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IN THE COMMONWEALTH COURT OF PENNSYLVANIA

- - -

VIVIETTE APPLEWHITE; WILOLA  
SHINHOLSTER LEE; GROVER FREELAND;  
GLORIA CUTTINO; NADINE MARSH; DOROTHY  
BARKSDALE; BEA BOOKLER; JOYCE BLOCK;  
HENRIETTA KAY DICKERSON; DEVRA MIREL  
("ASHER") SCHOR; THE LEAGUE OF WOMEN  
VOTERS OF PENNSYLVANIA; NATIONAL  
ASSOCIATION FOR THE ADVANCEMENT OF  
COLORED PEOPLE, PENNSYLVANIA STATE  
CONFERENCE; HOMELESS ADVOCACY PROJECT,

Petitioners,

VS.

THE COMMONWEALTH OF PENNSYLVANIA;  
THOMAS W. CORBETT, in his capacity as  
Governor; CAROLE AICHELE, in her  
capacity as Secretary of the  
Commonwealth,

Respondents.

**CERTIFIED  
TRANSCRIPT**

C.A. No.

330 M.D. 2012

TRIAL DAY TWO

Honorable Bernard L. McGinley

Harrisburg, Pennsylvania

Tuesday, July 16, 2013

REPORTED BY:

Marjorie Peters, RMR, CRR

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## P R O C E E D I N G S

THE COURT: Good morning, all. Please be seated. Mr. Rubin, are we ready to go?

MR. RUBIN: Yes, we are, Your Honor. The petitioners call Dr. Bernard Siskin.

BERNARD L. SISKIN, Ph.D, having first, been duly sworn according to the law was examined and testified as follows:

## DIRECT EXAMINATION

BY MR. RUBIN:

Q. Dr. Siskin, can you introduce yourself to the Court, please.

A. Excuse me. Hi. My name is Bernard R. Siskin, S-I-S-K-I-N.

Q. Dr. Siskin, were you retained by the petitioners in this case?

A. Yes, I was. Excuse me.

Q. And you still are retained, correct?

A. Yes.

Q. Can you please briefly explain what your assignment was in this case?

A. Yeah, my assignment was fairly simple and direct. I was asked to take the SURE database, which is the list voter registration database and look at the Department of Transportation database which had information as to who has

1 PennDOT driver's licenses, non-driver license photo IDs for  
2 the Department of State IDs, and using these two databases try  
3 and determine how many people who were registered voters in  
4 the State of Pennsylvania would not have a valid photo ID of  
5 those three types of Department of Transportation driver's  
6 license and non-driver license photo ID or the Department of  
7 State ID; either do not have that license or have a license  
8 but it expired so that it would not be available to be used  
9 for voting.

10 Q. When you say expired, is there a particular length of  
11 time it has to be expired?

12 A. Yeah. I was studying as of the -- assuming the November  
13 13th election. So, in order to be a valid photo ID it has to  
14 have expired after I think November 5th, 2012.

15 Q. Did you do any analyses beyond just matching the  
16 databases?

17 A. Yes. Aside matching the databases, I was asked to look  
18 at certain demographic characteristics of those people who did  
19 not have a valid photo ID of those types; and subsequently, I  
20 did some analysis in response to looking at the report from  
21 Dr. Wecker.

22 Q. For the demographic analyses, did you look at particular  
23 subgroups of voters.

24 A. Yes, I looked at the racial mix of the people who did  
25 not have voter IDs, valid voter IDs, and compared that to if

1 there was disparity by race. I looked at the political party,  
2 the people, to see if there was a disparity by political  
3 party. I looked at the age of the individuals. I looked at  
4 the counties that they lived in, and I also looked at how long  
5 it would take somebody to drive, in mileage and time, to reach  
6 a -- the Department of Transportation licensing center in  
7 order to get a license. I did that for the people who, of  
8 course, did not have valid IDs.

9 Q. Did you also look at gender?

10 A. Correct. I knew I forgot something.

11 Q. All in, Dr. Siskin, how much did you and your firm  
12 charge for the report and the analysis that was done leading  
13 up to your report?

14 A. \$30,000.

15 Q. And how much are you being paid for your time preparing  
16 for and testifying here today?

17 A. \$475 an hour.

18 Q. I'm having a little trouble hearing you speaking so  
19 close to the mic. Maybe if you're slightly further apart. I  
20 don't know --

21 A. Okay.

22 Q. -- if anyone else is having --

23 A. Is that better?

24 Q. I think --

25 A. Worse --

1 Q. Yes.

2 A. -- better?

3 Q. From looking at the court reporter who probably matters  
4 most.

5 Do you have experience doing this type of work otherwise  
6 on this case?

7 A. Yes, for a long time, I spent a lot of time analyzing  
8 databases, merging databases, dealing with issues of combining  
9 databases in employment where you combine health care --  
10 applicant databases with employer databases. I do work in  
11 health care where we merge databases. I'm doing work on  
12 behalf of the Department of Labor analyzing and merging  
13 databases for, in health care issues. I have done this for  
14 the FBI and other organizations as well.

15 Q. Now, I have been calling you doctor. What type of  
16 doctor are you?

17 A. I'm not the kind to give you an aspirin, medicine. I  
18 have a Ph.D in statistics and economics from the Wharton  
19 School at the University of Pennsylvania.

20 Q. And where did you do your undergraduate?

21 A. The University of Pittsburgh.

22 Q. Have you held any positions in academia?

23 A. Yes, after finishing my coursework at Penn, I joined the  
24 faculty at Temple University, and I was there for 16 years,  
25 and in the Department of Statistics.

1 Q. And did you hold any leadership positions at Temple  
2 University?

3 A. Yes, while I was there, I became a tenured Professor,  
4 Associate Professor and was Chairman of the Department of  
5 Statistics for five years at Temple University.

6 Q. When did you leave Temple University?

7 A. 1984.

8 Q. And what have you been doing since then?

9 A. I have been working as a consultant primarily in the  
10 area of applied statistics in a variety of areas, to a great  
11 extent in litigation settings.

12 Q. Where do you currently work?

13 A. I work in Philadelphia for a firm called BLDS, Limited.

14 Q. What is your position at BLDS?

15 A. I'm a director.

16 Q. What does that mean?

17 A. It means that I'm on the -- one of the principals in the  
18 firm. The term comes from actually my prior employment was  
19 with the firm called LECG which was a public corporation doing  
20 the same thing, and they went under financially and we left;  
21 and the whole group that I was with, which was the labor  
22 statistics practice, moved over, and everybody, I was a  
23 director and other people that were essentially leaving the  
24 research at LECG, and we just kept the titles when we moved  
25 over to this firm, which is basically owned by the department,

1 the directors of the firm.

2 Q. Is there a particular focus? I know you said you have  
3 done database matching in the past, but do you have any other  
4 focuses in your work?

5 A. Yes. The major focus that I do is analyzing statistics,  
6 primarily in the area of the fair lending employment  
7 discrimination. Applied statistics in a variety of other  
8 areas, health care and commercial and other situations, but  
9 most of our work tends to be in the employment and  
10 discrimination area, analyzing large databases for evidence of  
11 discrimination.

12 Q. You say you do consulting; is that right?

13 A. Right.

14 Q. Who do you consult for?

15 A. I have consulted and continue to consult for most of the  
16 government agencies. I have co-worked for the Department of  
17 Justice, I have worked for the FBI, the C.I.A., the Department  
18 of Labor, U.S. Navy, National Aeronautic and Space  
19 Association, EPA.

20 I have also worked for numerous states, including  
21 Pennsylvania and Connecticut, Alaska. And I worked for  
22 numerous Fortune 500 corporations.

23 Q. And you've mentioned Pennsylvania. What type of work do  
24 you do for the State of Pennsylvania?

25 A. I'm not working with them right now, but in the past I

1 have done some work for them in health care, analyzing some  
2 nursing home data and health care information. I was retained  
3 once by the Attorney General to look at an issue jointly with  
4 the Chief Magistrate Court in Philadelphia to look at some  
5 data to give him some information with respect to some  
6 allegations which were made against the Court.

7 Q. Have you worked with other courts?

8 A. Yes, I have. I have been a neutral expert appointed by  
9 the Court in a variety of circumstances. I was the  
10 statistical consultant to the Third Circuit Task Force for  
11 studying the question of the quality in the court system. I  
12 currently work for Judge Carter in the Southern District of  
13 New York as a consultant to the Court. I have been appointed  
14 in numerous other circumstances as a neutral expert to the  
15 Court in analyzing statistical data.

16 Q. Do you do litigation -- obviously, you're testifying  
17 here today. Do you do litigation consulting beyond what  
18 you're doing here today?

19 A. Yes. Besides, you know, litigation, we do statistical  
20 consulting for a variety of companies as well. And we do a  
21 lot of health care work. We have done work for health care  
22 companies that have the best measure in analyzing data  
23 concerning reimbursement rates in full and other things like  
24 that.

25 Q. In terms of your litigation work, do you predominantly

1 work for one side, plaintiffs or defendants?

2 A. No. I work for both plaintiffs and defendants. I have  
3 worked for the Department of Justice on when they sue cities  
4 and states. I work for cities and states when they have been  
5 sued by the Department of Justice. So, I have worked for both  
6 plaintiffs and defendants. That's the advantage as a  
7 statistician. Statisticians really just look at data and tell  
8 you what the data says. They don't have to make opinions. So  
9 the data is a data, so you can work for the plaintiffs and the  
10 defendants. It doesn't really matter. Just telling them what  
11 the data says.

12 Q. Fair enough. You mentioned that you worked for the  
13 Attorney General's office in the past. Have you worked for  
14 any of the other law firms or counsel that are in the  
15 courtroom today, that you aware of?

16 A. Yes, I have. I have worked a great deal for Drinker,  
17 Biddle and Reath that's in the courtroom today.

18 Q. And have you worked for anyone that's sitting on my  
19 side? Although I don't think he is here.

20 A. Yeah, I have worked for the ACLU in the past.

21 Q. Anybody else on petitioners' side of the table?

22 A. Not that I recall, no.

23 MR. RUBIN: Your Honor, at this time I'd like  
24 to have marked -- it's premarked already -- so I --  
25 Respondents already have a copy of the entire expert report,

1 and what we have done is we have marked it as Exhibit 2096, A,  
2 B, C, going through to the end. Right now I'd like to put in  
3 2096d, which is Appendix B to Dr. Siskin's expert report and  
4 which is the CV.

5 I'm handing a copy to the Court Reporter.

6 BY MR. RUBIN:

7 Q. Dr. Siskin, do you recognize what I have just handed  
8 you?

9 A. Yes, I do. This is a copy of my resume.

10 Q. Does it accurately reflect your training and experience?

11 A. Yes, with one correction which I should make on this;  
12 and that is under teaching experience, where it lists Adjunct  
13 Professor of law, 1992 to present. In 2006, I resigned that  
14 position. For a long time, I had been teaching a course  
15 jointly with a former partner of mine and he passed away. We  
16 stopped teaching that course. And I am not -- I have been  
17 asked, but I'm not doing anything since then.

18 MR. RUBIN: Your Honor, at this time we'd like  
19 to proffer Dr. Siskin as an expert in statistics and database  
20 analysis.

21 THE COURT: Do you have any cross-examination  
22 of the doctor?

23 MS. HICKOK: Not at this time.

24 MR. RUBIN: At this time, Your Honor, I'd like  
25 to provide the court reporter with the remaining portions of

1 Dr. Siskin's report, which again is -- are marked Exhibits  
2 2096a through g.

3 Respondents have a copy already, Your Honor,  
4 and I'll provide a copy for the Court.

5 BY MR. RUBIN:

6 Q. Dr. Siskin, here's a copy of Exhibit 2096. Can you  
7 identify what that is?

8 A. Yes. This is a copy of the report that I filed in this  
9 case.

10 Q. And is the report 2096a?

11 A. That's correct.

12 Q. Can you tell us what 2096b represents?

13 A. 96b represents the tables for that report.

14 Q. When you mean the tables, is that -- what do you mean by  
15 that?

16 A. Well, they're the calculations, summarizing the  
17 calculations that were made and described in the report.

18 Q. And are there some appendices as well?

19 A. Yes.

20 Q. We talked about your resume already. Can you tell us  
21 what 2096c is, Appendix A to the report?

22 A. 2096c is a summary that outlines the matching process  
23 that was used to determine who did and did not have a valid  
24 PennDOT ID.

25 Q. And 2096e, which is Appendix C to your report, just

1 generally without going into detail, can you tell us what that  
2 represents?

3 A. Yeah, that in Appendix C describes the reliability study  
4 we did to test the accuracy of the process.

5 Q. And 2096f, Appendix D, what does that represent?

6 A. This is just a table that I referred to in the report  
7 showing the voter registration and presents voting by,  
8 tabulated by the U.S. Census Bureau current population survey.

9 Q. And the last one, 2096g, Appendix E, what does that  
10 show?

11 A. That's simply a list of the programs that were used in  
12 doing this analysis.

13 Q. That's one probably no one else in the courtroom will  
14 probably understand.

15 I'd like to go back to the database and the data that  
16 you received. Can you again summarize for us what databases  
17 you received?

18 A. Yeah, I received the Pennsylvania voter registration  
19 database, which is referred to as the SURE database. And it  
20 was as of May 6, 2013. And what it contained that I used was  
21 essentially the names of the individuals who were registered;  
22 the birth dates; the last four digits of their Social Security  
23 number, which is what I understand the Department of State  
24 retains; the addresses of the individual in the record;  
25 whether or not they had a license; if they had a license, it

1 would have a license number associated with it, that meant a  
2 PennDOT license; and also had certain other information such  
3 as indicating whether they were an active or inactive voter or  
4 whether there was a valid registration vote or not; and  
5 information as to whether or not they had been removed from  
6 the list or cited on the list as being dead or pending dead.

7 There is a "possible dead" code, et cetera. There are  
8 codes on the file which I did not use.

9 Q. Let me just clarify that last point. You said you did  
10 not use certain codes?

11 A. Yeah. I used -- well, I used the code which determined  
12 who is a valid voter, okay? There were some other codes on  
13 there, such as the reasons why they're not a valid voter,  
14 which I did not rely upon.

15 Q. Once they weren't a valid voter, you just threw them  
16 away?

17 A. Correct.

18 Q. Excluded their data, pardon me.

19 A. Excluded their data. So I didn't need to use that field  
20 anymore.

21 Q. Fair enough. Did you receive any other data for your  
22 analysis?

23 A. Yes. The other -- two other databases, one of which I  
24 used. I received a PennDOT database, which was the Department  
25 of Transportation database. I received an original May 6th,

1 same date, 2013, and then it was updated including certain  
2 additional information on May 30, 2013.

