote swings, you increment the vote share say**
 17 **1 percent, and then, towards one political party,**
 18 **and then you usually do it for two parties. And**
 19 **then you start carving out what hypothetical,**
 20 **what you think would happen if you had these**
 21 **uniform vote swings. So by swing sets, I take**
 22 **what your question means.**

Conducted on June 5, 2017

69

1 And, yes, you look to see what's going to
 2 happen. For example, Perez v. Perry litigation,
 3 the vote shares were really flat, meaning that
 4 they were unresponsive is another way to say it.
 5 You can change the vote share and it didn't
 6 change the seats. That's informative for me to
 7 know that something odd is happening with the way
 8 in which the districts are being drawn, not going
 9 to affect what would happen in a typical
 10 election, but also in other elections that might
 11 be a little bit, deviate a little bit from what
 12 we would think would be the typical election.
 13 Again, this is evidence or information
 14 and facts that you take and you evaluate to see
 15 what you think is going to happen with the plan.
 16 There's no hard and fast rules to say, oh, you
 17 need to take a plus or minus 10 percent on the
 18 swings or anything of that nature. It's really
 19 just the expert's opinion, how they are going to
 20 go about doing their work that is going to inform
 21 them as to what they need to do in terms of
 22 creating those ranges of vote swings.

70

1 Q Okay. Is a 4 percent -- moving away,
 2 sorry, from the analysis that is undertaken of
 3 partisan bias and into just your general
 4 knowledge of elections and how -- is a 4 percent
 5 swing in party performance unusual?
 6 MR. STEIN: Objection. Vague.
 7 A It really depends on the historical
 8 context of the elections. The easiest way to
 9 answer that question is to look at the swings
 10 across some period of elections and then observe
 11 what you observe.
 12 We have had some unusual politics
 13 recently with large swings of the parties in 2006
 14 towards the Democrats and the Republicans in 2010
 15 and 2014. So in a way we may, if I did the
 16 analysis, I don't know, maybe 4 percent is
 17 typical. I don't know.
 18 MS. RICE: And, actually, maybe now a
 19 good time for a break, just a very short one, and
 20 we will come back.
 21 (Break taken.)
 22 MS. RICE: I have no further questions,

71

1 Dr. McDonald.
 2 THE WITNESS: Oh.
 3 MR. STEIN: We're fine.
 4 THE REPORTER: Copy for you?
 5 MR. STEIN: Yes. We will expedite.
 6 (Discussion off the record.)
 7 (Off the record at 11:25 a.m.)
 8 -----
 9
 10
 11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22

72

1 CERTIFICATE OF SHORTHAND REPORTER-NOTARY PUBLIC
 2
 3 I, Carla M. Sinclair, the officer before whom
 4 the foregoing deposition was taken, do hereby
 5 certify that the foregoing transcript is a true
 6 and correct record of the testimony given; that
 7 said testimony was taken by me stenographically
 8 and thereafter reduced to typewriting under my
 9 direction; that reading and signing was not
 10 discussed; and that I am neither counsel for,
 11 related to, nor employed by any of the parties to
 12 this case and have no interest, financial or
 13 otherwise, in its outcome.
 14
 15 IN WITNESS WHEREOF, I have hereunto set my
 16 hand and affixed my notarial seal this 6th day of
 17 June, 2017.
 18
 19 *Carla M. Sinclair*
 20
 21 My commission expires:
 22 November 13, 2018

Transcript of Michael P. McDonald, Ph.D.

Conducted on June 5, 2017

19

A			
ability	across	21:10, 26:16,	agreement
16:4, 20:6,	70:10	29:15, 30:5,	2:10
22:1, 23:15,	actions	34:8, 34:13,	aided
29:17, 30:16,	17:21	34:21	32:6
32:9, 33:21,	actual	advisory	al
34:4, 63:1	23:7, 35:4	42:18	1:4, 1:7, 3:3,
able	actually	advocacy	3:12
7:3, 12:19,	10:16, 13:22,	9:18, 9:20,	alaska
19:4, 19:14,	14:22, 26:20,	12:6	66:19, 67:3
22:11, 29:11,	27:1, 27:7,	advocate	alert
32:2, 33:2,	30:4, 34:11,	9:21	12:10
33:15, 33:17,	34:12, 36:15,	affect	all
33:19, 34:18,	43:9, 43:13,	29:17, 69:9	7:10, 17:9,
43:12, 48:11,	46:18, 67:8,	affected	46:11, 47:16,
48:16, 48:18	70:18	19:3, 21:21,	51:10, 55:3,
about	ad	22:16, 23:19,	57:5, 59:7,
8:6, 11:12,	12:12	28:12, 32:2	65:19
13:14, 15:18,	add	affecting	almost
15:20, 16:1,	47:11	34:10	5:17
21:9, 22:6,	adding	affiliated	already
24:5, 24:14,	18:9	29:4	6:20, 6:22,
26:7, 26:11,	addition	affiliations	13:13, 52:20
27:6, 27:11,	22:3	42:14	also
29:9, 29:14,	additional	affixed	3:21, 5:11,
31:22, 33:6,	27:8, 40:16,	72:16	6:4, 6:18, 8:16,
34:5, 34:21,	63:21, 64:3	african-american	10:7, 11:22,
41:17, 43:6,	address	25:7, 25:9,	12:7, 13:7,
43:7, 43:20,	16:16	25:12, 25:21,	13:17, 23:1,
44:10, 45:10,	adheres	28:7	23:3, 23:8,
47:12, 47:14,	52:19	african-americans	23:9, 25:1,
48:10, 49:21,	adjacent	25:8, 25:20,	25:15, 27:10,
50:10, 51:5,	13:1	26:4	38:18, 40:8,
52:20, 54:12,	adjusting	again	40:12, 45:6,
55:22, 56:20,	54:5	12:21, 13:15,	47:11, 48:6,
59:2, 63:3,	administration	17:8, 29:11,	54:9, 57:15,
67:6, 68:6,	10:11	31:15, 34:2,	60:17, 63:7,
69:20	adopted	43:17, 46:18,	67:3, 67:10,
absolute	18:4, 18:16,	56:10, 57:12,	69:10
49:16	20:4, 27:7,	62:7, 66:3,	alternative
academic	32:8, 44:14,	69:13	27:10, 30:13,
42:13, 46:2,	46:14, 63:16,	age	31:2, 52:12,
63:18	64:5, 64:7, 65:1	28:2	53:10, 53:16,
accepted	adoption	aggregated	54:15, 58:16,
64:19	19:6	13:15	60:19, 61:11,
achieve	advantage	aggregating	61:17, 62:2,
22:8, 37:13	31:10	45:3	62:3, 62:13
	adverse	aggregations	although
	15:5, 21:9,	13:4	11:19, 17:7,

Transcript of Michael P. McDonald, Ph.D.

Conducted on June 5, 2017

<p>27:20, 36:8, 45:6, 48:13, 56:18 always 7:12, 31:13 amendment 17:20 among 54:10 amos 8:16, 11:1, 11:3, 11:10, 12:13, 14:6, 45:4, 53:18, 54:13, 54:14, 55:10, 55:12, 56:20, 59:19, 60:14, 60:20 analogy 40:2 analyses 11:11, 24:15, 24:17, 24:18, 39:19, 41:9, 41:16, 62:20, 63:21, 64:4, 66:6, 66:14 analysis 14:4, 17:3, 23:17, 24:6, 24:9, 24:20, 26:6, 27:17, 30:7, 34:14, 34:17, 35:2, 35:3, 35:6, 37:12, 37:16, 38:1, 39:20, 40:21, 41:11, 42:6, 48:1, 48:8, 48:13, 49:12, 50:3, 50:8, 52:9, 57:5, 61:14, 61:19, 65:9, 67:21, 70:2, 70:16 another 8:17, 15:19,</p>	<p>25:16, 36:1, 39:18, 63:18, 69:4 ansolabehere 11:21, 12:4, 12:18 answer 16:15, 20:15, 20:17, 21:5, 33:13, 36:11, 64:12, 70:9 any 29:16, 30:2, 33:9, 33:20, 34:7, 34:14, 36:16, 37:12, 37:14, 38:12, 43:11, 44:5, 45:15, 47:18, 48:1, 48:22, 49:2, 50:3, 50:11, 50:15, 50:21, 50:22, 52:3, 52:4, 55:16, 55:22, 56:12, 57:5, 59:4, 60:13, 61:14, 65:9, 67:19, 72:11 anyone 64:11, 64:13, 65:1 anything 6:21, 7:4, 7:12, 14:17, 49:21, 69:18 anywhere 53:8 appear 14:18, 40:21, 43:17, 44:15, 58:6 appears 44:12, 49:9 application 64:20, 65:2 applied 15:19, 36:15</p>	<p>apply 35:15 apportionment 43:5 approach 13:13, 30:8, 47:7, 64:6, 64:7, 64:11, 64:14, 66:19, 67:3 appropriate 66:9 arcgis 10:1 area 66:17 areas 25:17, 57:13 arising 21:7 arizona 10:19, 10:20, 47:7, 63:12, 64:1, 65:5 around 56:19, 57:1, 58:2, 66:12, 66:13, 66:17, 67:1 arranged 12:3 article 64:16 aside 12:3 asked 8:5, 16:16, 33:13, 47:11, 47:12, 55:7 asking 7:22, 8:1, 17:15, 51:1, 59:2, 62:15, 62:17 assembly 28:22 assessment 22:18</p>	<p>assist 28:12 assistant 3:13, 3:15, 5:8, 5:11 assisted 8:13, 8:16 associated 6:17 assume 59:22, 60:22 assuming 42:22 attached 4:9 attempt 13:20 attorney 2:4, 3:13, 3:15, 3:16, 5:9, 5:12 attorneys 6:7, 8:10 attune 11:22 atypical 67:14 authorities 46:19 availability 40:11 available 10:11, 11:16, 23:2, 39:17, 40:5, 40:13, 40:17, 42:3, 55:15, 59:22, 60:14 average 31:9, 68:13 avoid 57:19 aware 11:5, 12:7, 42:11 away 70:1 <hr/><p style="text-align: center;">B</p><hr/>back 9:11, 10:18,</p>
---	--	---	--

Transcript of Michael P. McDonald, Ph.D.