3 And that database, the data contained which I was using  
4 which had information on everybody who had a PennDOT license  
5 at some point in time, since I believe 2008; and it contained  
6 the names of the individuals, their birth date, the last four  
7 digits of their Social Security number, their address, their  
8 license number, the date it expired, type of ID that it was.

9 Okay, DOS IDs don't have an expiration date, but they  
10 have just been issued and they will be in effect for ten  
11 years.

12 And some other -- it had -- and it had a voter history  
13 of each -- excuse me. The voter registration had a voter  
14 history for each individual.

15 Q. PennDOT does not, right?

16 A. PennDOT does not. That was in the SURE database. I  
17 apologize. It has not only -- in addition to the other  
18 information that I mentioned, it has a complete voter history  
19 for the person, telling you when they voted and how they  
20 voted.

21 Q. Was -- you said there was a third database?

22 A. The third database was the full voter export database.  
23 This was a file which I received which contained  
24 non-confidential information from the SURE database, and for  
25 which was suitable for export and could be sent to counsel in

1     answering questions. I did not use that for my analysis.

2     Everything that I needed was in the original SURE database  
3     that I received.

4     Q.     I just want to clarify one thing about the PennDOT  
5     database. What types of ID information were in the PennDOT  
6     database?

7     A.     The ID information in the PennDOT database would be the  
8     driver's licenses for the ID that somebody had.

9     Q.     Was their information in the PennDOT database on the  
10    PennDOT non-drivers ID?

11    A.     Yes, it would tell you whether it had a number for the  
12    PennDOT -- whether they had a driver's license, a PennDOT  
13    non-driver license photo ID, and it has an indication whether  
14    they had a Department of State ID.

15    Q.     And the Department of State ID, that's what I think we  
16    have been referring to as the DOS ID, the DOS ID?

17    A.     Correct.

18    Q.     And just to be clear, that's in the PennDOT database,  
19    that's not in the Department of State database; is that right?

20    A.     That's my recollection.

21    Q.     You said you did not use the full voter extract for the  
22    analysis that you're going to use today?

23    A.     Correct. That was just used to answer questions. My  
24    staff used it to answer questions that counsel asked us, in  
25    lists and things like that.

1 Q. Can we agree that for the rest of today, unless someone  
2 specifies otherwise, when we talk about the databases, we're  
3 referring to the SURE database and the PennDOT database that  
4 you used in your analyses that you are going to present?

5 A. That's correct.

6 Q. Roughly -- and you don't need to be precise -- how big  
7 was the database that you got from SURE initially?

8 A. It was about 13.8 million records.

9 Q. Did you do anything to narrow down that 13.8 million  
10 records?

11 A. Yes. First thing I did was try and get rid of people  
12 who were not registered voters who were not eligible to vote,  
13 and you could do that by simply -- there is a code on the file  
14 which says true, which meant it was a valid registration along  
15 with status code of an A or an I; and that would represent  
16 people who were eligible to vote in that database, and that  
17 brings it down to like 8.2 million records.

18 Q. Did you look at a subgroup in any of your analyses of  
19 those 8.2 million registered voters?

20 A. Yes, I also looked at subgroup of people who actually  
21 voted in the last presidential election.

22 Q. November 2012?

23 A. November 2012. That's that 5.7 million records.

24 Q. Why did you do that analysis?

25 A. Well, I did that because that's sort of a very

1 conservative analysis because that represents people who not  
2 only are registered to vote but we know actually did vote in  
3 the last major election.

4 Q. You said that both the databases had Social Security  
5 numbers, and I think you limited it to the last four digits.

6 A. Yes, it's my understanding that the SURE database only  
7 collects and keeps the last four digits of somebody's Social  
8 Security number. The Department of Transportation only  
9 supplied us with the last four, because the others would have  
10 been irrelevant anyhow because they couldn't have been used  
11 for matching purposes.

12 Q. Did every record in the SURE database have a last four  
13 digits of the Social Security number?

14 A. No. They were -- often the Social Security number was  
15 missing or incomplete, and about 9% of the time -- if you want  
16 an exact number, it's actually in my report.

17 Q. Footnote 9.

18 A. There were 748,931 records which do not have a valid  
19 four-digit Social Security number.

20 Q. For the PennDOT database, what's your understanding as  
21 to how far back the data went?

22 A. My recollection was it was 2008, but I may be mis- --

23 Q. If I were to tell you, 1990 is what was represented to  
24 us, does that refresh your recollection?

25 A. Yes, I think -- I was getting confused. I think the

1 voter history went back to 2008.

2 Q. Fair enough. We're going to get into the details of  
3 your methodology and go through your detailed findings. I'd  
4 like to start with a top-level summary of what you found when  
5 you matched the databases.

6 How many registered voters did you find from the SURE  
7 database that you could not find a valid PennDOT or DOS ID for  
8 voting purposes in the upcoming November 2013 election?

9 A. If you look at the database consisting of everybody who  
10 was eligible to vote, and restrict that, and I broke it up  
11 into two numbers. One is those people who were eligible to  
12 vote and there was no indication in the Department of  
13 Transportation database that they had obtained an out-of-state  
14 license. It was 511,415 people.

15 Q. And that includes driver's licenses; is that right?

16 A. Correct. Either they do not have a valid driver's  
17 license, valid photo ID, non-driver license photo ID or DOS,  
18 Department of State ID.

19 Q. Does that number include people that have a record of at  
20 some point having a PennDOT ID that was expired?

21 A. Correct. If you break that 511,415 up, 251,879, there  
22 is no indication that they ever held any of these licenses.  
23 For 259,536, we were able to match the individuals and  
24 determine that they had a license, but that license was  
25 expired and could not be used under the voter -- voting laws

1 being proposed.

2 Q. In addition to the 259,000 and change, were there  
3 additional people who had a license that was expired in  
4 PennDOT that you excluded?

5 A. Well, I reported my -- I keep them separately. That was  
6 157,966 people had an expired PennDOT license, but the  
7 indication in the PennDOT data was they were notified by  
8 another state that this person had obtained an out-of-state  
9 license. I removed those from my numbers and put them  
10 separately because it would be reasonable to assume that those  
11 people may -- may have -- I'm trying to be very conservative  
12 in my calculations. May have just simply left the state and  
13 are no longer in the state; and therefore, they let their  
14 license expire; and therefore, they would no longer vote  
15 either.

16 Q. So, by excludeing them, you lowered the number to  
17 511,000; is that right?

18 A. Correct.

19 Q. And if you had kept them in, your number of registered  
20 voters without ID would have been higher?

21 A. If you keep them in, the number would be higher; but I  
22 believe it's appropriate -- well, all of them may not be,  
23 because some of them actually voted in the last election. But  
24 the majority of them, it's reasonable to assume, probably have  
25 left the state and would not be voting and would not be really

1 eligible to vote. So I was trying to be conservative and I  
2 removed them all.

3 Q. And we're going to get into probably excruciating detail  
4 that will put people to sleep about how you did your match.  
5 But just at a top level summary, can you summarize for us how  
6 you did the match?

7 A. Yes, I did it in 12 steps. And the concept is fairly  
8 simple. We started with the matches which we were pretty sure  
9 of, okay? That everything matched -- the name, the license  
10 number, et cetera. And then I loosened it, with the concept  
11 that, you know, there's always two types of errors that one  
12 can make in a matching process. You can say somebody's  
13 matched when they're really not, which is a false positive.  
14 Okay? Or you can make a false negative. You can say  
15 somebody's not matched when in fact they are.

16 I was really concerned about just trying to minimize the  
17 mistake of saying somebody didn't match when there was a match  
18 for the person. I was trying to be as conservative as  
19 possible. So I continued to loosen up the criteria  
20 consistently so that it would lower the probability that  
21 somebody would not be matched who should be matched; and at  
22 the expense, of course, therefore increasing the probability  
23 that I would call somebody matched who was in fact not really  
24 matched.

25 Q. And by doing that, did you bring down your number to

1 511,000 from the other number?

2 A. Correct. It comes down to that number.

3 Q. Were there registered voters or multiple registered  
4 voters in the SURE database that you matched to a single ID in  
5 the PennDOT database?

6 A. Yes. We were trying, again, trying to be conservative.  
7 We would find somebody -- and particularly when we're  
8 loosening up our criteria, okay? Who would match -- three  
9 people would match one person in the database for PennDOT.

10 The example would be, since we're using -- this would be  
11 a truncation of names. So we would consider a name: Robert,  
12 Rob and Roberts. The same name. Because Rob could be a short  
13 term for Roberts, Robert. Robert could be included with  
14 Roberts. They may have just left off the S.

15 So to be conservative, you consider all three of those  
16 the same name. So you may have had somebody here in the  
17 PennDOT database whose name was John Roberts, and he could be  
18 the same birth date and last digits of the Social Security is  
19 all three of those people. We would use that person to match  
20 all three.

21 Now, obviously, for the individual it's possible that  
22 each of those have a match, then. Though, as in terms of an  
23 aggregate number, we're being very conservative, because if it  
24 was one of them, then it wasn't one of the other two. So it  
25 would have overstated the total number of matches.

1 Q. Do you have an estimate -- strike that.

2 When you say overstated the number of matches, does that  
3 mean your 511,000 number is understating?

4 A. Correct, because I'm counting people who are matched who  
5 are matched to the same person, which is a -- they can only be  
6 matched to one person. If you use that person for person A,  
7 then it could have matched person B.

8 Q. Okay. Can you quantify for us approximately how big of  
9 a concern this was?

10 A. Yes, it created 70,000 additional matches.

11 Q. So lowering your 511,000 by --

12 A. 70,000, roughly.

13 Q. You mentioned expiration dates. Again we'll get into  
14 more detail than probably most people care about, but at a  
15 high level explain what you did on the expiration dates.

16 A. Well, the expiration date was the easiest thing to do  
17 because there we match people. We've got the date and the  
18 license of the person, and we know the date that it expires.  
19 We took the latest -- and of course if we had more than one  
20 ID, we would take the latest expiration date for that ID and  
21 we simply looked at the expiration date.

22 If the expiration date was before November 5th, 2012,  
23 then that license would not be valid and we would consider  
24 that in the category of having a license, but it expired; and  
25 if it's after, then it would be a valid match and the person

1 would have a valid ID.

2 Q. Doctor, I'd like to now turn your attention to Table 1,  
3 which is Exhibit 2096b. Can you explain what Table 1  
4 represents?

5 A. Yes, Table 1 simply summarizes all of the results of the  
6 matching. On the first line at the top, it tells you that  
7 when we looked at the total database, there were 8,231,753  
8 voters. When we restricted it to the November 12th database,  
9 it was 5,742,557 voters. Okay.

10 Q. Now, it looks like you have four separate sets of data  
11 on this table?

12 A. Correct.

13 Q. Can you explain first for us what the notations  
14 non-out-of-state, or non-OOS, and OOS represents; and why you  
15 divided them that way?

16 A. Yeah. As I explained earlier, OOS meant out-of-state  
17 license. When I'm doing the top set of matches, I eliminated  
18 people who had out-of-state licenses so that when we had a  
19 match, and the person expired, and he had an out-of-state  
20 license, we just didn't count them. And we moved all of those  
21 people down to the bottom box. Where we were only looking at  
22 those people who had a license which expired, which was out of  
23 state.

24 Q. Now I'd like to walk you through --

25 A. And it expired.

1 Q. Sorry?

2 A. And had expired.

3 Q. Thank you. I'd like to now have you walk us through and  
4 explain what you did with this top box entry of data  
5 represents.

6 A. The top box is the result of our matching process. When  
7 you looked at all of the people, the first row for registered  
8 voters, you will see there's 251,879 people, who  
9 conservatively, we would estimate, did not have a valid  
10 PennDOT ID, including the -- those ID.

11 Q. That represents all registered voters?

12 A. Of all -- that represented 3.06% of all of the  
13 registered voters.

14 Q. What's the line under that?

15 A. Under that we restrict ourselves to those people who  
16 voted in November 2012. Okay?

17 Q. What were your results?

18 A. 889,753 or 1.09% of the voter population did not have --  
19 who voted in November but did not have a matching PennDOT ID.

20 And the following three concepts are where they voted:  
21 79,322 of those people voted at the polls; 8,197 voted  
22 absentee; and 2,231 voted provisionally.

23 Q. Why were you interested in where, how they voted: At  
24 the polls, absentee, provisionally?

25 A. I broke that out because -- to see the absentee numbers

1 primarily because the absentee numbers, my understanding, do  
2 not necessarily need to have a voter ID.

3 Q. Do you understand that there's some ID requirement for  
4 voting absentee?

5 A. My understanding for absentee is that they -- first, you  
6 need a reason to be able to vote absentee in the State of  
7 Pennsylvania, and then you can vote absentee using a -- your  
8 last four digits of your Social Security number; and if it  
9 matches what's in the PennDOT, in the SURE database, it's a  
10 valid vote.

11 Other than that, I think military is an exception --  
12 other than that, you have to produce an ID.

13 Q. What's the next item? I think the title is match to  
14 PennDOT record expired before November 5th, 2012. Can you  
15 explain that --

16 A. Sure. We now looked at the records that matched, and  
17 then we looked at the expiration date and we found among all  
18 the registered voters, 259,536 had a license, but the license  
19 had expired, so it would not be a valid license for the  
20 purposes of voting. That represents 3.22% of the voter  
21 population.

22 The next line below that restricts it to the November  
23 12th voters, and the numbers in that are 53,293, which is .65%  
24 of the voting population. And I give the numbers who voted at  
25 the polls absentee or provisionally.

1 Q. The next one, what do you do there?

2 A. The next one is just summing the two above, and this  
3 looks at simply how many people do not have a -- are not going  
4 to be able to produce a valid estimate of a valid PennDOT ID,  
5 either because they don't have one, or because they have one  
6 but it doesn't meet the date requirements.

7 And that shows that the total voter population of  
8 511,415, or 6.21% of the voting population, do not have --  
9 will not be able to produce a valid ID.

10 Q. And for November 2012 voters, what did you find?

11 A. For the November 12th voters, 143,046 would not be able  
12 to produce a valid PennDOT ID, which is 1.74% of the  
13 population, and subsequent numbers show where they voted in  
14 2012.

15 Q. And what was the breakdown for where they voted in 2012?

16 A. 115,778 voted at the polls; 24,339 voted absentee; 2,929  
17 voted provisionally.

18 Q. Is that set of data, the 511,143, the data that you used  
19 for the rest of your analyses that you are going to present?

20 A. Yes, that's the basic counts of my best estimate of the  
21 number of people in the voter registration that do not have a  
22 valid ID.

23 Q. You said --

24 A. It excludes the OSS people -- OOS people.

25 Q. You said you did various demographic analyses?

1 A. Correct.

2 Q. We'll talk about those, obviously, later.

3 Which set of the data did you do that analysis on?

4 A. I did it on both sets. I did it on the -- I did it  
5 always on the OSS -- OOS population, but I did it for  
6 registered voters, and then for people who voted in November  
7 '12.

8 Q. So the 511,000 and the 143,000 number?

9 A. Correct.

10 Q. Tell us, just to make sure we're all clear, what the  
11 last entry is again?

12 A. The last entry is taking out those people who did not  
13 have -- who had a matching ID, but it had expired, but there  
14 was an indication in the Department of Transportation file  
15 that they had obtained a license at another state.

16 Q. I'd like to now, Doctor, walk you through and have you  
17 walk us through in more detail how you actually did your 12  
18 steps of matching; and for that, I'd like you to take a look  
19 at -- and I'd ask counsel to bring up Exhibit 2096c and  
20 Appendix A, and specifically A1.

21 A. Let me try and walk you through these, and I'll try and  
22 do it --

23 Q. Dr. Siskin, if we can just wait. I'd like to make sure  
24 that everyone has it in front of them.

25 Tell us what Appendix A1 is first.

1 A. Appendix A1 represents the steps that we took and the  
2 results of each of those steps in trying to match the SURE  
3 database people who have -- who were eligible to vote, whether  
4 we could find a license in the DOT database, so that they  
5 would have a license, a PennDOT license, that they could  
6 produce.

7 Q. You said there are 12 steps. Did you group the steps in  
8 any meaningful way?

9 A. Yeah. I'll try and simplify this somewhat in concept so  
10 we don't put everybody to sleep, try and keep one person  
11 awake.

12 The first step is the easiest step; and that, we started  
13 with what would be essentially a perfect match, where there's  
14 a license plate number which matched -- there's a license  
15 number in both the SURE and the Department of State that  
16 matches. The person has the exact same name in both of these  
17 files, and that's clearly a match. I would expect that there  
18 are very few false positives. They're pretty clearly voters  
19 who have a license.

20 The second and third steps we're just trying to simplify  
21 this a little bit, but still keeping a pretty high standard.  
22 We ignored the license because I understand that what -- they  
23 didn't always collect licenses in the DOS from DOT. I said,  
24 well, if I get an exact match on the name and exact match on  
25 the birth date and exact match on the Social Security number,

1 it's probably the same person and that's probably a match; and  
2 we should just transpose the license number that we found in  
3 the DOT into the DOS database. And that added roughly another  
4 half a million records.

5 Q. Dr. Siskin, if I may interrupt for just one second. You  
6 said exact name match. Did you also truncate those names?

7 A. Yeah. When I use the term exact here, we always used  
8 what we call truncation, which is very -- a little bit  
9 conservative, okay? But we, we used that situation where  
10 sometimes somebody would use, particularly in the first names,  
11 they would do Rob instead of Robert, okay? Or use an initial  
12 instead of a full name. So we would consider that. Plus you  
13 had some data constraints which rarely occur, but in the  
14 number of fields that were available in the DOS database and  
15 in the DOT database, so one may have been truncated because of  
16 the data fields.

17 So to be conservative, we added a truncation aspect to  
18 it. So if the shorter name was always contained totally  
19 within the larger name, it was considered the same name.

20 And that also allowed us to pick up, to a certain  
21 extent, people would have hyphenated names, like Jones-Smith,  
22 which would be frequently in marriages where a woman may keep  
23 her maiden name and take the husband's name, and in one field  
24 it may only be the maiden name. So we would consider that a  
25 match in the truncation methodology.

1 And then the third step was just simply saying if the  
2 Department of State had put a license on it, as long as that  
3 license existed in both fields, we assumed it was the same  
4 person. We relied on what the Department of State had done.

5 Q. When you sum up steps 1, 2, and 3, roughly what  
6 percentage of registered voters were you able to match?

7 A. 91%, and this is pretty close to what my understanding  
8 that the Department of State had found when they did their own  
9 matching.

10 Q. So, this is sort of starting, starting with step 4 is  
11 where you went beyond what the Department of State did last  
12 summer?

13 A. Correct.

14 Q. Explain what you did to go beyond what the Department of  
15 State did.

16 A. Yeah, step 4 and step 7 really can be put together  
17 into -- I mean -- into -- step -- excuse me. Step 4 through  
18 step 3 -- 6 -- 4, 5 and 6 can be put together. And what we  
19 did here is we said one of the problems here is we said the  
20 matching Social Security is a problem because it's missing in  
21 about 9% of the cases. It's just not maintained.

22 So I said, let's not use Social Security as part of the  
23 matching process. Let's get rid of that; but since we're  
24 getting rid of Social Security, we're going to do it in steps,  
25 essentially looking at geography. You have to at least --

1 ultimately, we started with you had to live close by the two  
2 addresses in the Department of State and the Department of  
3 Transportation had to be within five miles and then we said  
4 ten miles and then ultimately, they just had to be in the same  
5 county to consider it a match.

6 So, we eliminated the Social Security constraint. We  
7 added in those circumstances that at least they were in the  
8 same county. And in doing that, we're going to pick up about  
9 another 200,000 matches.

10 Q. Before you get to the next set, why not just throw it  
11 all together and do this one match and why are you breaking it  
12 out into 12 steps?

13 A. I just break it out into 12 steps to see what's going on  
14 in each step, because each step is conservatively going to  
15 be -- increase the number of matches, but at the cost of  
16 making false matches. I just wanted to see what was going on  
17 in the process, so we can understand how, how we are getting  
18 to our end result.

19 Q. And step 4 created how many matches?

20 A. 184,228.

21 Q. And did step 5 and 6 add many more matches?

22 A. No. So, essentially, you can see the geography wasn't  
23 the issue. It was really getting rid of the Social Security  
24 number which made the big effect.

25 Q. Step 7.

1 A. Well, 7, 8, 9, and 10 are where we really start to make  
2 some simplifying. Here what I'm trying to do is I'm saying,  
3 well, the problem with name matches is two things. One is  
4 there's spelling mistakes. There's transcription mistakes.  
5 People hear a word and write it down wrong. You hear a name  
6 and write it down wrong.

7 So we went to what we called fuzzy name logic and we  
8 used two of the most common techniques. Soundex, which is a  
9 common widely used technique program which allows you to  
10 recognize names which sound alike; and the Damerau-Levenshtein  
11 technique which is what's used in SpellCheck.

12 It's part of SpellCheck and widely used, which allows  
13 you to say, if I can get from one name to another, okay, by  
14 either transcribing letters, adding a letter or taking out a  
15 letter, okay, you can change only a quarter of -- so if it's  
16 an eight-letter name, if I go from one name to the other by  
17 just making two changes. Those types that are adding a  
18 letter, taking out a letter, or transcribing letters --  
19 transposing letters, okay, and you get that name, then that's  
20 a match. Okay?

21 Those techniques have been shown statistically to do a  
22 fairly good job of making matches which should occur but  
23 didn't occur because of spelling errors, transcription errors,  
24 typing errors, and so forth.

25 The cost of that, of course, is the literature also

1 shows that it increases the number of cases where you're going  
2 to find matches which are not truly matches.

3 So, essentially, we matched on -- started matching on  
4 fuzzy name. We kept the birth date requirement. We did not  
5 consider it a match if the Social Security numbers disagreed.  
6 We didn't require them to agree, but they couldn't disagree.  
7 Okay?

8 So, if you didn't have a Social Security number in one  
9 file, that didn't disqualify it as possibly matching. So, the  
10 only time we didn't consider it a match is if the two were in  
11 disagreement.

12 And then we started out with a geographic constraint  
13 that the people had to live close together. Ultimately, we  
14 just got rid of that totally and we said, we don't care.  
15 They're in the database. If the fuzzy name matches and they  
16 have the same birth date and the Social Security doesn't  
17 disagree, then that's a match.

18 Q. Dr. Siskin, the Court has heard, last July, from  
19 Commonwealth witnesses concerning the database match that was  
20 done last summer by the Commonwealth concerning names, for  
21 example, McCormick and McCormick, whether there's a space  
22 between the MC or not a space, whether there are hyphens  
23 whether there are apostrophes. Did you account for that in  
24 any manner?

25 A. The Damerau-Levenshtein method should correct for that.

1 If you have one person with a space, the insertion or deletion  
2 will make it match. If you have a hyphen in one and not the  
3 other, taking that out will make a match. You're allowed to  
4 make, instead of a quarter, a quarter of the -- the number of  
5 letters that you have, you're allowed to make a quarter of  
6 those. It searches for all sorts of combinations would make  
7 the numbers matched.

8 Q. And is it specifically designed to account for that?

9 A. It was designed for that purpose.

10 Q. And do you have any reason to believe it wouldn't  
11 account for it?

12 A. No.

13 Q. And is that a generally accepted methodology?

14 A. It's widely used as part of SpellCheck that most people  
15 use, count on every day and rely upon.

16 Q. And is it generally considered reliable?

17 A. Yes.

18 Q. What is the next -- and that was steps 7 through 10?

19 A. Right.

20 Q. And the difference is, I think you said were just  
21 geography, five miles, ten miles, same county --

22 A. Got rid of it.

23 Q. -- and then nothing?

24 A. Correct.

25 Q. And how much did that work add?

1 A. That picks up roughly another 80, 80,000 names.

2 Q. Step 11, tell us about that one.

3 A. Step 11 is a situation where we're trying now to be very  
4 conservative. We don't want to miss matches. And we have set  
5 up a system where we said one of the things that we're  
6 concerned about is maiden names. So, we said, well, let's  
7 consider it, start with looking at -- we'll look at first name  
8 and last name; and if it's a female, I'm only going to care if  
9 the first name matches. Okay?

10 And we're using fuzzy logic, so matching them using  
11 fuzzy logic. We'll look at the date of birth, okay, but we'll  
12 do -- we did that in a fuzzy way also. We said, if it's a  
13 birth date match, if like the year matches, if it's  
14 transcribed, or if the year matches and either the month or  
15 date matches, we'll call that a match.

16 We looked at Social Security numbers; said, do they  
17 match? We looked at zip codes; did it match? And then we set  
18 up, set up a system which would say it's a match if we get at  
19 least a certain number of these matching notes.

20 If the first name matches and your date of birth  
21 matches, in fuzzy, that's a match. Okay? If your first name,  
22 last name matches, you're a male, you're in the same zip code  
23 and your Social Security number matches, that's a match.

24 So, we broadened it to any sort of combined set meets a  
25 certain standard, it would be a match. This was designed to

1 be very liberal, pick up maiden names, as many transcription  
2 errors as we could.

3 Q. How much did it pick up?

4 A. It picked up 136,091 names.

5 Q. Step 12.

6 A. Step 12, we went down to a simple, simpler method yet.  
7 We said if it's got the same birth date and the same Social  
8 Security number, that's a match. I don't care what the names  
9 say. Okay. We'll consider that a match, and that picks up  
10 another 29,000.

11 Q. You said that step 11 was concerned about maiden names.  
12 Is it also concerned about -- let me ask it this way: Did  
13 your analysis in any way deal with divorce -- the divorce  
14 situation where someone has a name, a married name and goes  
15 back to a maiden name or takes another name in a second  
16 marriage?

17 A. Yeah, this should pick those up, if the person has the  
18 same -- if it's a female and has the same first name, and had  
19 the same birth date, and had a zip code, they would have  
20 picked them up. The last name is being ignored for all of  
21 those people. So, if a person switches their last name either  
22 because they go back to their maiden name or got married,  
23 switched to the husband's name, it would have been picked up.  
24 It should have been picked up in that step.

25 Q. Now I'd like to ask you about the three columns that are

1 on the right. Total matches, going down, what do those  
2 numbers represent?

3 A. The total matches are the number of cases where we could  
4 find the person in the SURE database and match them to a  
5 person in the Department of Transportation database.

6 Q. And some of those names, you will actually have matched  
7 multiple people to the same PennDOT record; is that right?

8 A. Correct. 70,000 of these matches are people that are,  
9 used the same person to be matched to.

10 Q. And percentage of matches, what does that percentage  
11 represent?

12 A. That's of the total voter registration population we're  
13 studying, 85.8% of the population would be matched directly  
14 with that first step, which is exact match.

15 Q. I'm sorry. I think you just told me what the last  
16 column --

17 A. Oh, I'm sorry.

18 Q. I'm talking about the percent of the matches.

19 A. Of our matches.

20 Q. Yes.

21 A. 85.8% come out of the perfect matches.

22 Q. And the last column, what does that represent?

23 A. It represents 83.1% of the voter registrations matched  
24 with that.

25 Q. Okay. And so for, as you walked down each of the

1 percentages, it's the same?

2 A. Correct.

3 Q. Bottom line, how many non-matches did you find?

4 A. 251,879 which represents 3.1% of the voter population.

5 Q. So, when you got done with this work, and these 12 steps  
6 of matching, did you have any concerns about the methodology  
7 or the results?

8 A. Sure.

9 Q. Why?

10 A. I'm a statistician. I have been matching data forever.  
11 No matching databases ever or matching -- computerized  
12 matching routine is perfect. They're always going to have  
13 false positives; they're always going to have false negatives.  
14 What I wanted to get is what we call reliability. And I  
15 wanted to get an idea of what type of errors, how accurate is  
16 the matching, and how frequently do we have false positives,  
17 how frequently do we have false negatives; that is, how  
18 frequently do we match -- not match somebody, okay. Of this  
19 251,879, how many of these people actually could have been  
20 matched if we had done this manually. Obviously, we can't do,  
21 you know, 8 million records manually.

22 Q. So, what did you do?

23 A. And I also wanted to figure out how many and  
24 realistically how many people we said weren't matched -- were  
25 matched who weren't matched.

1 Q. Can you repeat the last one because it --

2 A. Yes. There's two sides to making errors. And one is  
3 that you match something and you're wrong, okay? This other  
4 error that you have here, these 251 people who we said aren't  
5 matched that really are matched.

6 So, the first thing I did is I took a random sample of  
7 these 251,879 people. 100 people, randomly selected, okay?  
8 Gave it to my staff, gave it to one analyst who then gave it  
9 to Dr. Cupingood second, then I personally reviewed them and  
10 said go in the database, here's people we say don't match,  
11 look at the data.

12 Find everybody who's got the same first name and  
13 everybody who's got the same last name, everybody who's got  
14 the same address, and got the same prior. Anything that would  
15 make you think it's possibly the same person. And look at the  
16 records. Okay? And again being conservative.

17 So if you see a first name, everything seems to match,  
18 consider the person could have been married -- it may be a  
19 maiden name problem or it may be a divorce problem. Okay?  
20 And see if you can find matches, manually, if you are going  
21 through every single possible record making judgments.

22 And they did, and they found 14% of the time,  
23 conservatively, okay, they were able to find what they would  
24 think could be reasonably a match.

25 Q. Were they certain?

1 A. No, they're not certain. There would always be some  
2 check -- nothing was ever perfect. So it would have been, on  
3 a fuzzy logic you could say that could be the same person.