Conducted on June 5, 2017

21

10:21, 20:19, 28:20, 31:21, 36:20, 64:1, 70:20 balance 54:9 ballot 63:16 baltimore 1:13, 2:6, 3:18 base 47:8 based 35:4, 37:21, 64:14, 65:6 basically 11:3, 54:18, 68:10 basis 6:8, 16:13 bathroom 51:6 because 11:14, 12:5, 12:8, 17:17, 18:3, 18:15, 26:15, 27:2, 28:9, 29:2, 34:17, 36:15, 41:4, 44:11, 57:11, 61:1, 61:12, 66:21, 67:7 been 5:3, 6:10, 6:22, 10:6, 14:6, 14:8, 15:13, 18:5, 18:17, 19:4, 19:8, 19:16, 19:20, 23:18, 24:7, 26:14, 27:3, 27:4, 27:5, 29:11, 31:5, 31:22, 32:8, 32:11, 32:21, 34:3, 40:14, 43:5,	43:11, 43:18, 43:22, 44:16, 48:18, 48:20, 50:10, 54:1, 63:16, 64:18, 67:4 before 2:10, 23:12, 42:5, 43:6, 58:13, 72:3 behalf 3:3, 3:12 behavior 50:4 being 9:18, 17:10, 17:18, 17:20, 38:17, 38:20, 45:15, 46:16, 58:21, 68:7, 69:8 believe 11:12, 28:17, 31:5, 42:17, 49:15, 53:11, 56:12, 61:9 believed 36:21 ben 3:22, 5:14, 5:16 benchmark 18:7, 20:8, 21:2, 21:11, 21:20, 23:18, 27:16, 28:4, 28:6, 28:9, 28:16, 29:19, 38:19, 47:3 benisek 1:4, 3:3 best 19:18, 19:19 better 10:10 between 54:8, 55:8 beyond 23:2	bias 66:22, 70:3 big 35:11 bisect 56:15 bit 11:19, 69:11 bloc 24:18, 39:19, 40:20, 40:21, 40:22, 41:8, 41:9 blocks 6:17 blocs 48:2 board 6:14, 12:20, 13:10, 43:5 bono 11:5 border 56:15, 59:20 borders 55:3 both 23:9, 43:4, 45:19, 46:4, 62:19 bottom 61:8 boundaries 35:17, 37:6, 53:4 boundary 37:1 break 51:1, 51:2, 51:3, 51:8, 70:19, 70:21 brian 8:16, 11:10, 12:13 broad 66:16, 66:20 brought 34:22	brown 3:6, 3:22, 5:14, 6:2, 6:4, 8:11 bump 57:1 burden 29:1, 29:6, 29:20 busy 43:14 <hr/> C <hr/> calculation 13:19 california 9:12, 10:17 call 53:22, 68:12 called 24:18, 39:19, 39:21, 42:12, 67:5 calls 16:11, 29:22 came 34:20 can't 30:6, 38:13, 43:16, 59:14, 59:16, 64:12, 64:22 candidate 16:4, 18:5, 18:17, 19:4, 19:9, 19:14, 19:20, 21:18, 22:2, 22:13, 23:16, 24:21, 25:1, 25:2, 25:7, 25:9, 25:13, 25:21, 26:3, 26:5, 26:16, 28:13, 29:12, 32:2, 33:2, 33:16, 33:19, 34:4, 48:11, 48:16,
--	--	--	---

Transcript of Michael P. McDonald, Ph.D.

Conducted on June 5, 2017

22

48:20, 49:4, 49:8, 49:10, 63:1 candidates 20:7, 26:10, 29:18, 30:17, 32:10, 33:22 carla 1:22, 2:10, 72:3 carving 68:19 case 1:6, 7:6, 7:8, 17:10, 26:18, 36:14, 38:12, 44:16, 47:10, 66:18, 72:12 cases 15:14, 16:7, 25:15, 28:5, 35:12, 39:17 cces 41:4, 42:3 census 6:17, 10:13, 11:19, 55:2, 55:14, 57:13, 57:18, 58:2, 58:3, 58:5, 58:9, 59:3, 59:4, 59:15 certain 17:19, 29:2, 29:6, 58:15 certainly 47:7, 60:2, 60:11, 68:2 certainty 30:6, 31:18, 65:1 certificate 72:1 certified 2:12 certify 72:5 chain 7:1	challenge 40:9 change 17:16, 26:20, 32:17, 33:7, 42:14, 44:5, 65:6, 69:5, 69:6 changed 26:21, 32:21 changes 22:10, 34:22, 38:7, 42:9, 45:9, 46:13, 47:4, 47:8, 61:21 characteristics 50:16, 51:13, 51:16, 51:17, 66:11, 68:7 characterize 34:9 characterized 45:13 characterizing 32:17, 33:7 charge 11:7 charging 11:7 cheaper 11:4 check 49:13, 60:22, 61:1 checked 6:20, 8:9 choice 16:4, 16:21, 18:6, 18:18, 19:5, 19:9, 19:15, 19:21, 20:8, 21:18, 22:2, 22:14, 23:16, 24:22, 25:1, 25:2, 25:7, 25:9, 25:14, 25:22, 26:3, 26:5,	26:16, 28:13, 29:12, 29:19, 30:17, 32:3, 32:11, 33:2, 33:16, 33:19, 33:22, 34:5, 48:12, 48:17, 49:4, 63:1, 63:4 choose 39:14 choosing 17:2 chose 16:9 circa 17:12 circumstances 19:18, 19:19, 31:13, 52:4 cited 64:11, 64:13, 64:17 cities 56:14, 57:6, 57:15, 59:3 citizens 29:2, 29:7 claim 28:11 claims 25:4, 27:21, 27:22 clean 47:6 clear 56:18 clear-cut 36:9 clearly 30:13 clerks 5:14 coalition 25:21 colorado 10:8 column 49:7, 49:9	come 23:13, 35:18, 70:20 comes 11:3 commission 10:20, 10:21, 58:14, 58:17, 63:13, 72:21 commissions 46:20 committee 40:15, 42:18, 42:22 common 15:11, 41:13 communities 36:5, 36:8 community 36:10 compactness 35:16, 36:22, 37:5, 53:3 compared 13:22, 18:6, 20:8, 29:19 comparison 21:1 competitive 64:22 competitiveness 63:4, 63:5, 63:14, 64:8 completely 47:6 complicated 11:20 comply 63:15 components 10:7, 10:13 composition 26:21, 26:22, 40:4, 40:6 compound 24:12, 42:2 compute 13:8
--	---	--	---

Transcript of Michael P. McDonald, Ph.D.

Conducted on June 5, 2017

23

<p>concept 53:19, 54:11, 56:11, 58:20</p> <p>conclusion 23:13, 30:1, 32:16, 62:5, 62:16, 62:18</p> <p>concrete 15:5, 18:2, 18:14, 34:13, 34:21</p> <p>configuration 58:22</p> <p>confusion 21:7</p> <p>congressional 15:3, 19:5, 19:8, 19:21, 20:4, 22:4, 27:12, 27:13, 30:15, 35:1, 36:17, 38:17, 38:20, 39:10, 41:5, 41:7, 41:10, 44:4, 45:9, 48:6, 49:1, 54:17, 54:21</p> <p>consequence 18:5, 18:17</p> <p>consider 16:21, 17:4, 22:17, 32:14, 33:10, 55:12, 55:16, 58:18</p> <p>consideration 32:5, 57:4</p> <p>considered 7:11, 44:13, 55:14, 57:16, 58:6</p> <p>constancy 17:4</p> <p>constitution 36:2, 36:20</p> <p>constitutional 36:16, 63:15</p> <p>constitutions 36:7</p>	<p>constructing 54:15</p> <p>consultant 10:17, 10:20, 40:14, 42:17, 42:22, 43:1, 63:12</p> <p>consultants 43:4, 51:21, 67:11</p> <p>consulting 9:12, 11:8</p> <p>contentious 35:13</p> <p>context 15:15, 15:17, 15:20, 21:16, 24:6, 26:10, 27:19, 28:14, 37:4, 70:8</p> <p>contiguity 35:18</p> <p>contiguous 35:19</p> <p>continue 33:15</p> <p>conversations 16:17, 60:1</p> <p>cookie 54:19</p> <p>cooper 12:1</p> <p>cooperative 39:10, 41:4</p> <p>copy 14:7, 71:4</p> <p>corner 22:4</p> <p>correct 15:7, 15:8, 24:3, 37:8, 49:15, 53:18, 58:4, 61:9, 63:2, 63:6, 63:7, 65:18, 72:6</p> <p>correctly 31:8, 59:18,</p>	<p>64:16</p> <p>correlate 40:3</p> <p>correlating 39:22</p> <p>cost 11:4, 11:9</p> <p>costs 60:10</p> <p>couch 31:15</p> <p>couched 31:4</p> <p>could 6:19, 15:19, 25:1, 27:4, 27:5, 31:15, 37:9, 40:2, 46:12, 48:7, 48:8, 54:10, 55:7, 57:6, 63:9</p> <p>counsel 16:18, 42:21, 45:6, 62:16, 72:10</p> <p>count 56:14</p> <p>counter 27:2</p> <p>counties 59:10</p> <p>country 9:20, 9:22, 37:16</p> <p>county 12:16, 12:20, 13:12, 55:1, 55:20, 62:10</p> <p>course 7:2, 7:12, 27:9, 45:22, 58:11, 59:13, 67:17</p> <p>court 1:1, 7:6, 46:3, 46:4, 46:5, 46:6, 58:19</p> <p>court's 36:21</p>	<p>courts 45:19</p> <p>cover 66:20</p> <p>covers 7:8</p> <p>create 12:5, 28:11, 30:21, 54:4, 68:10, 68:15</p> <p>created 9:16, 53:18, 54:11, 60:17</p> <p>creating 69:22</p> <p>criteria 33:9, 58:17</p> <p>critical 57:9</p> <p>critique 67:4</p> <p>critiqued 67:5</p> <p>crossover 26:15, 48:3, 48:14, 48:19, 49:2, 50:10</p> <p>crr 1:22</p> <p>cursorry 14:18</p> <p>curve 66:12</p> <p>cutter 54:19</p> <p>cv 1:7</p> <p>cycle 43:8</p> <hr/> <p style="text-align: center;">D</p> <hr/> <p>dan 8:18</p> <p>data 6:16, 7:20, 8:9, 9:2, 10:10, 10:11, 10:12, 10:13, 11:15,</p>
--	--	--	--

Transcript of Michael P. McDonald, Ph.D.