4 Q. But were there some matches, when a human looked at it,  
5 said, yes, this is, there's really no chance, it's not a  
6 match?

7 A. Well, basically for the ones that we said were not  
8 matches, we could not find anything that would fit that goal.  
9 You would look and say, oh, this must be a match.

10 Q. Did you describe this, this testing that you did in your  
11 report?

12 A. Yes. It's outlined that, outlined in Appendix C.

13 Q. And that's Exhibit 2096e, is that right?

14 A. Correct.

15 Q. If you could turn to that, and page two in particular.

16 A. Yeah. As you can see, when we did this match, we found  
17 35,263.

18 Q. Page two forward.

19 A. Okay. We would estimate, based on that 14% rate, that  
20 there was -- we would estimate -- our best estimate is if we  
21 did this for all of them --

22 Q. Dr. Siskin, if you could wait for one second.

23 Toby, could you blow up the table that's there so it's  
24 easier to see. Thank you.

25 Go ahead, Dr. Siskin. Can you explain what's being

1 shown in that table?

2 A. Yeah. What I want to find out was, you know, if we  
3 assume this error rate and there's always error rates, what  
4 are we finding and what does it really imply. Okay? In this  
5 case, we are talking about the error rate of having false  
6 negatives, saying somebody doesn't match when in fact he does  
7 have a driver's license or a PennDOT picture, non-driving  
8 license ID or DOS ID.

9 Based on our sample, we would estimate if we had looked  
10 through the 251,879 files individually, all of them, okay, we  
11 would have found, we would estimate that we would find 35,263  
12 people who we said did not match who actually matched. You  
13 could make a case for the fact that maybe that is this, a  
14 matching ID there. Okay.

15 Q. So, let me just make sure I understand what you did. It  
16 says there, numbering audit. What's that number? And what  
17 does that --

18 A. That's the 100 we went through and we found --

19 Q. Actual matches?

20 A. -- a few cases which we believed could be an actual  
21 match. There was an actual match that's possibly there.

22 Q. That's 14%?

23 A. Correct.

24 Q. And you applied that 14% to what?

25 A. To the total of 251,879.

1 Q. And that gave you?

2 A. That gives you 35,263.

3 Q. Okay. Why did you apply that 14% to the 251,879, and  
4 not the people you matched who had expired licenses?

5 A. Well, there can't be an error of the mismatching in the  
6 expired licenses. We watched them by definition and the date  
7 we're looking at is expired. If it's a bad match, and it  
8 expired, we are back in the same conclusion: The person  
9 doesn't have a valid ID, so there's no information there.

10 The only type of error that the matching can affect is  
11 this number of 251,879. The matching process does not affect  
12 the other situation where we have matched the person, and said  
13 that the person has an invalid ID only because it's expired.

14 Q. Is there some -- well, let me -- you write in your  
15 report here, accounting for sampling error, I estimate with  
16 95% confidence the total number of additional matches to range  
17 from 18,000 and change to 52,000 and change registered voters.

18 A. Yeah.

19 Q. Explain what that means?

20 A. Yeah. Well, we know we've got the sample that says 14,  
21 and that gives us our best estimate of the number that if we  
22 looked at the 251,879, what we would get. Statisticians know  
23 that, you know, you take a sample, you don't always get the  
24 exact same result. It's going to vary by sample.

25 So statisticians have a methodology which allows us,

1 since we're doing this based on random sampling results, which  
2 says based on what I have seen in this sample, how confident  
3 can I be if I measured, statistically, using probability  
4 theory, if I measured all 251,879 cases manually? What would  
5 I expect to see with 95% confidence? What's the largest  
6 number that I would expect to see, and what's the smallest  
7 number I would expect to see? Okay?

8 And I would say 95% confidence means 95% of the time it  
9 would occur probabilistically. I would see at most, 52,393  
10 registered voters out of those 251,000 actually having a  
11 match.

12 Q. And that's --

13 A. At least, the lowest it would be is 18,133. So the  
14 truth, the real answer, if I -- if we had the time, money,  
15 cost, expenses, to go through all 251,879, is we would have  
16 found between 18,000, roughly, and 52,000 people who matched  
17 for which we said we couldn't find a match, using our  
18 computerized matching routines.

19 Q. And this 95% level, is that generally accepted?

20 A. 95% is the level which is used commonly by  
21 statisticians. It is also the level which has been adopted by  
22 most courts and the Supreme Court -- and the U.S. Supreme  
23 Court.

24 Q. If we assume 95% -- 5% chance, I guess, that the true  
25 number of people, additional -- should have matched that you

1 missed is 52,000, what does that leave you in terms of your  
2 non-match population?

3 A. Well, you would be taking the 54,000 --

4 Q. 52,000, right?

5 A. 52 -- 52,953 and you would be subtracting that from --  
6 from actually -- you would be subtracting it from the 5,145  
7 and it would leave you with -- I know it's in my report.

8 Q. I'm sorry, Doctor, I think my question might not have  
9 been --

10 A. 417,502 registered voters without a license.

11 Q. My question was slightly different.

12 A. Okay.

13 Q. If you focus on the non-match population, the 251,000,  
14 and you take away the 52,000 from that, what are you left  
15 with?

16 A. What it would be down to, you mean?

17 Q. Yes.

18 A. 199,486.

19 Q. Thank you. Did you do any other auditing or testing of  
20 your results?

21 A. Yes. As I said, this is looking at the false positives,  
22 false negatives, those people we said didn't match who didn't;  
23 but there's the other type of error which is people who we  
24 said matched, who when you really look at the data manually,  
25 you would say that's not really a match.

1 Q. Referring to Exhibit -- or to Appendix C, page three,  
2 there's a table on that page.

3 A. Yes. What I did was I looked at 3 of the 12 categories.  
4 I really picked only three to be conservative in one sense,  
5 but also these were the areas which I either had specific  
6 interest in what the rate was or the ones where I would have  
7 thought that the rate would be the highest in terms of false  
8 positives.

9 The first group I looked at was the group which was in  
10 category three. These were the people that the State matched  
11 using a Department -- having a license in it, but the names  
12 didn't match exactly.

13 The second group that I looked at, which is labelled  
14 here as two, are the groups that were in the 11th step which  
15 is where we started using the fuzzy logic and it as long as  
16 you had a fuzzy birth date, we just have a first name match,  
17 so we looked at those.

18 And then the third group, which was split up into three  
19 groups, was the one where the only thing we matched on was the  
20 Social Security matched and the birth date matched. And I  
21 broke those up into the three groups that -- we matched them  
22 on basically just those two criterias, those which also had a  
23 first name match, those that also had a last name match, and  
24 those that had no name match at all, either first or last  
25 name.

1 And I took random samples of each of those, and then had  
2 my people and myself -- again, the same analyst looking at it  
3 then Dr. Cupingood reviewed it then I reviewed it -- how many  
4 of those cases were matched; but when you look at it, you  
5 would say, no, that can't be the same person. It just doesn't  
6 really make sense.

7 Sometimes you would see a circumstance where you were  
8 using a truncated name and the full name, and you realized  
9 that the truncated name was the actual full name. It may have  
10 been an Asian name, for example.

11 Q. Can you give us an example of an Asian name that --

12 A. You would have an Asian name like Na, N-A. And that  
13 would be in a truncation would match somebody whose name was  
14 Nab, Nabber, Nabberstein. The N-A is incorporated within  
15 Nabberstein. They're not common, but they can exist.

16 We went through all those doing the same thing and we  
17 found a rate for false matches on each of these categories.  
18 What you found is exactly what we expected. The error rate in  
19 the first group, the one that was done essentially by the  
20 Department of State, was 4%, which is a pretty reasonable  
21 error rate. I mean, reasonable being small. So I would  
22 consider that to be a fairly good matching job. When you  
23 looked at the 11 group --

24 Q. Just, just to be clear -- the subgroup 1, is that the  
25 Department of State?

1 A. Yeah, that's really step 3.

2 Q. Okay. Fair enough. Subgroup 2, which is the --

3 A. Which is step 11.

4 Q. Go ahead.

5 A. Here we get 6 out of the 47 that we randomly selected  
6 were incorrect, which is roughly, you know, 11, 12% error  
7 rate, much higher; and consistent with what we expected, since  
8 we were loosening the procedure.

9 What you see which is important is on the right. What  
10 it means is of the 215,891 matches that we identified uniquely  
11 by step 3, we would estimate 5,636 of them really are not  
12 matches. For step 11 when we added the 130,313, we would  
13 estimate that 16,636 did not match. Okay?

14 Q. And you have subgroups 3A, B, and C.

15 A. Which is 12.

16 Q. And why do you have subgroups A, B and C?

17 A. Because even though that the matching was purely on  
18 Social Security number and birth date, clearly, we thought  
19 that the matches would be different depending on what else was  
20 there. If the first name matched, we found an error rate of  
21 roughly 10%, okay, and that was being conservative again  
22 because again, we assumed if the last names were matching and  
23 it was female, it was always because of marital or divorce  
24 situation.

25 That accounts for a small number, 336 of that group we

1 think are probably false positives.

2 In the case where the last name matches, it matched  
3 pretty well. Only a 4% error rate, so it picks up only 543.

4 And the last case, however, where neither the first nor  
5 the last name matched, the match was based solely on Social  
6 Security number and the birth date matching.

7 When you looked at them, almost every single one, you  
8 would say this is not a match. This is a different person.  
9 Look at the address, the name. They just are not the same  
10 person.

11 In almost every one of those 11,595, we would say 11,331  
12 are different people.

13 Q. Totalling up those false matches that you estimated,  
14 what was the number?

15 A. 37,482. And this of course is conservative because we  
16 didn't look at all of the other categories. And for  
17 categories, you know, four, five, six, seven, eight, nine and  
18 ten, we would expect to find false positives there as well.

19 Q. After you finished this audit, this testing, how did you  
20 feel about your results?

21 A. I felt very good. Exactly worked pretty much --  
22 hopefully what I expected. We were conservative. The number  
23 of false matches that we had clearly seemed to outweigh  
24 somewhat the number of false negatives we had. They pretty  
25 much cancelled out to a great extent.

1           And the range I think I was very comfortable given this  
2   reliability estimate that the total number of non-matches is a  
3   fairly accurate and reliable estimate of what the number would  
4   be if one were to do this whole thing by hand, which of course  
5   is impossible.

6   Q.     I'd like to go back to Appendix A2, Exhibit 2096c.

7   A.     Yes.

8   Q.     Second page of that. Next one, Toby. Thank you.

9           This is another long 12-step chart. We're not going to  
10   go through this in detail, but can you explain for us what you  
11   are showing here?

12   A.     This one is very simple. We just took the matches and  
13   of course we categorized the matches by where we found them.  
14   And it simply tells you how many of those people, when we  
15   found a license, was the license expired. By expired we mean  
16   more than a year or older, expired prior to November 5th,  
17   2012.

18   Q.     And what did that total up to?

19   A.     417,502 people. Now, this includes --

20   Q.     How --

21   A.     -- the OOS people.

22   Q.     And in your ultimate number of 511,000, you took out the  
23   OOS people?

24   A.     Right. Of this 417,502, I said 157,966 was an  
25   indication of having an OOS, out of -- other state license.

1 And 259,536 remained, who would not have a valid license

2 because it expired, nor was it an indication that they have  
3 another state's license.

4 Q. Dr. Siskin, after you finished your matching work, you  
5 came up with 511,000 and change. Did you form an opinion,  
6 after accounting for margin of errors, inherent limitations in  
7 the database work you were doing, as to how many registered  
8 voters in Pennsylvania lack a valid PennDOT or Department of  
9 State ID that will work for voting in November 2013?

10 A. Yeah. I think given the analysis and reliability of the  
11 analysis, we can conclude clearly that there are hundreds of  
12 thousands of people who do not have valid PennDOT or  
13 Department of State IDs.

14 Q. Why do you say hundreds of thousands instead of 511,000  
15 and whatever the precise number was?

16 A. Well, that would be my best estimate, but I'm aware  
17 enough that there are going to be people in that database,  
18 some errors of matching, some people who may not really be in  
19 that, properly in that database.

20 So, given the range of errors, I'm not going to think  
21 that that number is written in stone; but clearly, given the  
22 margins of errors in the data, that number is not coming down  
23 significantly. So it's going to be hundreds of thousands of  
24 people.

25 Q. Are you aware that Dr. William Wecker has taken a look

1 at your work?

2 A. Yes, I am.

3 Q. And do you understand who Dr. William Wecker is?

4 A. Yes, I do.

5 Q. Who is he?

6 A. Dr. Wecker is a statistical consultant. He does very  
7 much -- not necessarily in the area that I work so much, but  
8 does a lot of litigation statistical consulting. He has a  
9 very good reputation.

10 Q. And do you have an understanding as to who he does work  
11 for in this case?

12 A. I assume he did it for the defendants. I mean, which  
13 defendant, I have no idea.

14 Q. Fair enough. Have you had a chance to look at his  
15 expert report?

16 A. Yes, I did.

17 Q. Have you had a chance to look at his underlying data  
18 that he generated and the materials that he looked at?

19 A. Yes, I did.

20 MR. RUBIN: At this time, Your Honor, I'd like  
21 to provide to the Court Reporter Respondents' Exhibit 224,  
22 which is Dr. Wecker's report. I provide a copy to the witness  
23 and a copy to the Court, Your Honor. Respondents' counsel  
24 already has a copy.

25 BY MR. RUBIN:

1 Q. Dr. Siskin, again at a high level -- and we'll get into  
2 more detail -- can you summarize what you understand  
3 Dr. Wecker's criticisms are of your report?

4 A. At a high level, I think there's two criticisms.

5 One is he criticizes that I only look at not having a  
6 Department of Transportation or DOS ID. That as I write in my  
7 report, of course, that there are other IDs one could have  
8 which would allow one to vote, such as a valid college ID  
9 which has an expiration date, a military ID, passport, other  
10 certain IDs. He criticizes because I don't study those.

11 The second criticism he has is that I include some  
12 people, particularly three sets of people, he argues, which  
13 would not be appropriate to include in my study as not being  
14 matched, and that there are people who are dead, therefore,  
15 can't vote.

16 People that he claims are in correctional institutes --  
17 institutions and shouldn't be able to vote, and people who  
18 vote absentee, but would have to vote absentee under the  
19 theory that if you vote absentee, you don't necessarily need  
20 to have a voter ID. You could vote with your Social Security  
21 number.

22 Q. Having reviewed Dr. Wecker's work, his underlying data,  
23 his report, what, if any, impact do they have on your  
24 opinions?

25 A. Well, first of all, his numbers with respect to people

1 he thinks I shouldn't have counted in the population have -- I  
2 don't necessarily agree with, and they don't have any  
3 significant impact on my numbers. The numbers remain in the  
4 hundreds of thousands and would not be having valid IDs.

5 His concern about other IDs, I would have to two things.  
6 First of all, the analysis I ran was -- did not and was not  
7 designed to look at that. What I do produce, which I think is  
8 useful to decisionmakers, is a number that says I would  
9 estimate 511,000 and change, 415 people, do not have valid  
10 PennDOT IDs.

11 If you're going to bring that down to a reasonably small  
12 number, the Court would have to accept -- for instance, if you  
13 wanted to bring that down to 100,000, that 80% of those people  
14 have other IDs. The Court can make a judgment based on that  
15 information and so forth whether that's a reasonable number or  
16 not, if there's any reason to believe that's a reasonable  
17 portion. So I think is what I did has intuitive and probative  
18 value to assessing the ultimate decision of who doesn't have a  
19 valid ID of any sort.

20 Secondly, I would add, when you look at what Dr. Wecker  
21 actually did, and I have a lot of problems with what he did,  
22 and I think he overstates the numbers tremendously. I think  
23 that even if you accept everything he says, you wind up with  
24 numbers that say had 68,000 people have -- and he would  
25 estimate -- have alternative IDs. That number is not going to

1 change a conclusion that there's hundreds of thousand of  
2 people without a valid ID.

3 Q. I'd like to turn your attention to page five of  
4 Dr. Wecker's report, paragraph 12. Do you agree that this is  
5 the heart of his criticisms?

6 A. Yes, I do.

7 Q. Can you explain, again, high level, we'll go through it  
8 one by one, what Dr. -- do you understand Dr. Wecker is doing  
9 in Paragraph 12?

10 A. He identifies certain groups of voters on certain  
11 characteristics which he believes should have been eliminated  
12 from the study as not being counted as non-matches.

13 Q. So, eliminated, he starts with your 511,000 number?

14 A. Correct.

15 Q. And he's pointing at other categories that should take  
16 -- come out of that number?

17 A. Correct.

18 Q. I notice in paragraph 12 that Dr. Wecker doesn't add up  
19 all of the various numbers that he has in paragraph 12?

20 A. That's correct.

21 Q. Did you add those numbers up?

22 A. Yes, I did.

23 Q. If you add up the numbers in paragraph 12, what does  
24 that come out to?

25 A. 144,465.

1 Q. And if you subtract that from your 511,000 number, what  
2 are you left with?

3 A. 366,950 people.

4 Q. Is that the right thing to do?

5 A. No, but if you want to know -- if you accepted  
6 everything he did, that's what you would get. I think his  
7 numbers are inflated for two reasons: A lot of what he is  
8 counting I think is not reasonable and not appropriate. A  
9 very simple example would be he counts people as living in a  
10 nursing home within .10 miles of the nursing home, or people  
11 living nextdoor to a nursing home are not in a nursing home  
12 and are not going to get a nursing home ID, even if they could  
13 get a nursing home ID.

14 Q. Okay. A question I have, a slightly separate question,  
15 is is it appropriate to even add up the numbers in this  
16 paragraph?

17 A. I was going to get there. The second problem is, he  
18 treats these categories as all mutually exclusive. That is, a  
19 person he puts in the category of absentee. Absentee voters  
20 is distinct from a person who is in the category of nursing  
21 homes, and what you find, of course, is there is a high --  
22 reasonable degree of overlap.

23 People in one category are also in the other category.  
24 And to be fair to Dr. Wecker, he never matched them up. I  
25 don't want to accuse him of that, of making this mistake.

1 Q. Could you speak just a little bit further away from the  
2 microphone. It echoes a little bit. What is the number --  
3 well, did you look at the underlying voters that represent  
4 each of the numbers in paragraph 12?

5 A. Yes, I did.

6 Q. Where did you get that data?

7 A. From Dr. Wecker himself, he sent us the IDs associated  
8 with each of these lists.

9 Q. Did you figure out how many of the numbers are actually  
10 unique voters in paragraph 12?

11 A. Yes. Of the 144,465, reduces down to 129,463, if you  
12 consider only unique people.

13 Q. You did the math for us getting to 366?

14 A. The math --

15 Q. With the higher number -- the lower numbers, if you take  
16 them, your 129,000 and subtract it from the 511?

17 A. 381,952.

18 Q. Now, I'd like to walk you through each of his  
19 criticisms. You see where he says I found 56,437 of  
20 Dr. Siskin's unmatched records voted absentee in the last  
21 election in which they voted?

22 A. Yes.

23 Q. What did you do to look at that criticism?

24 A. Well, when I looked at it, there's a couple of things.  
25 The problem is that is he's assuming that anybody that votes

1 absentee is not going to vote -- two assumptions. He's

2 assuming, one, they're not going to vote at the polls in the  
3 next election.

4 So, I did some studies to determine the number of those  
5 people who had in fact voted at the polls previously.

6 Q. So, of the 56,437 number, who the last time they voted,  
7 they voted absentee, how many and what percentage had voted at  
8 the polls previously?

9 A. I think it was about 20 -- 16%, 17%, I recall.

10 Q. Do you have a --

11 A. I might have --

12 Q. You do have some notes that you might want to refer to?

13 A. Yes, I was.

14 MR. RUBIN: With the Court permission, so  
15 we're not doing a memory test, Your Honor.

16 THE WITNESS: At my age, my memory is starting  
17 to go, so I try to keep notes.

18 MR. KEATING: Mr. Rubin, do you have a copy of  
19 those notes that we can see.

20 MR. RUBIN: Dr. Siskin, I do not have a copy,  
21 but can look at them. May I have a copy of your notes to let  
22 opposing counsel take a look at them?

23 THE COURT: If the Court Reporter agrees, it  
24 might be a good time to take five minute break. Give her a  
25 little rest. We'll recess for five or ten minutes.

1 (THERE WAS A RECESS FROM 10:47 A.M. UNTIL  
2 10:57 A.M., AND THE PROCEEDINGS CONTINUED AS FOLLOWS:)

3 THE COURT: Please remain seated.

4 MR. RUBIN: May we proceed, Your Honor.

5 THE COURT: Please.

6 BY MR. RUBIN:

7 Q. Dr. Siskin, I think you took out some aid memoirs. Just  
8 describe generally what it is you pulled out so that we  
9 understand.

10 A. They're basically some notes that I took in reference to  
11 the quick studies that we had done of Dr. Wecker's results and  
12 numbers so that I didn't have to at my age memorize them all,  
13 since it's very difficult at my age to do that.

14 Q. Fair enough. That's why we write them down, right?

15 A. Correct.

16 Q. I think believe we were talking about absentee voting  
17 number before we took the break. Tell us what you found in  
18 terms of when you looked at people who voted absentee?

19 A. Yeah. I think two things: My first concern with the  
20 absentee number is he's taking out everybody who the last time  
21 they voted was absentee, which seems to be overly high because  
22 a lot of people are going to vote absentee one period and not  
23 another. And the fact that you voted absentee in the last  
24 election doesn't mean you're going to vote at the poll -- vote  
25 absentee again.

1 I looked at this two ways. I looked at people who  
2 Dr. Wecker said was absentee and asked did they ever vote at  
3 the polls prior, and the answer was roughly 25% of them had.

4 I did a second study, which was I took the database --  
5 remember, the SURE database gives you the voting history. So  
6 I looked at the people and I found the first time they voted  
7 absentee, and then I said, subsequent to that did they ever  
8 vote at the polls. Next time they went to vote or anytime  
9 they went to vote, did they vote at the polls?

10 I found 38% of the time that when somebody voted  
11 absentee the first time, subsequent periods they voted at the  
12 polls.

13 So, it's really an overstatement just to say because  
14 somebody is voting absentee the last time they're going to  
15 vote absentee again.

16 Q. Did you have any other concerns with Dr. Wecker's  
17 observation about absentee voters?

18 A. Yeah. The other problem with the absentee voters is  
19 that some of these people who are voting absentee are going to  
20 need to produce a -- in order to vote, a valid photo ID  
21 anyhow, if there is no Social Security number for that  
22 individual in the DOS database, because remember, you have to  
23 be able to match the Social Security numbers in the database.

24 Q. Explain that to me. To vote absentee in Pennsylvania --  
25 you're a Pennsylvania resident, right?

1 A. Correct.

2 Q. What's your understanding of how -- what you need now  
3 under the photo ID law to vote absentee?

4 A. Well, my understanding is if you vote absentee, you can  
5 vote with a military ID, you can produce an ID, or you can  
6 write the last four digits of your Social Security number  
7 down. And if you write the last four digits of your Social  
8 Security number down, provided when it comes to the Department  
9 of State, they match those four digits in their database, it  
10 would be a valid vote. My understanding is if it's not  
11 matched, it becomes an invalid vote.

12 Q. Do you also understand that you can vote absentee if you  
13 write down your driver's license number?

14 A. Correct.

15 Q. And but for this group of 511,000 --

16 A. They wouldn't have a valid driver's license to write  
17 down.

18 Q. Is that why you are focusing on the Social Security  
19 numbers?

20 A. Yes.

21 Q. What did you find when you looked into Social Security  
22 numbers in the SURE database for absentee voters?

23 A. We found that of a reasonably large percentage of those  
24 people would not have had Social Security numbers.

25 Q. Do you have a percentage, approximately?

1 A. I didn't write that note down, so now my memory -- if I  
2 remember right, that number is about 16%.

3 Q. Was that 60 or 16?

4 A. 16.

5 Q. Thank you. Next, Dr. Wecker said, I found 17,924  
6 deceased voters. What's your understanding of what he did for  
7 that?

8 A. My understanding is he used Department of Health  
9 records, people who died, as well as indications in the  
10 Department of Transportation records of who had died, and he  
11 looked up the people that we identified as not being a match  
12 and determined whether there was an indication that they had  
13 died.

14 Q. In the work that you did, do you do anything to account  
15 for registered voters who were deceased?

16 A. No. I had assumed that -- my understanding was they  
17 were supposed to be taken out of the Department of State  
18 database, and there were codes for people being removed  
19 because they had died.

20 Q. So, in that sense you did, relied on --

21 A. I relied on what the Department of State did.  
22 Dr. Wecker went beyond that looking at the Department of  
23 Transportation data relying on that as well as the Department  
24 of Health data, and --

25 Q. Do you have any concern with what Dr. Wecker observed

1 about the 17,000 and change deceased voters from PennDOT and  
2 other records?

3 A. No. I think what he did here was reasonable, and I  
4 would take the math. I agree with him.

5 Q. How does that change your numbers?

6 A. It lowers the number by 17,000, and it has absolutely no  
7 effect on my conclusion that there's still hundreds of  
8 thousands of people.

9 Q. The next thing Dr. Wecker can is he wrote, I found  
10 18,217 voters age 65-plus living at a care facility that is  
11 eligible to issue valid photo ID; do you see that?

12 A. Yes, I did.

13 Q. What is your understanding of what Dr. Wecker did there?

14 A. Well, looking at his list, he did not really look at  
15 people who are living at the nursing homes. He looked at  
16 people who are within .10 -- .1 miles, 10% of a mile, near the  
17 nursing home, at or near the nursing home.

18 So, that he's including people who live nextdoor or near  
19 a nursing home as well as at the nursing home.

20 Q. Explain that to me. Did you find in his material any  
21 sort of lists of nursing homes?

22 A. Yeah. He has a list of nursing homes, but we could see  
23 matching what he did, he doesn't match the name of the nursing  
24 home, the address of the nursing home, the address of the  
25 voter. He uses geocoding and matching, and he says if they're

1 within one-tenth of a mile of the nursing home. So, you can  
2 be at the nursing home or near the nursing home, he would  
3 consider you living in the nursing home, and that's clearly --  
4 well, it's a quick way of doing it. It's a very incorrect way  
5 of doing it, because if you don't live in the nursing home,  
6 you're not in the nursing home. Living near a nursing home  
7 doesn't make you in the nursing home. You're not going to be  
8 -- at best -- you're not going to be eligible for a nursing  
9 home ID, even if they're going to give it to you.

10 Q. Did you review Dr. Wecker's underlying data on this  
11 point?

12 A. Yes, I did.

13 Q. Did you review his source information for -- you're  
14 saying nursing homes, but at care facilities; is that the  
15 right term?

16 A. Care facilities.

17 Q. Did you look at his source material for the care  
18 facilities lists?

19 A. Right.

20 Q. Did you see in those materials any indication that the  
21 care facilities were actually issuing ID?

22 A. None. There was no indication that these care  
23 facilities actually do give photo IDs with expiration dates.  
24 He just assumes that they were eligible to do that.

25 Q. And that's what he writes in his report is eligible?

1 A. Right.

2 Q. Did you see anywhere in his report where he said they  
3 were actually issuing ID?

4 A. No.

5 Q. Do you have an opinion as to whether Dr. Wecker's  
6 methodology reliable leads to the conclusion that 18,217  
7 registered voters among your 511,000 were living at a care  
8 facility?

9 A. No. I don't think it's a reliable methodology. This is  
10 a situation where are you either at a care facility or being  
11 near a care facility is irrelevant.

12 So do this properly, you would have to actually look at  
13 the addresses and match the people to see if it matches the  
14 address of the care facility.

15 Q. And is his methodology generally accepted?

16 A. Not in that circumstance, no.

17 Q. His next criticism relates to colleges and universities,  
18 and he writes, I found 48,046 voters aged 18 through 28 living  
19 at a college or university that is eligible to issue valid  
20 photo ID. What is your understanding of his critique there?

21 A. Well, his critique is if they are living on a college  
22 campus could obtain a college ID which meets the requirements,  
23 and therefore, would be eligible to vote having an alternative  
24 ID.

25 Q. Did you have an opportunity to look at Dr. Wecker's

1 underlying data and reliance materials and methodology and  
2 coding for this critique?

3 A. Yes, I did.

4 Q. Did Dr. Wecker actually look for people living at a  
5 college or university?

6 A. Well, he did, but he didn't use that. He started, and  
7 ultimately used people that lived within a mile of the  
8 university.

9 Q. Did he look for people living closer to the university  
10 than a mile?

11 A. He did. He originally look at people within a tenth of  
12 a mile, that would be very close to the university.

13 Q. What number did he find --

14 A. That number --

15 Q. Go ahead.

16 A. That number funnels down to 11,000 people. Instead of  
17 48,000, he would have reported 11,000, if he had used that. I  
18 think going to three miles out -- a mile out from the  
19 university becomes very questionable whether these are really  
20 college students and is appropriate.

21 For example, at Temple University, if you go a mile  
22 around the campus, are you a mile into North Philadelphia  
23 which is one of the lowest income, hard core slums in  
24 Philadelphia.

25 If you go a mile of the University of Pennsylvania, west

1 or south, you are in West Philadelphia, which is a low income  
2 which is not an area with the college students generally live  
3 or not an area where residents generally go to college.

4 At Pitt if you go down Forbes towards the center of  
5 town, Downtown, you get into the Hill District, a mile, which  
6 again is not an area, at least when I was there, an area where  
7 many of the Pitt students would live that would live off  
8 campus. It was an area with low income minority  
9 population.