Conducted on June 5, 2017

24

11:16, 11:18, 11:19, 11:20, 11:21, 12:2, 12:7, 12:12, 12:13, 12:18, 13:4, 13:7, 13:16, 32:7, 39:17, 40:11, 40:13, 40:16, 40:18, 42:6, 44:11, 44:12, 44:18, 44:21, 45:3, 55:12, 55:14, 55:15, 55:17, 59:20, 59:22, 60:13, 65:18 database 12:5, 12:11 databases 47:17 date 40:10 day 5:18, 72:16 deal 13:11 decade 67:18 decided 13:7, 40:20, 41:3, 41:11 decimal 34:5 defendants 1:8, 3:12, 5:10, 5:12 defined 35:10 degree 34:1, 34:10 democrat 31:15, 45:10, 68:11 democratic 51:18, 62:9, 62:21 democrats 15:20, 26:9,	32:22, 41:14, 41:15, 48:15, 49:3, 50:12, 61:15, 62:1, 70:14 demonstrable 15:5, 28:19 denies 16:3 depends 21:14, 27:19, 28:14, 36:12, 70:7 depicted 7:20, 52:14 deployable 9:17 deployed 12:8 deposition 1:12, 2:1, 4:10, 14:12, 14:14, 72:4 depositions 7:6 describe 6:16, 39:10 described 44:20 designated 59:3, 59:5 detail 42:20 detailed 45:2 determination 36:9 determine 24:20 determining 64:21 deterministic 34:17, 35:6 develop 44:7, 66:10, 66:16 developed 7:2, 9:13,	13:13, 46:16, 47:19, 63:11, 65:4 developing 11:2, 65:6 development 44:3, 44:13, 45:5, 45:16 developmental 43:18 deviate 69:11 deviations 37:17 dies 31:14 different 6:21, 7:4, 23:14, 26:19, 27:13, 51:11 difficult 54:8 difficulties 12:14 diluted 62:3, 62:12 dilution 15:3, 15:9, 15:15, 15:16, 15:22, 16:8, 16:10, 17:3, 18:2, 18:14, 18:19, 18:21, 19:1, 20:12, 20:16, 20:21, 21:3, 21:6, 24:5, 24:15, 24:17, 25:4, 26:6, 26:12, 27:14, 27:17, 28:18, 31:22, 41:2, 62:19 diminished 23:16, 32:12, 32:14, 63:2 diminishing 20:6, 22:1, 32:22	diminishment 34:4, 34:8 diminution 33:4, 33:20 direct 55:16 directed 53:20, 54:13, 54:14, 54:22, 59:21 direction 11:14, 12:22, 13:3, 19:12, 33:1, 33:5, 53:19, 55:22, 58:19, 72:9 directly 44:2 disclosed 44:16, 46:17 disclosure 40:18, 40:19, 43:19 discount 11:6 discovery 6:10, 40:7 discuss 9:4, 52:13, 61:13, 63:8, 65:14 discussed 23:10, 47:16, 53:2, 72:10 discussion 27:9, 31:21, 47:14, 56:20, 71:6 district 1:1, 1:2, 6:18, 7:21, 8:10, 13:4, 16:3, 18:4, 18:7, 18:16, 19:8, 19:22, 20:5, 20:9, 21:2, 21:11, 21:15, 21:17, 21:20,
--	--	--	--

Transcript of Michael P. McDonald, Ph.D.

Conducted on June 5, 2017

25

21:22, 22:4, 22:9, 22:11, 22:13, 22:16, 23:18, 24:7, 24:10, 25:11, 26:1, 26:4, 26:14, 26:22, 27:3, 27:12, 27:13, 27:16, 28:9, 29:16, 29:20, 30:4, 30:14, 30:15, 30:21, 31:2, 31:3, 31:6, 31:9, 31:11, 32:8, 32:18, 32:20, 33:3, 33:8, 33:16, 34:2, 34:3, 35:1, 36:1, 37:14, 38:1, 38:17, 38:19, 38:21, 38:22, 39:3, 39:6, 41:7, 41:10, 45:10, 45:11, 45:12, 48:6, 52:7, 52:12, 53:21, 54:21, 57:14, 61:3, 61:4, 61:8, 61:11, 61:13, 61:16, 61:21, 62:2, 62:3, 62:11, 62:12, 62:22, 64:21 districts 26:19, 28:3, 35:19, 35:22, 38:1, 38:16, 38:18, 46:16, 47:18, 53:8, 53:10, 53:13, 53:15, 53:16, 54:9, 54:17, 55:9, 55:21, 56:5, 57:14, 59:9, 59:14,	61:5, 63:14, 67:9, 67:15, 67:16, 68:8, 69:8 divide 55:19 division 58:12 documents 7:6 doing 10:6, 10:8, 37:22, 40:20, 43:7, 43:13, 43:20, 46:18, 48:12, 63:21, 64:3, 66:6, 69:20 domain 6:20 done 10:15, 37:19, 41:10, 49:12, 61:21 down 31:2 dr 5:7, 13:18, 23:10, 52:2, 65:16, 71:1 dramatically 26:20 draw 21:22, 25:10, 31:2, 48:10, 54:22, 55:19, 56:21, 59:21, 62:15, 62:17 drawers 32:6 drawing 16:2, 27:11, 30:3, 47:18, 50:9, 54:7, 57:22, 58:18, 67:9, 67:10, 67:12, 67:15, 67:16	drawn 10:16, 20:5, 21:17, 24:7, 26:14, 29:16, 32:8, 42:1, 55:17, 55:18, 69:8 drew 59:20, 60:20 due 30:12 duly 5:3 during 7:2, 7:11, 43:14, 44:13, 45:4, 47:19, 47:22 <hr/> E <hr/> each 6:17, 40:4, 40:10, 41:6, 61:3, 61:4 earlier 11:16, 42:7, 47:12, 53:3, 53:17 early 10:18, 10:21, 10:22, 47:12 easiest 70:8 easy 56:12 ecological 39:21, 41:11 effect 15:5, 19:1, 20:6, 22:11, 23:8, 23:9, 26:11, 26:17, 28:19, 29:15, 30:5, 30:7, 34:8, 34:11, 34:13, 34:15, 34:21 effects 21:9, 21:10,	52:8 efficiency 13:19, 14:4 effort 9:19 efforts 9:20, 9:21 eighth 27:12, 54:17, 54:21, 56:5, 59:14, 61:5, 61:11, 61:15, 61:21, 62:1, 62:11, 62:22 either 37:21, 44:2, 50:11, 60:12 elect 16:4, 18:5, 18:17, 19:4, 19:9, 19:14, 19:20, 20:7, 21:18, 22:2, 22:13, 23:16, 25:13, 25:21, 26:2, 26:5, 26:16, 28:12, 29:11, 29:18, 30:17, 32:2, 32:10, 33:2, 33:15, 33:19, 33:22, 34:4, 48:11, 48:16, 63:1 elected 22:22, 48:20, 48:22, 49:4 election 6:12, 9:2, 10:11, 10:12, 11:17, 13:10, 19:15, 22:22, 23:2, 23:7, 35:5, 39:10, 40:1, 40:3, 40:6, 40:10, 41:5, 44:22, 45:3, 48:9,
---	--	--	--

Transcript of Michael P. McDonald, Ph.D.

Conducted on June 5, 2017

<p>48:18, 49:17, 49:19, 49:22, 50:13, 51:12, 51:20, 60:18, 64:2, 66:12, 66:13, 66:17, 69:10, 69:12 elections 6:14, 12:20, 13:8, 13:11, 19:5, 19:10, 22:20, 23:6, 23:8, 23:13, 23:14, 31:12, 34:18, 34:19, 34:20, 49:1, 50:14, 67:9, 67:12, 67:13, 67:18, 69:10, 70:4, 70:8, 70:10 electoral 18:3, 18:15, 19:18, 19:19, 52:4 electorate 65:7 else 52:22 embedded 54:11 employed 72:11 enable 26:2 enacted 27:5 encountered 12:14 end 45:14, 45:18 endogenous 23:6, 23:13, 34:19, 50:14 entire 37:16 equal 55:21</p>	<p>equality 22:8 equalizing 55:8 eric 40:13, 42:16, 42:17, 43:2, 44:6, 45:1, 51:22 error 13:18 esquire 3:4, 3:5 essentially 6:11, 11:18, 39:22, 48:12 establish 7:4, 16:20, 40:22, 41:2, 41:12, 63:9 estimate 64:2 et 1:4, 1:7, 3:3, 3:12 ethnicities 15:19 evaluate 69:14 evaluating 63:14, 64:8 even 19:19, 43:6 eventually 44:14 ever 21:17, 30:7, 33:9, 50:16, 51:12, 57:3, 57:5 every 49:10, 60:6 everything 7:9, 14:6 evidence 7:1, 8:18, 20:3, 21:22, 23:11, 27:6,</p>	<p>45:20, 47:9, 69:13 exactly 12:14, 48:13 examination 4:2, 5:5 examine 24:11, 50:16, 52:8, 56:3 examined 7:20, 8:8 examining 51:11 example 69:2 examples 10:14 except 49:10 exceptional 19:11 excuse 10:22 exhibit 4:10, 14:12, 14:14 exist 22:9, 55:6 existed 42:4, 46:15 existing 28:6, 38:19 exists 28:10, 30:14 exogenous 23:6, 23:8, 34:19, 50:14 expect 64:3, 65:17, 68:13 expedite 71:5 experience 8:20, 9:8, 12:1, 46:18, 54:7, 67:10 expert 4:11, 14:13,</p>	<p>14:21, 16:6, 24:19 expert's 69:19 experts 7:7, 11:22 expires 72:21 explain 45:17 expressed 44:6 extent 16:11 extreme 25:5, 67:7</p> <hr/> <p style="text-align: center;">F</p> <hr/> <p>fact 12:3, 16:20, 33:17, 35:2, 48:21 factors 51:19 facts 18:22, 45:21, 69:14 factual 27:2 far 6:19, 46:11, 55:17, 57:20 fast 37:9, 69:16 federal 46:5 fell 36:20 felt 38:10 figure 14:2, 52:14, 54:6 figured 14:3 files 6:16, 6:19, 7:20, 8:9, 46:9</p>
---	---	--	--

Transcript of Michael P. McDonald, Ph.D.