10 Q. Doctor, did you actually look at some of the addresses  
11 that Dr. Wecker's methodology captured?

12 A. Yes.

13 Q. What did you find?

14 A. Well, I found some interesting things. I mean, you go a  
15 mile around campus, you pick up the apartment building that I  
16 live in on Rittenhouse Square in Philadelphia, which means  
17 that when my son lived with me and my daughter-in-law,  
18 actually from Pittsburgh, had actually lived there and she was  
19 not in college at the time would have been classified as a  
20 college student. The major apartment buildings in our area  
21 would be classified as college students.

22 I looked at the areas that I'm familiar with, and  
23 clearly concluded areas which there's no reason to believe  
24 that everybody in those ages are college students.

25

1 Q. Do you have an opinion, Dr. Siskin, as to whether  
2 Dr. Wecker's methodology reliable leads to the conclusion that  
3 48,046 voters age 18 through 28 are living at a college or  
4 university?

5 A. No. I think that's a tremendous overstatement of the  
6 people that live at a college or university that -- you know,  
7 the extent -- the extension beyond the .10 makes the numbers  
8 totally inflated and unreliable.

9 If he would have looked at his data, he would have  
10 noticed that the age mix that he found was heavily people 23  
11 to 28. It was almost 40% of his population. Yet if you look  
12 at college students in this state, and you look at full-time  
13 college students, it's like 6% in that category of 23 to 29,  
14 actually older than's reported out, 10%, if you include all  
15 part-time students as well.

16 So he should have realized that these numbers are not  
17 reliable estimates of who in this database was actually in  
18 college.

19 Q. In the context of the question he was seeking to answer  
20 and the statement he is making in his expert report, do you  
21 have an opinion as to whether this methodology is generally  
22 accepted?

23 A. I think it's -- it would not be generally accepted.  
24 It's got significant flaws. The statement "at college" is  
25 clearly incorrect. I think estimating the number of students

1 here who have a college degree is a very difficult thing to do  
2 from this database.

3 Q. I'm sorry. You said college degree?

4 A. I mean college students.

5 Q. Thank you. Dr. Wecker, next writes, "I found 2,547  
6 voters living at a military base where a valid photo ID is  
7 required." Again, what is your understanding of that  
8 critique?

9 A. Well, we looked at the data, and as far as we could tell  
10 from the data, he didn't restrict it to people at the military  
11 base. He went out three miles.

12 Q. Did he go out less than three miles?

13 A. Sure.

14 Q. How much -- if he went out one mile, how much?

15 A. He runs his analysis at various alternatives and  
16 surfacing reports, so you can see what he did. If he went out  
17 one mile, that number would fall to 392. So, again, he's  
18 moving far out, and these may or may not be military  
19 personnel. There's just no way of knowing.

20 Q. Do you have an opinion as to whether Dr. Wecker's  
21 methodology for coming up with this is reliable?

22 A. No. I do not think it's a reliable estimate of what the  
23 number of people who actually are living at a military base  
24 would be. By definition, if are you three miles away, are you  
25 not living at the military base.

1 Q. And would it be generally accepted to do what Dr. Wecker  
2 did to try to come up with this answer?

3 A. No. I do not believe so.

4 Q. His next critique -- well, let me take a step back.

5 With respect to the care facilities, the colleges, and  
6 the military, do those fall into the categories of the  
7 critiques where Dr. Wecker was suggesting these voters may  
8 have access to another type of ID besides a PennDOT or DOS ID?

9 A. Correct.

10 Q. He now then went on to another critique, and said, I  
11 found 1,294 voters living at a correction center and possibly  
12 ineligible to vote, or unable to renew a valid ID at this  
13 time, or if eligible to vote absentee, would not require ID.  
14 What is your understanding of that critique?

15 A. I didn't understand that. My understanding of the law  
16 is that you're in a correctional institute, you can't register  
17 at the correctional institute. So, there shouldn't be people  
18 in this database who are incarcerated or in a halfway house,  
19 correctional institute.

20 I also believe it's only convicted felons who lose the  
21 right to vote for a period of time. And when you looked at  
22 the data that he did, again, he looked -- he had correctional  
23 facilities, which include halfway houses, addresses, and he  
24 looked at people living within .10th of a mile around that  
25 address. So he would actually include people that weren't in

1 that correctional center.

2 As well as my understanding is some of these halfway  
3 houses would include not only halfway houses for inmates being  
4 released, but would also drug rehabs as well, and those people  
5 would in fact be eligible to vote and eligible to  
6 register.

7 Q. Did you have an opportunity to look at his underlying  
8 data?

9 A. Yes, I did.

10 Q. Did you have an opportunity to look at his source  
11 material for the lists of the various -- he calls them  
12 correction centers?

13 A. Yeah. I mean, he did them for, I think, Region One.

14 Q. Region One covers what?

15 A. Philadelphia area, region.

16 Q. Are there other regions in Pennsylvania for the  
17 Corrections Department?

18 A. I assume so.

19 Q. He didn't look at those?

20 A. Correct.

21 Q. So, focusing on the Philadelphia area, Region One, did  
22 you have a chance to look at the specific facilities and the  
23 addresses of those facilities and compare them to the voters  
24 he found?

25 A. Yes. We found lots of voters who weren't at the

1 facility, but just near the facility. We found one of the  
2 facilities he was looking at was the regional office.

3 Q. No inmates there?

4 A. I assume no one lives in the regional office. People  
5 live nextdoor, but they would obviously not in be the  
6 correctional institute. There were 26 people coded up as  
7 being in a correctional institute because they actually lived  
8 -- you know, they lived near the office.

9 Q. Was there any significance to the fact that he was  
10 looking at the facilities primarily based in Philadelphia  
11 itself, in the urban area, in terms of his methodology?

12 A. The only is, obviously, when you go into an urban area,  
13 going to .10th of a mile will control for a lot of people,  
14 where if you are in a rural area, a tenth of a mile may not  
15 include many people.

16 But other than that, on the other hand, to the  
17 extent that he was looking at this issue from looking at other  
18 regions, you can only make the number larger.

19 Q. And did you look at any -- did you come to an  
20 understanding and look at any actual center where there are --  
21 I think you called them halfway houses; did you look at some  
22 of those?

23 A. We did look at some of those people. Some of those  
24 addresses were in the houses and some were around the houses.  
25 One, I understand it, had a drug rehab as well as a halfway

1 house for released prisoners.

2 Q. Now, I'd like you to assume, and I know you don't agree  
3 with it, but I'd like you to assume that Dr. Wecker was right,  
4 and that there are in fact 18,217 voters living at a care  
5 facility, 48,046 living at a college or university, 2,546  
6 living at a military base, all eligible to receive another  
7 form of acceptable ID, and all in fact having another form of  
8 acceptable ID. Can you make that assumption for me?

9 A. Sure.

10 Q. What does that do in terms of -- I guess, what  
11 percentage did Dr. Wecker find of your 511,000 that would have  
12 access to another form of ID?

13 A. Of the -- it would be of the total group, would be  
14 13-and-a-half percent.

15 Q. If you were to use the lower number that Dr. Wecker  
16 found, not the 48,000 for colleges but the approximately  
17 11,000 for colleges, when you get to .1 mile, what is the  
18 percentage, what does it drop to then? And for the record,  
19 you're using your ipad as a calculator.

20 A. A calculator, so I calculate that right. Okay. I take  
21 11,000 away from that. The 5,000 -- 6.2% of the 5,000 --  
22 511,415. So, you would say 6.2% of the people have  
23 alternative IDs.

24 Q. So, just to make sure we're all clear: Assuming  
25 Dr. Wecker is right about the care facilities, the colleges,

1 the military IDs. All of the people are actually living at  
2 those facilities and those institutions, and all actually have  
3 another form of ID.

4 Does his data give you a range or a potential range for  
5 the percentage of your 511,000 who have another form of ID?

6 A. Based on his numbers, it would be somewhere between  
7 maximum of 13-and-a-half percent and as low as maybe 6%.

8 Q. So, 6 to 13?

9 A. 6 to 13.

10 Q. Assuming that he's right about everything?

11 A. Correct.

12 Q. Now, let's assume he's right. Let's assume all of those  
13 voters have those other forms of ID. Let's also assume you  
14 take out the correctional facility people, and you take out  
15 the absentee voters, and you take out the deceased voters.

16 Did you do any calculations to figure -- well, let me  
17 pause for a second. I think we did that number earlier, and I  
18 think you said it was 381,000 and change?

19 A. 366,950.

20 Q. That's if you don't take out duplicates, right?

21 A. Correct.

22 Q. If you take out the duplicates, it's 381?

23 A. Correct.

24 Q. What percentage of those people would need to have some  
25 other form of acceptable ID in order to get your number down

1 to 100,000 voters without ID?

2 A. 70%. A little over 70%.

3 Q. Bottom line, Dr. Siskin, with respect to Dr. Wecker's  
4 critiques, do they change your opinions in any way?

5 A. Well, it didn't change my original opinion. It adds an  
6 additional opinion what I think based on what Dr. Wecker says  
7 and the numbers that he's producing, the likelihood of  
8 additional information, the likelihood that this disparity  
9 that we are seeing from the Department of Transportation  
10 PennDOT IDs is not reasonably going to be explainable or  
11 attributable to likelihood that people have other IDs.

12 Q. I want to -- before we get to your subgroup analyses, I  
13 want to go back and just make sure we're all clear.

14 Toby, you can take that back down.

15 What the significance of this OOS designation, and what  
16 the significance is that you took OOS PennDOT IDs out of your  
17 analysis.

18 Why did you exclude the OOS PennDOT IDs?

19 A. The reason -- the reason is this: We're dealing with a  
20 population, and we're saying does not have a -- has a license,  
21 but it's expired. Okay? One of the reasons why it may be  
22 expired and not been renewed is that somebody has got another  
23 license from out of state. And if they have another license  
24 from out of state, well, it's possible they picked up another  
25 license out-of-state, but they still live in Pennsylvania and

1 they're going to vote in Pennsylvania, or they picked it up  
2 and have returned to Pennsylvania. Okay? Are back in  
3 Pennsylvania where they live, and they're going to vote.

4 It's more likely, okay, and probably much more likely,  
5 that these will people who have moved out of the state, picked  
6 up a license in another place, and PennDOT, the SURE database  
7 just carries them and hasn't purged them from the rolls yet.

8 So, being conservative, I didn't want to inflate my  
9 numbers by saying these were people who were going to be  
10 disenfranchised, who have a valid -- because they don't have a  
11 valid license. Okay?

12 Q. Because they don't live in Pennsylvania anymore?

13 A. Because they don't live in Pennsylvania, they don't have  
14 a valid license in Pennsylvania because they're probably not  
15 in Pennsylvania anymore, so these are people who shouldn't be  
16 counted in the data.

17 So, to be conservative, I took them out lowering the  
18 number down by roughly 137,000.

19 Q. You also gave us a number of 70,000 records that you  
20 said were voters who matched -- where there was multiple  
21 voters matching to a single PennDOT ID; is that right?

22 A. Right.

23 Q. Can you just clarify that and explain that a little bit  
24 more what that means.

25 A. Well, you remember how we're doing the matching and

1 going down and reducing the things.

2 For each person, we are saying can we find a person in  
3 the PennDOT who we think might be a match. When we matched  
4 the person, let's say person A. We did the exact match. It  
5 was an exact match and found the person who were here saying  
6 same driver's license and same name. That's a perfect match.  
7 We did not remove that person from the PennDOT database.

8 So we came down to, let's say, step six and using  
9 truncation, et cetera, this person now, says, oh, on a fuzzy  
10 name match and in a fuzzy birthday match, maybe this person  
11 could be the same person. We would use it again with the  
12 concept of wanting to always error on the side of saying there  
13 is a match and not missing one that actually exists.

14 Okay? In terms of making the statement that there could  
15 be a match for this person, that's fine. If we're trying to  
16 figure out the total number of missed matches. However, if I  
17 have got a person in the PennDOT database matched to two  
18 people, that means one of them is incorrect. You can't be  
19 both people, assuming there's not duplicates in the database.

20 Okay. So, to the extent that there are any duplicates  
21 in the database, then maybe some of those are appropriately  
22 double-matched. If there are no duplicates in the SURE  
23 database, this would be a case where our conservative led us  
24 to matching two people to the same people, but in reality only  
25 one of them could be correct. So we would have gotten a false

1 positive.

2 Q. And I'm told that during your testimony before the  
3 break, at some point you might have referred to some of your  
4 results as leading to eligible voters. Is it correct that all  
5 of your analysis was on registered voters?

6 A. Correct. I think I might have said eligible voters,  
7 meaning eligible given the new law.

8 Q. Fair enough. You've said, and I'd like to now turn to  
9 -- back to the tables, which are Exhibit 20896b. And you told  
10 us that you have done subgroup analyses on the 511,000; is  
11 that right?

12 A. That's correct.

13 Q. Can we turn to Table 2, Toby, please.  
14 What is Table 2 showing?

15 A. Table 2 is an attempt to look at the relationship  
16 between not having a valid ID by race. Okay?

17 Now, the problem in this analysis the statistician  
18 faces, the SURE database does not include information as to  
19 someone's race. So, in those circumstances what you must do  
20 is you must estimate the race of the people, and there are two  
21 standard methodologies widely used and accepted for estimating  
22 race.

23 The most common one and the one that's used frequently  
24 and is used in most jury selection cases, jury pool challenges  
25 and so forth, is called geocoding.

1 Q. That's at the bottom?

2 A. That's at the bottom.

3 Q. Can you scroll down a little bit just so we can get both  
4 of them on.

5 A. And geocoding, it's very simple, uses where somebody  
6 lives, and looks at the relationship of where they live and  
7 the racial mix in the area where we live.

8 It deals with a very small, what we call census block  
9 area, which is a relatively small area, geographically and  
10 small number of people, averaging about a couple thousand  
11 people.

12 It tends to in this country, and of course, in  
13 Pennsylvania tends to fairly consistent with respect to race.

14 But using those probabilities associated with the mix  
15 and the population in that area, we can estimate the race of  
16 individuals and the race broken out by whether or not they  
17 have a valid ID and not a valid ID.

18 Q. Can I interrupt for a second. You called it a census  
19 block. What does a census block refer to?

20 A. Census block is an area -- this all comes from the 2010  
21 United States Census data, and that data is collected and  
22 recorded by the census and they define geographic areas.

23 The smallest geographic area that they define for which  
24 they give you data is called a census block, and it's  
25 essentially -- in a city it might be an apartment building.

1 In the suburbs it might be two or three blocks. And in a  
2 rural area, very rural area, it might be a half mile or a  
3 quarter of a mile. It's essentially trying to get roughly on  
4 average, you know, 2,000, 3,000 people.

5 Q. And that's what you're referring to is the geocoding?

6 A. That's the geocoding methodology.

7 Q. Is that methodology considered generally accepted?

8 A. It is generally accepted by statisticians. It's used,  
9 as I said, widely in the courts.

10 Q. Is it generally considered reliable?

11 A. It's considered -- it's considered one of the more  
12 reliable estimates of race that we can use.

13 Q. Do you have a different one that you use as well?

14 A. Yeah, we use an estimate called BISG, Bayesian Improved  
15 Surname Geocoding.

16 Q. Is that what's on the top?

17 A. That's on the top. That was a methodology that was  
18 developed in the late 2000s by the Rand Corporation as part of  
19 a study trying to figure out the race of the people in the  
20 health care area, so that they can do studies of health care  
21 for providers and payors and estimate the race of the  
22 individuals.

23 The statistically lat tour has clearly shown that that  
24 method is slightly better, generally better and more reliable  
25 than geocoding. What it does is uses geocoding along with

1 information it gets from the government on the distribution of  
2 names by race.

3 The census is tabulated up from the -- from its records  
4 by name, last name, the race. For example, if you look up  
5 Siskin, it would tell you that 96% of the people by the name  
6 of Siskin are white. Okay? And 4% of the people Siskin are  
7 non-Hispanic whites. Okay? Or non -- not white, non-Hispanic  
8 or other races. Okay. Or it will tell you, they'll tell you  
9 how many are black, how many are Hispanic, how many are  
10 Pacific-Asian and so forth.

11 Using both the name and the address, the studies have  
12 shown that this is a refinement to geocoding which makes it  
13 more accurate.

14 The Consumer Financial Protection Bureau has made that  
15 the method of preference. It is asking all of the banks who  
16 are obligated to do studies where they can't collect race by  
17 law, for instance, who gets a credit card, what their interest  
18 rates and so forth, what they use is BISG as a method to do  
19 their race studies.

20 Q. How do you know that's what they're asking the banks to  
21 do?

22 A. I know that for two reasons. One is, I'm a consultant  
23 to the CFPB. I do a lot of their consulting work. I have a  
24 blanket contract for the enforcement group as well as I  
25 represent on the other side, most of the major banks in

1 America. I represent Chase, Citi, Bank of America and others.

2 I have been intimately involved in both sides of that,  
3 and it's clear that the government is recommending that as the  
4 method to use, and the banks have adopted it as the method of  
5 use.

6 Q. Why did you use and present data for both of them in  
7 this case?

8 A. Because I was asked to. We would have done BISG, but we  
9 were asked to -- the lawyers said, isn't geocoding the more  
10 common method? I said, yes, it is the more common method in  
11 the court, but it's not the best method anymore, but we'll  
12 present both to show you it really doesn't matter to the  
13 results.

14 Essentially, it's interesting, the only differences in  
15 the results is there's some differences in respect to Hispanic  
16 voting, and I think the BISG is actually more accurate and it  
17 picks up the fact that the Hispanic voters are a little less  
18 likely to register to vote.

19 Q. When you say you think it's a little more accurate for  
20 Hispanics, is that based on literature as well?

21 A. Correct, we have actually done -- besides the  
22 literature, we have done a lot of studies both for government  
23 and for banks testing the two methodologies.

24 Q. Did you compare your results to census data as well for  
25 Pennsylvania?

1 A. Yeah. Where we could, we had some checks and balances,  
2 and we looked at census data, and we had numbers consistent  
3 with what the census voting. The census doesn't tell you who  
4 doesn't have IDs, and they tell you who is registered. They  
5 estimate the race mix of who is registered to vote and who  
6 voted.

7 Q. Do you present that for comparison purposes in Appendix  
8 D to your report?

9 A. Correct.

10 Q. That's 2096f.

11 You want to bring that up, Toby. Okay.

12 With that explanation, what did you find?

13 A. I found very simply, when you look at the data, you find  
14 essentially that minorities, both Blacks and Hispanics and  
15 Asians, are generally less likely -- they're more likely in  
16 proportion to be -- to not have a valid ID than White  
17 non-Hispanics. They're about twice as likely -- more likely  
18 not to have a valid ID of the Department -- of PennDOT ID.

19 Q. So, for using the BISG, for White non-Hispanics, what  
20 percentage of registered voters lacked a valid ID?

21 A. 5.49%.

22 Q. For African-Americans?

23 A. 10.8.

24 Q. Hispanics?

25 A. 10.89%.

1 Q. Asian?

2 A. 11.17%.

3 Q. Then you also looked at American Indian and Multirace?

4 A. They're the only categories that the census reports this  
5 data by.

6 Q. I have heard of a concept -- well, let's just do it for  
7 the record. Geocoding; what did you find for Whites?

8 A. Similar number, 5.57.

9 Q. And for African-Americans?

10 A. 10.57.

11 Q. Hispanics?

12 A. 9.14.

13 Q. And Asians?

14 A. 9.33.

15 Q. In statistics is there something called statistical  
16 significance?

17 A. Yes.

18 Q. I often see it as a P-value of less than .05 or  
19 something like that?

20 A. Correct, that's --

21 Q. I don't see that on here.

22 A. P-value is the standard deviations are exactly  
23 correlated to one another. The statisticians generally put  
24 P-values down. The Supreme Court in its decision talks in  
25 terms of using the standard deviation, so I reported the use

1 of the standard deviation. The Courts, so we understand what  
2 we're doing here, is we're looking at disparity, and we're  
3 asking the question is if it could have occurred by chance or  
4 if this difference is real, which is going to depend on two  
5 things. How much -- how large the sample is and how different  
6 the disparity is.

7 In this case we have very large samples, so it would be  
8 very easy to get statistical significance. The courts have  
9 said that anything more than two or three standard deviations  
10 is clearly an indication that the difference is real. It's  
11 not occurring by chance. There's something going -- some  
12 cause here.

13 What I have done is reported the units of deviation, and  
14 in all of the cases, these disparities are observing are real.  
15 They're always well off two or three standard deviations. So  
16 that any of disparities that we're seeing between any of the  
17 groups and characteristics we're looking at are real. They're  
18 not occurring by chance.

19 We also report, more importantly, the actual  
20 differences, because when you have large samples, you will get  
21 statistical significance often when the differences are not  
22 really this large. So there's a second concept which is  
23 called practical significance. Is that difference between the  
24 numbers important. Okay? Is it worth being considered and  
25 worth being worried about, and in a sense and that's not a

1 decision for the statistician. That's a decision for the  
2 decisionmaker and for the court to decide.

3 So, in using this, I think when you see these numbers,  
4 you are going to see very large units of standard deviation,  
5 which means that you should look at these numbers in the sense  
6 that they're real, and then you should look at the magnitudes  
7 and decide whether this is of interest or importance.

8 Q. So, in terms of this page, what is the lowest number of  
9 units of standard deviation you found for any of these  
10 differences?

11 A. 107.

12 Q. What's considered a real difference?

13 A. Minimum of two to three. Three is -- three is like the  
14 highest level anybody uses. Most courts and most  
15 statisticians use two standard deviation.

16 The .05 number that you talk about is essentially two  
17 standard deviations.

18 Q. As a statistician, do you have an opinion to a  
19 reasonable degree of certainty as to whether there is a real,  
20 in terms of statistics, difference between African-Americans  
21 and White non-Hispanics?

22 A. Almost beyond a shadow of a doubt.

23 Q. Same question for Hispanics.

24 A. Yes. These are real differences.

25 Q. Just to be clear you're not offering an opinion as to

1 the practical significance of that?

2 A. Correct.

3 Q. That's for the Court.

4 A. Yeah. That's not the role of the statistician.

5 Q. Table 2. Is that for all of the voters?

6 A. Table is all the voters. Table 2a, we do the exact same  
7 analysis and we do a Table and the A Table. The A Table is  
8 the same analysis, except restricted to the voters who voted  
9 in the November 2012 presidential election.

10 Q. I'm going to put up 2a in a minute. Before we move off  
11 of this, by all voters you're referring to your 511,000  
12 number; is that right?

13 A. Correct.

14 Q. I notice here that the number without ID is 493,466; is  
15 that right?

16 A. Correct.

17 Q. There's a note at bottom, excluding unknown races?

18 A. Correct.

19 Q. Explain that for us.

20 A. In order to do BISG or geocoding, you have to have a  
21 valid address for the person to get to the census. Not all of  
22 the addresses in the database are valid in the sense valid for  
23 identifying address in the geocoding because somebody could  
24 list, for instance, that he lives in an apartment in an  
25 apartment building. Like, I live in Society Hill. Society

1 Hill is not really an address.

2 There's a real street address that you would need to be  
3 able to geocode. So, in certain percentage of the cases, we  
4 cannot identify for through the normal geocoding routines that  
5 one does what the actual address is.

6 The numbers we found here which are about 10% is  
7 consistent with what generally we find when we do studies for  
8 banks, and you run through them the geocoding process and you  
9 determine what percent are not going to be hit in the first  
10 one because the address is not an address equivalent to what  
11 the census would call an address, a street address, and that  
12 10% is a common -- pretty much what you would expect.

13 Q. Sir, I just want to make sure that I understand that.  
14 493,000 compared to 411,000, is that 10%?

15 A. I was looking at -- actually, this is a better hit than  
16 normal. No, it's about 5%.

17 Q. About -- I just wanted to make sure.

18 A. They do a better job of collecting addresses.

19 Q. If we look at Table 2 quickly -- 2a, I'm sorry.

20 Without going through -- and this is the one that you  
21 said that's limited to November 2012 voters; is that right?

22 A. Right.

23 Q. Without going through all of the numbers again, did you  
24 find similar disparities?

25 A. Correct. You find similar disparities, disparities

1 narrow a little, particularly in the -- using the geocoding.

2 But essentially, you're finding that the minorities are much  
3 more likely not to have a valid ID than white non-Hispanics.

4 Q. Can we go to Table 3. This is again an all-records  
5 table; is that right?

6 A. Correct.

7 Q. And if we look the data, it would be limited to November  
8 2012?

9 A. Correct.

10 Q. What is this table showing?

11 A. This table breaks out the voters by the registration  
12 that's reported showing on the SURE database. This does list  
13 a party registration. It's not unknown. And just looks at  
14 the distribution by party registration where it shows that  
15 Democrats were much more likely, statistically significantly  
16 and almost in numbers more than twice in percentages, is about  
17 twice as likely not to have a valid ID as Republicans.

18 Q. Compared to Republicans?

19 A. Correct.

20 Q. And the party registration, where did that data come  
21 from?

22 A. That comes from the SURE database.

23 Q. And as a statistician, again, do you have an opinion as  
24 to whether this disparity is a real disparity?

25 A. Yes. This disparity is not occurring by chance. The

1 things in the process correlate -- not caused by, but  
2 correlate, to party affiliation which makes it more likely  
3 that Democrats would not have a valid ID.

4 Q. Can we look at 3a, please.

5 Again, this is restricted to November 2012 voters?

6 A. Correct.

7 Q. Do you have an opinion as to whether there is a  
8 disparity between Democrats and Republicans as to who has  
9 valid ID among November 2012 voters?

10 A. Correct. As the data shows, roughly 85,000 Democrats  
11 would not be eligible because they do not have a valid PennDOT  
12 ID.

13 Q. By percentage.

14 A. Only 37,000 Republicans --

15 Q. And what's the percentage?

16 A. -- would not have a valid ID. That difference is  
17 significant, statistically significance. So there is a true  
18 difference in the likelihood associated with the party that's  
19 somebody's in, making Democrats more likely to not have a  
20 valid PennDOT ID.

21 Q. And what were the percentages for the record?

22 A. 3.01 for Democrats, 1.62 for Republicans.

23 Q. Take a look at Table 4.

24 A. Table 4 breaks the data out by age. Again, excludes  
25 only those cases where age was not reported in the database.

1 Or it was reported with some -- there's 9011, as  
2 reported in the database. Anybody born in 1901, with a 1,  
3 January 1st, as the fill-in date. And 1911, 11/11, and we can  
4 consider those unknown. They're numbers put in the databases  
5 as holding positions.

6 Q. That took out about 3,000 people?

7 A. Correct. And this shows the results by age group, and  
8 it what it shows is clearly the older and younger people are  
9 clearly less likely to have valid PennDOT IDs.

10 Q. Does it show anything about the --

11 A. When I say the younger and older are more likely, that's  
12 in the percentage-wise. That's not necessarily numbers, but  
13 percentage-wise.

14 Q. Explain what you mean by that?

15 A. If you look for instance at the 18 to 22-year-olds,  
16 11.07 do not have valid IDs. If you look at the 90-year-olds  
17 and above, 40.58% don't have IDs, but that represents only  
18 roughly 90,000 people.

19 Where between 50 and 69, there's 90,000 people alone.  
20 Between 23 and 49, there's 238,000 people. So, in absolute  
21 numbers, they're not that large a group compared to the other  
22 age groups.

23 But proportionately, they're clearly stick out as being  
24 proportionately less likely to have an ID.

25 Q. In terms of the 18 to 22-year-old group and the 37,000,

1 does that give you -- allow you to make any conclusions as to  
2 the impact of colleges issuing IDs or being eligible to issue  
3 IDs on getting IDs to the people that you found?

4 A. Well, with respect to the respect of, let's say,  
5 full-time undergraduate college students, you can see it's  
6 limited. There's only 37,000 people in that age group, if you  
7 assume that everybody that we found didn't have a voter ID  
8 between 18 and 22 was a college student, which is not a  
9 reasonable assumption.

10 But even then, it's not going to have a significant  
11 ability to explain away the large number of people who do not  
12 have PennDOT IDs.

13 Q. The disparities that you saw for the young and the older  
14 groups, as a statistician do those represent real differences?

15 A. Yeah. These differences again are highly statistically  
16 significance. They're not occurring by chance. There's  
17 something related to age, as you would expect, which is going  
18 to make it less likely to have a voter PennDOT ID.

19 You would expect, for instance, very old people are  
20 going to not necessarily have drivers licenses anymore, that  
21 are active.

22 Q. Table 4a, is that the same data for November 2012  
23 voters?

24 A. Yes.

25 Q. Were there any particular differences that you

1 observed --

2 A. Yes.

3 Q. -- with the young or old?

4 A. The same pattern holds up. Again, the bulk -- the  
5 likelihood of not having it is much higher if you are young or  
6 old. But again, the bulk of the people who don't have it are  
7 in the average, you know, mid-range in terms of absolute  
8 numbers.

9 Q. Table 5.

10 A. And clearly, these differences are real.

11 Q. Table 5.

12 A. Table 5 looked at gender.

13 Q. One second, doctor.

14 Could you shrink that so we could have it. Thank  
15 you.

16 Explain what Table 5 is.

17 A. Table 5 is likelihood with respect to gender, and here  
18 we broke it up into two parts because there's two different  
19 databases.