Conducted on June 5, 2017

27

financial 72:12 find 7:1, 25:3, 25:15, 25:17, 61:20, 67:20 fine 71:3 firm 9:12 first 5:3, 5:18, 9:13, 13:6, 14:3, 14:20, 14:21, 15:1, 17:20, 17:22, 19:2, 20:1, 20:3, 30:10, 34:12, 52:17, 60:19, 60:21, 64:15 flat 69:3 floor 2:5, 3:17 florida 8:17, 8:19, 45:19, 46:5 focus 17:13 focused 66:17 follows 5:4 foregoing 72:4, 72:5 form 28:17, 47:21, 48:2 formally 54:20 formed 6:7, 34:20, 46:22 formerly 61:15, 62:1, 62:21 forming 46:4	formulated 66:22 fortunately 12:19 forward 16:20, 27:11 found 11:20, 45:20 frame 56:8 framed 48:13 full 17:22, 30:9, 65:13 fully 46:22 further 11:9, 70:22 <hr/> <p style="text-align:center">G</p> <hr/> gaithersburg 56:19, 57:1, 57:4, 57:21, 58:1 gantt 3:22, 5:15, 5:16 gap 13:19, 14:4 gathered 8:18 gave 38:2 general 2:4, 3:14, 3:15, 3:16, 5:9, 5:12, 28:22, 37:22, 70:3 generally 35:14, 36:20 generated 6:13 geocoding 10:6 geographic 9:1 geography 55:2	gerrymandering 15:12, 15:17, 24:6, 27:21, 30:3, 39:16, 66:7, 66:21 gis 8:20, 9:1, 9:9, 9:13, 10:4, 10:5, 10:7, 10:9, 10:13, 10:16, 46:9 give 9:6, 14:7, 55:22 given 8:5, 11:5, 20:15, 21:5, 59:22, 60:9, 72:6 gives 38:12 giving 20:18, 46:1 glance 14:18 go 15:1, 27:11, 43:7, 47:1, 51:6, 56:19, 69:20 goals 32:6 goes 31:21 going 12:15, 13:8, 14:7, 14:9, 19:13, 28:16, 28:20, 29:9, 37:9, 59:2, 67:17, 68:4, 69:1, 69:8, 69:15, 69:19, 69:20 good 5:6, 55:7, 70:19 government 28:1	governor's 42:18, 58:17 graduate 8:14 grant 12:4 graphic 38:8 gray 57:13, 58:6 great 7:14 greater 49:8 greatly 30:16 group 15:6, 15:18, 16:1, 16:2, 16:3, 19:4, 21:18, 21:21, 22:16, 23:19, 24:21, 24:22, 26:2, 26:17, 29:11, 29:15, 30:5, 32:1, 32:2, 34:13 groups 9:18, 15:20, 25:2 guess 38:10 guide 11:14 <hr/> <p style="text-align:center">H</p> <hr/> hand 72:16 happen 67:8, 67:17, 68:14, 68:20, 69:2, 69:9, 69:15 happened 32:19, 47:21 happening 14:1, 17:13, 26:8, 68:3, 69:7
---	---	--	---

Transcript of Michael P. McDonald, Ph.D.

Conducted on June 5, 2017

28

<p>happens 25:16</p> <p>hard 57:10, 69:16</p> <p>hawkins 40:14, 42:16, 42:17, 43:2, 44:6, 45:1, 51:22</p> <p>head 46:22</p> <p>held 2:2</p> <p>help 21:17</p> <p>here 17:8, 17:14, 20:19, 21:19, 23:4, 35:7, 37:9, 40:2, 50:6, 53:1, 56:12</p> <p>hereby 72:4</p> <p>hereunto 72:15</p> <p>high 25:11, 47:20</p> <p>highly 31:11, 32:20, 45:21, 46:3</p> <p>hire 11:10</p> <p>hired 11:11</p> <p>hispanic 28:2, 28:7</p> <p>historical 70:7</p> <p>historically 48:2</p> <p>history 32:7, 36:13, 36:14</p> <p>home 10:3</p> <p>hoping 7:1</p>	<p>hour 11:7, 11:8, 11:12</p> <p>house 49:11, 49:17</p> <p>however 48:7, 64:14</p> <p>hypothetical 34:2, 45:7, 67:12, 67:13, 68:15, 68:19</p> <p>hypotheticals 30:2, 67:7</p> <hr/> <p style="text-align: center;">I</p> <hr/> <p>idea 53:19, 66:10</p> <p>ideal 37:13, 53:13, 54:2, 54:3</p> <p>identical 46:13</p> <p>identified 40:14</p> <p>identifying 16:2</p> <p>illustrated 58:21</p> <p>imagine 23:4, 43:16</p> <p>immaterial 17:16</p> <p>immediately 12:15</p> <p>immutable 16:22</p> <p>impact 18:3, 18:14</p> <p>impacted 57:6</p> <p>impair 30:15, 31:19, 33:21</p> <p>impairment 30:21</p> <p>impinged 17:21</p> <p>implies 30:20</p>	<p>improve 10:10</p> <p>included 59:9, 59:10</p> <p>incomplete 44:9</p> <p>incontrovertible 20:3</p> <p>increment 68:16</p> <p>incremental 45:9, 45:11</p> <p>incumbency 52:8</p> <p>incumbents 56:4, 56:9, 56:11</p> <p>independent 10:19, 63:12</p> <p>independently 13:20</p> <p>independents 48:14, 48:15, 49:3, 50:11</p> <p>index 51:18, 68:11, 68:12</p> <p>indicate 42:13</p> <p>indirectly 44:2</p> <p>individual 50:16, 51:13, 51:15, 52:4</p> <p>inept 30:4</p> <p>infer 48:7, 48:21</p> <p>inference 39:21, 41:11</p> <p>inferences 50:10</p> <p>inform 69:20</p> <p>information 6:9, 8:5, 9:1, 27:8, 44:15, 44:17, 45:2,</p>	<p>45:21, 46:3, 47:9, 47:13, 47:15, 47:17, 51:22, 59:7, 69:13</p> <p>informative 28:16, 45:21, 67:8, 69:6</p> <p>initiative 63:16</p> <p>inside 36:1</p> <p>insofar 57:18</p> <p>instead 41:22, 57:22</p> <p>instructions 60:1</p> <p>instructive 66:7, 67:20</p> <p>insufficient 49:2</p> <p>intact 57:2</p> <p>intended 29:1</p> <p>intent 29:14</p> <p>intentional 29:17</p> <p>interaction 8:7</p> <p>interest 36:6, 36:8, 36:10, 72:12</p> <p>interested 32:13</p> <p>intermediate 45:16, 47:19</p> <p>interpreted 29:12</p> <p>intimately 12:6, 12:7</p> <p>investigator 9:15</p> <p>involved 9:11, 13:14, 14:6, 15:13,</p>
--	--	--	---

Transcript of Michael P. McDonald, Ph.D.

Conducted on June 5, 2017

29

27:20, 60:10 issue 12:16, 13:11, 57:21 issues 12:21, 13:14, 35:19, 56:13 iterative 47:1 itself 64:14	42:20, 43:9, 49:16, 49:18, 53:12, 57:8, 64:10, 69:7, 70:16, 70:17 knowing 55:2, 55:6 knowledge 15:14, 37:22, 60:10, 70:4	legality 29:9 legislature 10:18, 58:14 legislatures 46:20 let's 15:1, 18:13, 49:5 level 11:17, 13:5, 24:20, 26:8, 33:5, 40:1, 44:21, 60:17 lewis 3:22, 5:16 lichtman 13:18, 14:2, 23:10, 52:2 lichtman's 65:16 liked 44:11 likelihoods 31:16 likely 14:4, 67:17 limitations 12:8 limited 40:11 linda 1:7 line 54:5, 54:22, 55:1, 55:5, 55:19, 56:1, 57:22, 58:12, 59:21 lines 32:7, 37:1 list 7:10 literally 55:19 litigating 28:10 litigation 8:19, 15:12,	23:5, 43:3, 66:15, 67:4, 69:2 little 11:19, 57:1, 69:11 living 61:15, 62:1 llp 3:6 local 35:16, 36:22, 37:6, 53:3 located 22:4 longer 33:17, 33:19 look 7:13, 10:9, 12:19, 13:1, 17:22, 19:3, 28:3, 32:18, 34:18, 41:3, 48:8, 48:9, 49:5, 51:12, 51:22, 52:3, 54:6, 57:12, 60:11, 61:10, 64:13, 65:22, 66:8, 66:10, 69:1, 70:9 looked 15:14, 41:7, 42:19, 49:18, 51:15, 52:1, 52:2, 59:19, 60:15 looking 21:16, 25:4, 27:1, 28:15, 28:21, 30:9, 36:13, 36:22, 37:2, 37:5, 40:11, 41:22, 44:18, 50:13, 52:16, 57:18, 60:3, 60:4, 65:12, 65:21
J	L		
jen 5:11 jennifer 3:13 jersey 43:4 job 1:20 john 1:4 joint 10:8 journal 63:19 june 1:14, 72:17	lamone 1:7, 3:12 language 31:4, 31:16, 36:16 large 9:19, 25:12, 33:7, 41:5, 70:13 larger 57:12 last 18:1, 32:13, 43:14, 56:8 late 9:11 later 9:15, 13:6, 13:7 lawyer 17:8, 46:1 lawyers 8:6, 47:13 lay 46:2 layer 60:17 lead 34:12 least 10:14, 28:2 legal 16:5, 17:9, 29:8, 29:22, 32:16, 62:5, 62:16, 62:18		
K			
katz 3:13, 5:11, 5:20 keeping 57:2 kimberly 3:5, 6:4 kind 44:18 knew 12:9, 12:14 know 14:10, 14:19, 26:12, 27:20, 30:6, 38:1, 38:22, 39:3, 39:6, 42:8,			

Transcript of Michael P. McDonald, Ph.D.

Conducted on June 5, 2017

30

<p>lot 8:20, 9:3, 11:3, 12:1 lots 67:11</p> <hr/> <p style="text-align: center;">M</p> <p>made 13:18, 40:17, 45:12 maggie 3:22, 5:14 main 29:13 maintained 56:4 make 22:10, 38:9, 38:11, 43:11, 47:8, 54:8, 55:5, 56:22, 61:14 makes 21:2, 44:1 making 16:21, 47:4 manner 20:5, 27:13, 29:17 many 26:4, 54:10, 56:14, 58:11, 58:15, 59:4, 61:2, 61:14 map 32:6, 42:1, 46:9, 46:11, 46:22, 47:8, 53:18, 54:5, 54:10, 55:17, 56:18, 58:7, 58:10, 58:18, 59:5 mapmakers 28:22 mapping 43:21, 60:8 maps 10:16, 54:7,</p>	<p>57:12, 58:16, 60:3 maptitude 10:2, 10:3, 55:11, 58:10 margin 49:16 mark 14:8, 14:11 marked 14:13, 14:15 maryland 1:2, 1:13, 2:6, 2:13, 3:18, 5:9, 6:13, 12:9, 17:21, 22:3, 28:21, 36:15, 38:2, 44:4, 48:4, 48:5, 50:4, 65:10, 65:16 maryland's 15:2, 20:4 material 6:6 materials 7:11 matter 5:10, 5:13, 23:17, 34:1 maybe 70:16, 70:18 mayer 3:6, 6:2, 6:4, 8:11 mcdonald 1:12, 2:1, 4:2, 4:10, 5:2, 5:6, 5:7, 14:12, 14:14, 71:1 mean 8:2, 15:10, 17:11, 20:12, 24:2, 29:7, 31:19, 53:1, 57:9, 59:1, 62:17, 62:18 meaning 16:5, 16:7,</p>	<p>69:3 means 68:22 meant 8:10 measure 18:22, 52:7 measured 21:10 measures 66:22 meetings 9:3, 9:5 memory 49:20 mention 40:12 mentioned 7:15, 11:16, 22:15, 24:5, 42:16, 65:4 mentions 35:7 merge 10:12, 11:15, 54:16 merged 12:12, 13:16 merging 12:13 method 65:2, 65:5, 67:5 methodology 13:9, 63:11, 63:18, 64:15, 64:18, 64:21 metrics 23:1 micah 3:4, 5:22, 6:2, 16:13 michael 1:12, 2:1, 3:5, 4:2, 5:2, 6:3 might 27:11, 28:3, 34:11, 36:1,</p>	<p>36:7, 41:10, 51:18, 56:15, 57:15, 66:12, 69:10 mine 8:14, 67:4 minorities 24:8, 25:20 minority 21:17 minus 69:17 minute 49:13, 60:6 miscalculated 14:4 mischaracterize 24:3 mischaracterizes 21:12, 30:22, 37:7, 58:8 missing 7:12, 14:17 misunderstood 24:4 monday 1:14 montgomery 12:16, 12:20, 13:12, 54:22, 55:20, 62:10 more 7:6, 10:6, 23:12, 40:13, 44:10, 44:11, 44:12, 45:1, 46:8, 46:9, 51:1 morning 5:6 most 16:19, 22:20, 22:21, 35:19, 51:16, 66:16, 67:17, 68:4 move 34:1, 38:13 moved 8:15, 38:15,</p>
--	--	---	---

Transcript of Michael P. McDonald, Ph.D.

Conducted on June 5, 2017

31

38:17, 38:20, 61:16, 62:2, 62:11 moving 18:21, 20:1, 21:8, 39:9, 50:19, 70:1 much 22:5, 45:4, 57:11 myself 10:2, 23:9, 65:3	new 43:4, 50:19 next 32:4, 52:11, 67:18 nice 55:4 non-affiliated 48:3, 50:4 none 25:5, 47:9 notably 51:16 notarial 72:16 notary 2:12 notes 13:22 nothing 28:9 noticing 49:21 november 72:22 number 25:19, 36:5 numbered 15:1 numbers 50:6, 61:11	50:1, 50:5, 50:18, 51:14, 53:9, 53:14, 55:13, 56:16, 57:7, 58:8, 61:18, 62:5, 62:14, 67:22, 70:6 observe 23:15, 48:18, 66:13, 66:18, 70:10, 70:11 obtained 6:10, 13:9 occurred 16:19, 19:6, 28:18 occurring 26:12, 26:13 odd 69:7 offhand 49:18 office 2:4, 3:16, 10:9 officer 72:3 officially 6:22, 10:15 often 24:18, 35:18, 55:6, 57:16, 66:22 oh 14:22, 51:2, 56:20, 69:16, 71:2 ohio 43:3 okay 7:22, 8:8, 8:12, 9:8, 14:20, 17:22, 20:1, 22:15, 31:19, 37:2, 37:18, 39:13, 51:4, 52:3, 58:3, 59:12,	59:18, 61:10, 63:3, 66:5, 70:1 once 13:13, 13:16, 13:17, 26:12 one 9:13, 11:22, 13:22, 14:3, 15:14, 18:22, 19:9, 24:19, 24:21, 27:4, 29:18, 31:8, 35:4, 36:1, 36:9, 46:9, 48:7, 51:19, 54:2, 54:10, 54:12, 57:10, 57:14, 58:13, 68:17, 70:19 ones 35:17, 58:6 only 11:6, 22:6, 22:9, 40:5, 40:7, 40:9, 44:20, 45:14, 55:14, 57:20, 58:3, 58:5, 59:13, 60:21 open 9:16, 10:5 opening 4:11, 14:13, 14:21 opine 29:9 opinion 16:14, 28:18, 30:11, 32:5, 33:18, 34:21, 46:1, 46:2, 46:4, 47:21, 69:19 opinions 6:8, 44:5, 48:10 opportunity 19:13, 32:1,
N	O		
name 5:8, 8:16 named 8:18 national 9:19, 19:12 natural 15:16 nature 31:14, 35:4, 65:7, 69:18 necessarily 21:14, 55:3 necessary 38:10, 41:1, 42:5, 63:22 need 12:22, 20:17, 22:5, 25:10, 26:2, 26:3, 28:11, 49:13, 51:2, 51:5, 53:18, 69:17, 69:21 needed 22:7, 37:13, 38:11, 42:6 neither 59:19, 72:10 nesting 35:22 never 31:12			

Transcript of Michael P. McDonald, Ph.D.

Conducted on June 5, 2017

32

<p>41:8 opposed 59:3 order 22:11, 25:13, 26:2, 26:5, 28:12, 41:12, 42:6, 48:16 organized 68:8 other 12:9, 23:1, 24:22, 28:5, 36:17, 37:14, 37:22, 38:18, 42:12, 52:6, 54:14, 55:17, 55:22, 57:3, 58:9, 58:16, 60:13, 65:2, 67:11, 69:10 others 9:19, 43:15, 64:5, 64:7, 67:5 otherwise 72:13 out 14:2, 14:3, 38:17, 43:16, 46:21, 51:5, 53:22, 54:1, 54:9, 54:18, 62:16, 68:19 outcome 22:12, 72:13 outcomes 18:3, 18:15 over 17:17, 18:13, 22:7, 42:9, 42:14, 49:13 overall 34:20, 34:21, 36:14 overlaid 46:12 oversee 9:4, 60:6</p>	<p>own 9:8, 13:13, 13:21, 64:12, 65:18, 67:10</p> <hr/> <p style="text-align: center;">P</p> <hr/> <p>page 4:2, 4:10, 14:20, 37:10, 38:6, 50:21, 52:16, 52:17, 54:6, 61:8, 61:20, 65:12, 65:14, 65:19 pages 1:21, 39:9, 52:13 paradigm 15:11, 16:10, 17:3 paragraph 14:22, 18:1, 20:2, 30:10, 65:13, 65:14 part 18:9, 19:2, 21:2, 21:8, 26:11 particular 18:9, 19:10, 19:15, 49:22, 57:4, 58:21 particularly 9:4, 67:20 parties 68:18, 70:13, 72:11 partisan 15:15, 17:4, 32:5, 40:4, 40:5, 40:22, 41:9, 42:14, 66:7, 66:21, 66:22, 67:6, 68:11, 70:3 partisanship 16:22, 17:17, 52:7</p>	<p>parts 26:21 party 6:11, 29:3, 29:18, 30:3, 32:6, 33:21, 38:7, 40:21, 42:8, 44:21, 49:7, 68:17, 70:5 pass 13:7 passed 64:9 past 29:3 patterns 41:1, 42:12 paul 2:5, 3:17 paying 30:12 peer 64:9 peer-reviewed 63:19 people 15:18, 16:2, 17:11, 17:16, 17:19, 38:14, 39:18, 41:6, 47:1, 47:5, 51:21 percent 45:10, 45:12, 45:17, 45:18, 63:6, 65:17, 66:21, 67:1, 68:17, 69:17, 70:1, 70:4, 70:16 percentage 31:10, 67:19 perez 66:15, 67:2, 69:2 perfectly 55:5</p>	<p>perform 37:12 performance 31:3, 33:8, 45:11, 45:12, 51:18, 51:20, 68:11, 70:5 performant 21:20, 28:6, 31:6, 31:11, 32:20, 32:22 performative 22:16, 23:19, 24:10 period 22:17, 41:20, 70:10 perry 66:15, 67:2, 69:2 person 16:9, 20:18, 54:2 personal 67:10 personally 10:1, 43:9 ph 1:12, 2:1, 4:2, 5:2, 8:14, 8:15 phrase 32:13, 37:3, 52:17, 52:20 place 2:5, 3:17, 17:13, 58:2 places 34:6, 57:13, 57:19, 58:3, 58:5, 58:9, 59:3, 59:5, 59:15 placing 56:1 plaintiffs 1:5, 3:3, 6:3, 6:7, 11:4, 16:18, 44:16</p>
---	---	---	---

Transcript of Michael P. McDonald, Ph.D.

Conducted on June 5, 2017

33

<p>plan 7:2, 15:3, 19:7, 27:7, 27:10, 28:11, 44:3, 44:4, 44:7, 44:8, 44:13, 44:14, 45:4, 45:14, 45:16, 45:18, 46:14, 46:21, 47:2, 47:3, 47:4, 54:15, 60:19, 61:16, 61:17, 62:4, 62:10, 62:13, 69:15</p> <p>plans 43:17, 43:18, 46:16, 47:19</p> <p>please 24:3, 49:14, 58:4</p> <p>plus 34:2, 69:17</p> <p>point 17:19, 23:4, 31:8, 31:10, 46:15, 54:2, 54:3, 61:2, 61:12, 66:1, 66:8</p> <p>pointing 62:16</p> <p>points 38:11</p> <p>polarization 25:5, 25:17, 26:7, 26:13, 41:22, 42:8</p> <p>political 9:12, 29:3, 35:16, 37:1, 37:6, 53:4, 68:17</p> <p>politics 70:12</p> <p>pop 46:21</p>	<p>population 22:7, 22:8, 25:13, 28:2, 28:7, 28:8, 28:12, 37:13, 37:14, 37:17, 38:2, 38:9, 38:13, 38:15, 38:19, 53:7, 53:13, 54:1, 55:8, 55:21</p> <p>populations 53:12</p> <p>portion 54:19, 62:9</p> <p>posed 17:18, 19:2</p> <p>possible 27:6, 31:13, 47:6, 55:2, 56:21, 60:4, 60:6</p> <p>post 64:1</p> <p>potential 41:22, 68:1</p> <p>precinct 6:15, 8:9, 11:17, 12:17, 13:12, 40:1, 40:4, 40:10, 44:21, 60:17</p> <p>precincts 7:21, 12:17, 13:1</p> <p>preferred 63:5</p> <p>prepare 59:4</p> <p>present 3:21</p> <p>previous 18:6, 20:8, 21:1, 21:11, 21:15, 29:19</p> <p>previously 20:15, 21:5, 44:21, 50:9</p>	<p>principal 9:15</p> <p>principle 36:3</p> <p>principles 30:13, 35:8, 35:9, 35:15, 36:19, 37:4, 52:19, 52:21, 53:1, 53:2</p> <p>prior 15:13, 22:9, 22:15, 27:6, 33:3</p> <p>privilege 16:12</p> <p>pro 11:5</p> <p>probabilistic 34:6, 34:14, 35:6</p> <p>probabilities 31:17</p> <p>probability 34:6</p> <p>probably 14:1</p> <p>probative 22:21, 23:3, 68:5</p> <p>problems 12:10, 12:11</p> <p>procedure 63:9</p> <p>process 36:18, 45:16, 47:1, 47:20, 47:22</p> <p>produce 15:4, 30:14, 37:16, 38:8, 43:12, 43:17, 53:21, 57:3, 57:5</p> <p>produced 6:22, 40:15, 42:20, 61:7</p> <p>producing 43:11, 43:21,</p>	<p>45:1</p> <p>professional 2:11</p> <p>professor 8:17</p> <p>profile 10:10</p> <p>project 8:13, 9:7, 9:16, 10:8</p> <p>proposed 52:12</p> <p>protect 24:8</p> <p>proto 11:17</p> <p>provide 7:10</p> <p>provided 6:6, 6:9, 6:18, 7:5, 40:7, 40:18, 43:19, 44:17, 45:7, 46:8, 47:10, 47:13</p> <p>provides 27:5</p> <p>public 2:12, 6:20, 72:1</p> <p>published 8:22, 10:12, 63:17</p> <p>purpose 67:15</p> <p>purposes 9:14, 57:17</p> <p>pursuant 2:10</p> <p>put 12:22, 23:12, 26:3, 27:10, 51:11</p> <p>putting 23:12, 56:11</p> <hr/> <p style="text-align: center;">Q</p> <hr/> <p>quantum 10:4</p>
---	--	---	--

Transcript of Michael P. McDonald, Ph.D.

Conducted on June 5, 2017

34

<p>question 8:12, 15:1, 15:10, 16:17, 17:15, 17:17, 19:2, 20:3, 20:14, 20:22, 24:14, 26:18, 27:15, 28:21, 29:5, 29:8, 29:14, 30:11, 34:13, 35:7, 36:12, 41:19, 50:22, 51:10, 56:8, 62:6, 68:22, 70:9</p> <p>questions 17:9, 18:1, 28:20, 33:13, 52:11, 63:3, 70:22</p> <p>quite 8:15, 11:12</p> <hr/> <p style="text-align: center;">R</p> <hr/> <p>race 40:1, 49:10, 49:11, 50:17, 51:13</p> <p>races 15:18, 51:10, 51:16, 52:5</p> <p>racial 15:12, 15:17, 16:7, 16:9, 16:10, 24:6, 24:18, 26:13, 27:16, 27:21, 39:16, 39:19, 40:20, 40:22, 41:8</p> <p>raised 17:10</p> <p>range 63:4, 63:5, 63:8, 63:9, 63:20, 64:1, 65:5, 65:6, 66:1, 66:8,</p>	<p>66:9, 66:16, 66:20</p> <p>ranges 69:22</p> <p>rate 11:6, 11:11</p> <p>rather 31:17, 35:20</p> <p>rational 13:2</p> <p>read 20:19, 30:18</p> <p>readable 46:9</p> <p>reading 18:12, 45:22, 72:9</p> <p>reads 15:2, 32:4</p> <p>real 34:12</p> <p>realignments 42:12</p> <p>realize 11:9</p> <p>realized 13:14, 13:17</p> <p>really 23:21, 24:13, 26:6, 27:19, 28:14, 29:14, 35:17, 50:22, 55:3, 57:21, 66:16, 69:3, 69:18, 70:7</p> <p>realm 35:14</p> <p>realtime 2:12</p> <p>reasonable 16:20</p> <p>rebuttal 4:12, 14:15, 65:12</p> <p>recall 31:8, 39:2, 39:5, 39:8, 49:21, 53:22,</p>	<p>57:20, 59:7, 59:14, 59:16, 64:16</p> <p>received 8:15, 44:20</p> <p>receives 49:8</p> <p>recent 22:20</p> <p>recently 7:7, 10:6, 70:13</p> <p>recommended 11:10</p> <p>record 42:19, 71:6, 71:7, 72:6</p> <p>recounting 7:19</p> <p>rectify 56:12</p> <p>redistricting 6:14, 7:3, 8:19, 8:21, 9:14, 9:16, 10:2, 10:15, 10:19, 10:21, 12:6, 16:7, 17:12, 19:7, 30:12, 35:8, 35:9, 35:12, 35:15, 36:17, 37:4, 42:18, 43:6, 43:7, 43:8, 43:15, 44:4, 46:19, 47:20, 47:22, 51:21, 52:19, 52:21, 53:1, 57:16, 63:13</p> <p>reduced 28:1, 72:8</p> <p>reduction 31:5</p> <p>refresh 49:20</p> <p>regarding 36:17</p>	<p>regards 44:18</p> <p>registered 2:11, 20:6, 30:16, 32:9, 38:13, 61:2, 61:22</p> <p>registration 6:12, 11:18, 17:5, 32:7, 38:5, 38:7, 44:22, 49:7, 59:20</p> <p>regression 35:3</p> <p>regularly 10:4</p> <p>related 9:2, 41:19, 51:17, 51:19, 72:11</p> <p>relates 20:21, 52:11</p> <p>relation 21:11</p> <p>relative 26:7</p> <p>relevant 21:19, 22:17, 58:11</p> <p>remedial 25:11, 26:1, 28:11, 58:18</p> <p>repetitive 59:2</p> <p>replicate 13:20</p> <p>replicated 13:21</p> <p>report 4:11, 4:12, 7:13, 11:2, 11:22, 14:8, 14:13, 14:15, 14:21, 23:3, 31:1, 34:15, 37:5, 37:15, 37:20, 37:21,</p>
---	--	--	--

Transcript of Michael P. McDonald, Ph.D.

Conducted on June 5, 2017

35

<p>38:4, 38:10, 52:22, 53:7, 53:8, 56:17, 57:8, 59:4, 59:6, 59:8, 59:9, 59:10, 59:11, 59:16, 59:17, 61:1, 65:12 reported 1:22 reporter 2:11, 2:12, 71:4 reporter-notary 72:1 reports 7:10, 23:10, 40:15, 40:17, 43:17, 43:21, 44:6, 44:22, 45:8, 50:15, 53:21, 57:11 represent 5:10 representational 29:1, 29:6, 29:20 represented 42:21 representing 5:12, 6:3 republican 18:3, 18:15, 19:7, 20:7, 22:21, 28:1, 31:3, 31:14, 32:10, 48:20, 48:22, 49:4 republicans 15:21, 17:11, 19:11, 19:13, 19:20, 22:12, 23:15, 24:10, 26:9, 26:18, 30:16, 31:7, 31:10, 32:21, 33:1, 33:14,</p>	<p>34:22, 41:13, 41:14, 48:2, 48:11, 61:2, 65:17, 70:14 requirement 63:15 requirements 35:21 research 9:4 residences 56:3 residents 62:9 resolve 12:21 respect 20:2, 30:10, 30:12, 33:4, 34:7, 36:22, 37:6, 64:17, 65:5, 65:10 respective 35:16, 53:3 respects 36:11 restate 20:17, 20:22 result 11:17, 27:14, 30:5, 45:14 resulted 15:3, 44:14 resulting 22:1 results 13:10, 23:2, 23:7, 35:5, 40:1, 40:3, 40:10, 45:3, 48:9, 49:19, 49:20, 50:14, 51:12, 51:20, 60:18 retained 44:1, 44:7 review 52:17</p>	<p>reviewed 64:9 rice 3:15, 4:3, 5:5, 5:8, 5:16, 5:21, 6:5, 14:16, 16:13, 51:7, 51:9, 70:18, 70:22 right 18:8, 20:10, 30:20, 49:11 rights 17:20, 21:16, 23:5, 24:8, 29:1, 29:6, 29:20 road 55:4 rodden 11:21, 12:4, 12:18 role 27:16, 28:8, 44:3 rough 64:2 roughly 22:6, 63:22 round 43:14 rpr 1:22 rules 69:16 run 51:5</p> <hr/> <p style="text-align: center;">S</p> <hr/> <p>said 7:19, 8:1, 8:8, 16:18, 20:15, 34:12, 50:9, 58:13, 58:14, 72:7 same 24:9, 46:11, 62:14, 65:19</p>	<p>sample 41:6 sarah 3:15, 5:8 satisfy 58:16 savings 11:9, 11:13 saw 12:15 say 14:9, 25:6, 26:4, 30:6, 31:4, 31:12, 52:22, 53:17, 54:10, 62:7, 63:10, 67:2, 68:16, 69:4, 69:16 saying 12:22 says 30:10, 52:18 scale 41:5 scope 14:5 seal 72:16 seats 66:12, 69:6 second 21:8, 29:13, 49:5 secretary 10:8 see 6:20, 27:15, 56:17, 57:1, 57:10, 64:5, 64:13, 68:3, 69:1, 69:14 seemed 15:16, 16:19, 57:9 seen 44:11 select 41:21</p>
--	--	---	--

Transcript of Michael P. McDonald, Ph.D.

Conducted on June 5, 2017

36

<p>selected 41:21</p> <p>sense 41:13, 43:11, 44:2, 66:11</p> <p>sentence 18:2, 20:1, 20:21, 21:8, 30:10, 31:20, 32:4, 52:18</p> <p>separately 48:14</p> <p>sequentially 14:9</p> <p>serious 15:4</p> <p>set 11:21, 12:18, 28:20, 33:9, 46:9, 52:11, 72:15</p> <p>sets 68:21</p> <p>seven 34:19</p> <p>severe 25:18</p> <p>share 49:8, 65:15, 65:22, 68:16, 69:5</p> <p>shares 69:3</p> <p>shift 37:13</p> <p>shifting 66:2</p> <p>short 70:19</p> <p>shorthand 72:1</p> <p>should 27:3, 31:11, 58:15</p> <p>show 40:16, 45:8</p> <p>showing 60:2</p>	<p>signature-wvndr 72:19</p> <p>significant 25:18</p> <p>signing 72:9</p> <p>similar 13:9, 27:3, 27:4, 36:6, 38:8, 41:8, 54:4, 54:5, 58:20, 61:19, 65:9, 66:19</p> <p>simple 13:3</p> <p>simply 48:9, 59:21</p> <p>since 19:6, 33:1, 36:18, 38:12</p> <p>sinclair 1:22, 2:11, 72:3</p> <p>site 12:20</p> <p>sitting 50:6</p> <p>situation 25:10, 25:16</p> <p>situations 25:3</p> <p>sixth 19:8, 19:21, 20:4, 22:3, 27:12, 30:14, 35:1, 37:14, 38:16, 38:20, 41:9, 45:9, 48:5, 54:16, 54:20, 56:4, 59:14, 61:5, 61:7, 61:13, 61:17, 62:3, 62:12</p> <p>skipped 18:12</p> <p>slate 47:6</p>	<p>small 34:3, 57:11</p> <p>smith 8:18</p> <p>software 9:9, 9:17, 9:18, 9:21, 10:2, 10:16, 55:10</p> <p>some 5:13, 6:9, 7:1, 7:5, 9:6, 11:9, 11:10, 12:16, 17:15, 23:4, 24:20, 25:3, 25:15, 27:5, 27:21, 30:21, 31:5, 34:10, 35:3, 35:12, 35:17, 35:21, 36:11, 38:12, 38:14, 40:15, 40:16, 46:15, 50:6, 50:7, 51:15, 60:22, 61:2, 63:3, 70:10, 70:12</p> <p>somehow 17:21, 60:5</p> <p>someone 44:1, 44:13</p> <p>someone's 46:22</p> <p>something 15:13, 24:11, 31:14, 31:17, 35:3, 55:4, 60:9, 64:22, 68:6, 69:7</p> <p>sometimes 47:5</p> <p>somewhat 40:9</p> <p>somewhere 52:21</p> <p>sorry 5:7, 5:17, 14:22, 18:11,</p>	<p>20:2, 50:19, 51:2, 51:6, 61:6, 66:4, 70:2</p> <p>sort 24:20, 25:4, 26:7, 30:9, 35:3, 43:10, 43:22, 48:8, 48:12, 61:19, 63:21</p> <p>sorts 35:19, 56:13, 66:14</p> <p>source 9:16, 10:5, 49:2, 50:11</p> <p>speaking 24:5</p> <p>specific 64:20, 65:1, 65:2</p> <p>specifically 9:2, 28:22</p> <p>specifications 55:18</p> <p>split 12:16, 56:22, 58:1, 59:5</p> <p>splits 12:17, 13:12, 57:20, 59:6, 59:7</p> <p>spreadsheet 6:11</p> <p>st 2:5, 3:17</p> <p>stage 60:16</p> <p>standard 64:10</p> <p>start 6:6, 18:13, 45:17, 47:2, 47:3, 47:5, 47:8, 68:3, 68:19</p> <p>started 43:6, 45:10</p>
---	---	--	---

Transcript of Michael P. McDonald, Ph.D.

Conducted on June 5, 2017

<p>state 2:13, 5:9, 6:14, 6:22, 10:18, 13:10, 22:5, 22:8, 28:1, 31:17, 36:2, 36:4, 36:12, 36:13, 36:18, 36:19, 43:4, 46:4, 46:5, 46:20, 54:20, 63:4, 63:7, 63:15, 67:14, 68:4 state's 10:9 states 1:1, 12:9, 35:21, 36:5 statewide 13:8, 31:9, 59:11, 60:18 statistical 24:19, 35:2, 39:20, 63:8 statistics 6:12, 13:15, 32:19, 42:20, 43:10, 60:3, 60:5, 61:7 statutes 36:2, 36:7 statutory 36:16 stein 3:4, 6:1, 6:2, 8:3, 9:10, 16:11, 16:15, 17:1, 17:6, 18:20, 20:13, 21:4, 21:12, 22:19, 23:20, 24:12, 27:18, 29:22, 30:22, 32:16, 33:11, 34:16, 37:7, 38:3, 42:2, 42:10, 44:9,</p>	<p>46:10, 50:1, 50:5, 50:18, 51:14, 53:9, 53:14, 55:13, 56:7, 56:16, 57:7, 58:8, 61:18, 62:5, 62:14, 67:22, 70:6, 71:3, 71:5 stenographically 72:7 step 60:7 steps 45:15 still 31:6, 40:9, 47:7 straight 55:1, 55:3, 55:5, 57:22 street 3:7 strength 33:20, 61:22, 68:11 strongly 25:8 student 8:14 studies 41:20 study 39:11, 39:14, 42:13 submitted 44:7 subsequently 63:17 substantial 22:10, 32:15, 33:10, 33:14, 33:18 substantially 32:11, 32:14, 33:5, 33:6, 54:5, 58:20 sufficient 26:15, 41:12,</p>	<p>42:4, 48:19 sufficiently 15:4, 25:11, 25:12 suggest 21:6, 24:14 suggested 64:15 suggestion 58:14 suited 60:9 summer 5:14 superior 30:13 support 9:21, 12:5, 24:21, 26:8 suppose 60:5 supreme 36:21, 46:5 sure 6:1, 23:21, 24:1, 27:8, 41:18, 42:4, 51:7, 59:16, 62:8 survey 39:17, 41:5, 41:6, 42:3 sweeping 68:8 swing 67:19, 68:1, 68:2, 68:21, 70:5 swings 68:6, 68:9, 68:16, 68:21, 69:18, 69:22, 70:9, 70:13 sworn 5:3 symmetry 67:6 systems 9:1, 9:13</p>	<p style="text-align: center;">T</p> <hr/> <p>table 38:6, 38:9, 41:17, 48:8, 49:5, 50:7, 61:20, 65:16 tables 50:15, 51:12 tabulation 59:9 take 49:14, 51:3, 68:21, 69:14, 69:17 taken 11:5, 43:16, 45:15, 51:8, 70:21, 72:4, 72:7 taking 16:1, 17:12, 20:18, 51:1 talk 41:17 talked 8:6, 52:20, 54:12 talking 15:18, 15:20, 16:1, 26:11, 33:6, 34:5, 43:5, 43:20, 44:10, 67:11 talks 21:9 target 25:1 tasked 63:13 tasks 9:6 technique 39:18, 39:20, 39:21, 64:18, 68:10 tedious 60:8</p>
--	--	--	---

Transcript of Michael P. McDonald, Ph.D.

Conducted on June 5, 2017

38

tell 6:19, 38:15, 46:12, 55:18, 64:22	67:6, 67:16, 68:20, 69:12, 69:15	topics 66:3	typical 11:6, 65:15, 65:22, 66:17, 69:9, 69:12, 70:17
telling 68:6	thinking 35:14	total 22:6, 22:7, 38:8	typically 11:7, 39:16, 39:21, 59:8, 66:13, 66:14, 66:20, 68:3
tend 41:13, 41:14	third 30:9, 30:11, 65:13, 65:14	totality 23:11	<hr/> U <hr/>
terms 8:6, 16:6, 31:16, 34:6, 34:9, 69:21	third-party 44:8	touched 22:6	unable 18:5, 18:17, 19:8, 19:16, 19:20, 22:13, 48:2
test 43:20	thought 38:4	touching 59:13	under 13:3, 31:13, 58:19, 61:16, 62:3, 62:10, 62:12, 62:18, 72:8
testified 5:3	three 19:5, 34:18, 35:7, 48:22	towards 68:17, 70:14	underlying 52:6, 64:18
testimony 21:13, 24:3, 72:6, 72:7	through 6:10, 9:17, 12:22, 30:7, 40:17, 40:19, 47:2, 52:13, 54:22, 58:1, 63:16	trades 54:8	underneath 18:1
texas 27:21, 66:18	throughout 7:8, 9:20, 9:22, 67:18	traditional 30:12, 35:7, 35:9, 35:15, 36:19, 37:3, 52:21	underpopulated 39:1, 39:4, 39:7
th 2:5, 3:17	thrust 29:13	transcript 4:9, 20:19, 72:5	understand 6:13, 8:4, 8:12, 15:9, 16:6, 17:9, 20:14, 20:20, 23:21, 24:13, 24:15, 27:22, 29:5, 29:10, 35:8, 46:7, 58:4, 59:18, 62:6, 65:15, 66:2
thank 66:5	time 17:12, 17:17, 17:19, 22:17, 40:8, 41:20, 42:1, 42:9, 42:15, 43:16, 46:16, 49:14, 56:7, 70:19	tried 56:19	understanding 62:19
thanks 51:4	today 5:13, 27:10	trivial 35:20	understood 17:7, 17:10, 17:18, 33:12
thereabouts 5:20, 5:21	together 8:22, 9:7, 12:21, 13:1, 13:16, 54:16, 56:11	trouble 14:10	undertake 48:1, 50:3
thereafter 72:8	told 45:6, 45:8	troubleshot 14:1	
therefore 21:21	top 52:16, 52:17	true 72:5	
thing 40:7, 54:12	topic 50:20	trying 14:2, 20:20, 24:13, 57:19, 58:4	
things 42:11, 54:14		turn 14:20, 37:10, 50:21	
think 7:8, 14:5, 20:20, 24:2, 24:4, 27:15, 30:2, 34:11, 36:3, 36:8, 40:8, 40:12, 40:13, 41:13, 41:19, 51:18, 52:12, 57:15, 59:15, 66:7,		two 8:22, 10:14, 26:19, 28:2, 53:2, 53:7, 54:8, 55:8, 55:20, 56:11, 57:14, 68:18	
		typewriting 72:8	

Transcript of Michael P. McDonald, Ph.D.

Conducted on June 5, 2017

<p>undertaken 70:2</p> <p>uniform 68:21</p> <p>uninformed 63:8, 63:20</p> <p>unique 31:13</p> <p>united 1:1</p> <p>university 8:17</p> <p>unless 43:13, 43:22</p> <p>unnecessary 57:19</p> <p>unresponsive 69:4</p> <p>unusual 70:5, 70:12</p> <p>upcoming 43:7</p> <p>urban 25:16</p> <p>use 10:3, 10:4, 10:9, 17:3, 32:6, 37:19, 39:18, 40:2, 47:21, 52:20, 55:10, 62:19</p> <p>uses 11:22, 39:20</p> <p>using 10:16, 13:12, 58:10, 65:18</p> <p>usually 15:22, 25:16, 47:2, 65:22, 68:18</p> <hr/> <p style="text-align: center;">v</p> <hr/> <p>vague 8:3, 9:10, 17:1, 17:6, 18:20, 20:13, 21:4, 22:19, 23:20, 24:12,</p>	<p>27:18, 33:11, 34:16, 38:3, 42:10, 46:10, 50:1, 50:5, 50:18, 51:14, 53:9, 53:14, 55:13, 56:16, 57:7, 61:18, 67:22, 70:6</p> <p>valuable 46:3</p> <p>value 22:21, 23:3, 68:5</p> <p>various 7:7, 23:14</p> <p>vast 54:7</p> <p>vernacular 23:5</p> <p>version 10:3, 10:5, 36:21</p> <p>versus 27:7, 66:15</p> <p>viable 40:22</p> <p>violations 56:10</p> <p>vote 15:3, 15:9, 15:15, 15:16, 15:22, 16:8, 16:10, 17:3, 18:2, 18:14, 18:19, 18:21, 19:1, 20:16, 20:21, 21:2, 21:3, 21:6, 24:5, 24:14, 24:15, 24:17, 25:4, 25:6, 25:19, 26:6, 26:12, 27:14, 27:16, 28:18, 31:9, 31:22, 32:17, 41:2, 41:14, 41:15,</p>	<p>49:9, 49:16, 65:15, 65:22, 67:19, 68:1, 68:2, 68:16, 68:21, 69:3, 69:5, 69:22</p> <p>voted 29:2</p> <p>voter 59:19</p> <p>voter's 33:21, 33:22</p> <p>voters 15:6, 18:4, 18:16, 19:7, 20:7, 29:18, 29:21, 32:10, 38:14, 38:16, 48:3, 62:21, 68:7</p> <p>votes 16:1, 48:14, 48:19, 49:2, 50:10, 62:12, 66:11</p> <p>voting 21:15, 23:5, 24:8, 24:18, 25:8, 26:15, 28:2, 32:7, 33:20, 39:19, 40:21, 41:1, 41:9, 48:3, 50:4, 59:8, 61:22</p> <p>vtlds 59:8</p> <hr/> <p style="text-align: center;">W</p> <hr/> <p>want 5:22, 34:9, 46:7, 47:16, 50:21, 67:6, 68:2, 68:12</p> <p>wanted 11:8, 31:15</p> <p>washington 3:8</p>	<p>water 51:5</p> <p>wave 19:12</p> <p>way 11:8, 13:2, 16:3, 16:20, 17:7, 18:22, 21:22, 26:14, 27:2, 35:5, 55:4, 69:4, 69:7, 70:8, 70:15</p> <p>ways 17:16</p> <p>we'll 27:9</p> <p>we're 43:20, 71:3</p> <p>we've 10:6, 12:1</p> <p>web 9:17, 12:20</p> <p>weekly 9:3, 9:5</p> <p>weight 23:12</p> <p>went 58:2</p> <p>western 54:19</p> <p>whatever 68:12</p> <p>whereof 72:15</p> <p>whereupon 14:12, 14:14</p> <p>whether 15:2, 16:22, 17:16, 17:18, 18:22, 19:3, 28:15, 28:17, 28:21, 29:10, 31:22, 33:14, 42:8, 48:1, 48:10, 53:12, 56:3, 64:20, 64:21</p>
---	---	--	--

Transcript of Michael P. McDonald, Ph.D.

Conducted on June 5, 2017

<p>whites 25:6, 25:19</p> <p>whole 14:5, 52:18</p> <p>widely 64:16, 64:17, 64:19</p> <p>win 19:14, 31:15</p> <p>winning 49:9</p> <p>wipe 54:18</p> <p>wisconsin 45:20, 46:6</p> <p>wish 32:19, 41:17, 58:17</p> <p>wished 48:7</p> <p>within 22:8, 22:12, 26:4, 31:3, 31:9, 32:18, 35:1, 36:6, 38:16, 40:10, 41:9, 48:5, 54:2, 56:4, 57:13, 58:21, 62:22</p> <p>without 38:13, 46:13, 63:21, 64:3</p> <p>witness 5:18, 71:2, 72:15</p> <p>witnesses 7:7</p> <p>work 8:21, 9:1, 9:6, 11:1, 11:15, 16:6, 40:19, 42:13, 43:13, 43:22, 44:1, 60:7, 60:8, 63:11, 64:12, 64:13, 69:20</p> <p>worked 43:2, 43:3</p>	<p>working 12:2, 12:21</p> <p>world 15:12, 35:11, 35:12</p> <p>wrong 58:5</p> <hr/> <p style="text-align: center;">Y</p> <hr/> <p>yeah 8:4, 50:2, 56:21, 60:21</p> <p>year 19:11, 19:15</p> <p>yourself 8:10</p> <hr/> <p style="text-align: center;">Z</p> <hr/> <p>zero 53:22</p> <p>zeroing 54:1</p> <hr/> <p style="text-align: center;">\$</p> <hr/> <p>\$280 11:7</p> <p>\$350 11:7</p> <p>\$50 11:12</p> <hr/> <p style="text-align: center;">1</p> <hr/> <p>10 69:17</p> <p>10,000 22:7</p> <p>11 71:7</p> <p>1101 3:8</p> <p>12 38:6, 61:20</p> <p>13 1:7, 31:9, 72:22</p> <p>14 4:11, 4:12, 48:17, 52:13</p>	<p>146596 1:20</p> <p>15 52:16, 52:17, 61:8</p> <p>16 48:17, 52:13</p> <p>1980 9:11</p> <p>1990 10:18, 10:21</p> <p>1994 64:15</p> <p>1999 3:7</p> <hr/> <p style="text-align: center;">2</p> <hr/> <p>20 2:5, 3:17</p> <p>200 2:5, 3:17</p> <p>2000 10:22, 63:17, 64:1</p> <p>20006 3:8</p> <p>2002 61:16, 62:10</p> <p>2006 70:13</p> <p>2010 6:12, 22:22, 40:6, 42:6, 44:22, 56:9, 70:14</p> <p>2011 15:2</p> <p>2012 17:11, 39:14, 41:21, 42:5, 48:17</p> <p>2014 19:10, 39:15, 41:21, 49:10, 49:17, 70:15</p> <p>2017 1:14, 72:17</p> <p>2018 72:22</p>	<p>202 3:9</p> <p>210 4:11, 14:11, 14:13</p> <p>211 4:12, 14:11, 14:15</p> <p>21202 2:6, 3:18</p> <p>25 54:6, 71:7</p> <p>263 3:9</p> <hr/> <p style="text-align: center;">3</p> <hr/> <p>3000 3:9</p> <p>3233 1:7</p> <p>38 1:15</p> <p>39.1 65:17</p> <hr/> <p style="text-align: center;">4</p> <hr/> <p>410 3:19</p> <p>48 63:5, 63:20</p> <p>49 34:3</p> <hr/> <p style="text-align: center;">5</p> <hr/> <p>50 34:2, 66:21, 67:1</p> <p>51 45:10, 45:17</p> <p>52 63:6, 63:20</p> <p>53 45:12, 45:18</p> <p>576 3:19</p> <hr/> <p style="text-align: center;">6</p> <hr/> <p>6324 3:19</p>
---	--	--	---

Transcript of Michael P. McDonald, Ph.D.

Conducted on June 5, 2017

6th 72:16	
7	
72 1:21	
9	
9 1:15	