20 In those cases we matched, but it expired, we can get  
21 gender information from the Department of Transportation  
22 database which keeps gender information.

23 For those cases where we don't have a match, which are  
24 the ones at the bottom, we are studying the cases of the  
25 people that were identified as no match, we have to estimate

1 somebody's gender because the SURE database does not collect  
2 gender.

3 The way we do that is the common way that's used and  
4 very reliable methodology is the United States census has  
5 tabulated up first names and the likelihood that a first name  
6 would be a particular gender.

7 Most names in this country are or more than 90% male and  
8 90% female. You identify names based on gender. In the  
9 second case, we separated those where we were estimating  
10 gender from those we know gender.

11 And what you find in this case, you find clearly that  
12 females were among those that were matched that were more  
13 likely to have an expired license. Though you -- while it's  
14 statistically significant here, if you look at the actual  
15 percentages, 3.5, versus 3.2, those numbers are clearly pretty  
16 much closer. And the question of practical significance here,  
17 I think, is a reasonable question.

18 Q. So, as a statistician, do you have an opinion as to  
19 whether the observed difference is a real difference?

20 A. The observed differences are real. There's something in  
21 this process either for expired as well as not having a  
22 license which correlates with genders of making females less  
23 likely to have a license -- or more likely to have a license,  
24 but have it expired.

25 Q. For the practical --

- 1 A. But the differences are small.
- 2 Q. For the practical question, that's for the Court?
- 3 A. Correct. I'm just saying those differences are small.
- 4 Q. Okay. I understand, but you don't have an opinion on
- 5 that, right?
- 6 A. Not -- but here the differences are small. But somebody
- 7 asked to make a decision, not me.
- 8 Q. Table 5a, is that the same data for November 2012?
- 9 A. Correct.
- 10 Q. And did you find the same thing?
- 11 A. Same patterns exist.
- 12 Q. Does that end your, sort of, demographic analysis?
- 13 A. Yes, it does.
- 14 Q. Did you also do geographic analysis?
- 15 A. Yes. I was asked to report out the data by counties,
- 16 the voters. That's in Table 6.
- 17 Q. Let's turn to page Table 6, and if you could scroll
- 18 through, Toby. It's a three-page table. Is that right?
- 19 A. That's correct.
- 20 Q. Can you blow up that just a little bit, Toby. Thank
- 21 you. We'll put it all on the same. Thank you.
- 22 So, this is for all 511,000?
- 23 A. Correct.
- 24 Q. Did you tabulate the numbers for -- against where
- 25 driver's license centers were or were not?

1 A. Yeah. We were asked to -- besides by county, we were  
2 asked to tabulate the data into those counties for which there  
3 is no drivers license center.

4 Q. For the counties with no driver's license center, what  
5 was the total number of registered voters without a valid ID?

6 A. 7,683, which is 6.7%.

7 Q. Were you asked to tabulate the counties where driver's  
8 license centers were only open one or two days a week?

9 A. Correct. That's reported in that, and that number is  
10 5%.

11 Q. And what do -- the number is 44,709?

12 A. Correct.

13 Q. And then 6a, does that give the same data for November  
14 2012 voters?

15 A. Correct.

16 Q. Can you turn to Table 7, please.

17 A. Table 7.

18 Q. Describe what Table 7 is.

19 A. Table 7, we were asked to determine, given you do not  
20 have a valid ID, what would be the typical driving distance in  
21 miles that one would have to drive on average, the  
22 distribution, how long someone would have to -- how many miles  
23 someone would have to drive to get to a Department of --  
24 department licensing center from PennDOT.

25 Q. Let me ask a clarifying. You say distance in miles.

1 A. Right.

2 Q. Is this miles as the crow flies, or from here just a  
3 straight line on a map?

4 A. It's actual driving mile.

5 Q. How do you determine that?

6 A. Well, there are two programs. We looked at a program  
7 called -- for everybody called Open Street Map, which is a  
8 common program. It's actually became the foundation for  
9 Googlemaps and Apple mapping. Which takes, if you put in a  
10 particular longitude and latitude, it actually maps and  
11 calculates the driving distance to another point.

12 We also did it through Mapquest, which is probably the  
13 most commonly used public one that people go on the computer  
14 to use.

15 We did it both ways. Turns out for the analysis,  
16 Mapquest gave us a slightly lower -- slightly higher driving  
17 times, rather, attributed close which a quarter of a mile  
18 more. We used the lower one, which was the Open Street  
19 Mapping to give us the distance. And these are actual  
20 estimates of driving distance, not as the crow flies.

21 We reported out in distribution, so we tell you  
22 percentiles. 2.5 percent in terms of the shortest distance.  
23 2.5% of the population is only 1.33 miles away from Adams  
24 County, for example, while 97.5, 35.65, okay? 97.5% of the  
25 population would have to drive that -- drive that far or less.

1 So, actually --

2 Q. I want to clarify one thing. When you have these  
3 various percentiles, this isn't some sort of a 95% confidence?

4 A. No, no, no. This is just showing the distribution. So  
5 97.5% says 2.5% of the people have to drive more than that  
6 number to get to the licensing place.

7 At 50th percentile, that means half of the people, had  
8 to drive more than 11.72 miles.

9 At 1.3 miles is 97.5% of the population had to drive  
10 more than a mile, 1.33 miles, to get to the licensing center.

11 Q. Fair enough.

12 Let's go to Table 7a, and is this again, following the  
13 pattern of November 2012.

14 A. Exact same analysis, but restricted to those people who  
15 voted.

16 Q. Did you synthesize this data into some sort of a  
17 aggregate and present aggregate data on driving distance and  
18 driving duration in Table 8?

19 A. Correct.

20 Q. Let's look at Table 8, please. Can you blow that up  
21 just a little bit.

22 Let's focus just on the top, the driving distance. That  
23 says all voter records?

24 A. Correct. It gives you various statistics about what it  
25 is. It gives you the average that somebody would have to

1 drive to get to a licensing center.

2 Q. And what was the average?

3 A. 14.11 miles.

4 Q. And what was the median?

5 A. Median is the point where half are above and half are  
6 below.

7 Q. What was that number?

8 A. Half of the people had to drive 9.96 miles, and half  
9 could get there in less than 9.96 miles.

10 Q. What was the maximum?

11 A. 142.77 miles.

12 Q. How is that possible in Pennsylvania, given the  
13 geography.

14 A. Assuming this is correct, which I think it is, there are  
15 rural counties that have no place they can go. The other  
16 reason is I think there's some data errors in here. Somebody  
17 has an address which is outside the state, has to drive into  
18 the state to get a license.

19 Q. Fair enough. I just wanted to -- but that's what the  
20 data shows that you got from the Respondents?

21 A. It's primarily -- yes. I believe it's data errors of  
22 somebody showing up with a license -- an out-of-state driver's  
23 license.

24 Q. Was there a lot of that data error?

25 A. No, it's trivial.

1 Q. Did it impact your average as the median?

2 A. It might have a slight impact on the average. If I --  
3 as a statistical thing, I would rely more on the median as the  
4 best estimate here of what's going on. They have two  
5 advantages.

6 One is it's a more typical measure, even though average  
7 is more commonly used. Median talks about half of the people  
8 have to go more than that, half to have to less than that.

9 To extent there's data errors, it's hardly affected by  
10 that, and obviously, it isn't going to change the ranges.

11 Q. You give ranges for the middle 95% and the middle 50%?

12 A. Correct.

13 Q. Explain who those are.

14 A. That's to truncate the data to get rid of the bad data  
15 and really that tells you what's the lowest and the maximum  
16 media, getting rid of the extremes, that's probably the  
17 numbers on the top side that -- particularly 95% are probably  
18 a more accurate measure of what the true maximum is in terms  
19 of travel.

20 Q. And what proportion of voters who lack acceptable photo  
21 ID from PennDOT or DOS, with a DOS ID, would have to travel  
22 more than 20 miles to a drivers licenses center?

23 A. 20.9%.

24 Q. More than 30 miles?

25 A. 10.5%.

1 Q. Did you do something to try to estimate how long it  
2 would take them?

3 A. Yes. We used --

4 Q. Is that the bottom?

5 A. That's the bottom.

6 Q. How do you do that?

7 A. Mapquest has, besides telling you the distance, they  
8 have got algorithms which are commonly used, if you go online,  
9 which tells you normally how long it actually takes to drive  
10 from point A to point B.

11 We ran the random sample of 15,000 voters through the  
12 program of Mapquest and came up with the same type of  
13 statistics with the same caveats for the duration of driving  
14 that somebody would have to do to get to the licensing center.

15 Q. And why did you do a random sample of 15,000 instead of  
16 all voters?

17 A. The Mapquest data is not available as a general  
18 practice, so you can't just do in batch. So, you -- it became  
19 physically impossible for us to process the millions of  
20 records. So we took a random sample and did it with 15,000.

21 Q. And is a sample of 15,000, in your opinion, a reliable  
22 sample to come up with these estimates?

23 A. That's a very large sample for statistical purposes.

24 It's about -- typical polls take a little more than -- at

25 1,300 people to estimate the vote in the United States. So,

1 15,000 is a very large sample.

2 Q. And is that generally accepted to be reliable?

3 A. Oh, yes. 15,000 of these numbers are very accurate.

4 Q. So, quickly, what's the average driving duration?

5 A. The average driving duration is 25 minutes. The median  
6 is 18. The maximum, again, influenced by the outliers was  
7 152.

8 Q. The middle 95%?

9 A. The better one is 95. That's 71 minutes. So, about an  
10 hour is probably the maximum somebody has to drive.

11 Q. Percentage, more than 30 minutes?

12 A. 28.7%.

13 Q. And percentage more than 45 minutes?

14 A. 11.5.

15 Q. Did you do the same thing on Table 8a, limiting it to  
16 November 2012 voters?

17 A. Correct.

18 Q. We won't go through that.

19 A. Thank you.

20 Q. Finally, which I'm sure everyone is very happy to hear  
21 the word, Table 9. What is Table 9?

22 A. Table 9 is a study we were asked to do and can only do  
23 this for urban centers. The data is really only available for  
24 the Pittsburgh and Philadelphia areas. And that is where you  
25 don't necessarily drive, but people can take public transit to

1 get to the licensing center which would make some sense

2 because a lot of these people we're dealing with don't have  
3 valid driver's licenses, as far as we can tell.

4 Maybe they can get there through public transportation,  
5 what would it take.

6 So, for Philadelphia and Pittsburgh, there is software  
7 available by Google which allows you to estimate, if you give  
8 an address and you want to go somewhere, it tells you to use  
9 public transportation, the expected time it's going to take  
10 you to get from point A to point B.

11 This is a commonly reliable used method, and in fact, if  
12 you call SEPTA, and you ask them how long it's going to take  
13 you to get from point A to point B, they send you instructions  
14 how to use Google to get that estimate, to get there.

15 Q. Did you take a sample?

16 A. We took a sample of 2,000.

17 Q. Why 2,000 instead of 15,000?

18 A. First of all, we're dealing with a smaller number of  
19 people, so a smaller sample is more accurate. It's also a  
20 fairly time consuming process to go through all of this.

21 Q. Taking it -- a sample of 2,000, is that statistically  
22 reliable?

23 A. More than reliable for this.

24 Q. What did you find?

25 A. We found that the median time in -- for people in

1 Philadelphia, Pennsylvania, was 46.3 minutes for registered  
2 voters, and Table 9a, who voted in November 2012, was 44.95 or  
3 45 minutes. The maximum seems to be a little over -- a little  
4 over -- close to two hours would be the maximum amount of time  
5 somebody would have to spend.

6 Q. So, you said the maximum is a little over two hours, but  
7 I see the maximum actually written here is 222 minutes; where  
8 did you get your maximum from?

9 A. Again, I looked at the 95th percent range allowing for  
10 some possible outliers. I think it's a more realistic figure,  
11 the actual maximum is, in this case, may not be, errors, but I  
12 tend to truncate the data to be conservative, but with the  
13 true maximum, might be.

14 Q. One question: For all of your distance and duration, is  
15 that one-way or round trip?

16 A. This was one-way. You can double it if you want round  
17 trip.

18 Q. And for the other tables we looked at, are those one-way  
19 or round trip?

20 A. One-way.

21 Q. And for the public transportation, what proportion was  
22 60 minutes or more?

23 A. Excuse me. What was the question?

24 Q. Table 9 for the public transportation.

25 A. What proportion was more than an hour?

1 Q. Yes.

2 A. 28%.

3 Q. And Table 9a does the same thing, but for --

4 A. 25%.

5 Q. But Table 9a is for November 2012 voters, correct?

6 A. Correct.

7 Q. Does your work in this case have a margin of error?

8 A. Of course. There's always a margin of error.

9 Q. And are there inherent limitations in your work?

10 A. There are specific -- yes, there are always limitations  
11 based on what the data is available and the completeness of  
12 the data and the accuracy of the data.

13 Q. Did you account for those?

14 A. We looked at the margins of errors through the  
15 reliability studies, and we did what we could with respect to  
16 all of the other factors, as I explained.

17 Q. And accounting for those margin of errors and accounting  
18 for the inherent limitations, what conclusion did you come to  
19 as a number of non-matched, number of registered voters in  
20 Pennsylvania, who lacked a valid PennDOT or DOS ID for voting  
21 purposes?

22 A. I would say with a high degree of certainty and surety,  
23 there's hundreds of thousands of people in the state of  
24 Pennsylvania who are registered voters who do not have a valid  
25 PennDOT ID.

1 Q. I know it's getting late, and it's noon. Can I just  
2 draw your attention, because I think we may have  
3 miscommunicated, to the Tables 7, 8, 9.

4 Can you just look at the table and tell me whether all  
5 of the statistics are round trip or one-way?

6 A. Oh. For 7 --

7 Q. I think you said they were one-way.

8 A. 7, 8 and 9, they're round trip. Actually, I think I  
9 said -- I think I said they're one-way. They're all round  
10 trip.

11 Q. I just wanted to clarify that.

12 A. It says it in the title. You get a little punchy.

13 Q. Absolutely. It's been a long morning.

14 MR. RUBIN: With that, Your Honor, we pass the  
15 witness.

16 THE COURT: Very good. It's a good time to  
17 take a lunch recess.

18 MR. RUBIN: Thank you. Your Honor, before  
19 doing that, may I proffer the report that's 2996 into evidence  
20 and all of the subparts.

21 THE COURT: Sure. How about if we come back  
22 at 1:15?

23 MR. RUBIN: Your Honor, we have one of your  
24 elderly voters who is scheduled to be here after lunch. Would  
25 it be possible, and I believe Respondents' counsel are okay

1 with it --

2 MS. HICKOK: I'm willing to accommodate.

3 MR. RUBIN: -- to call her, and it would be a  
4 quick cross-examination.

5 Thank you, Your Honor.

6 (THERE WAS A RECESS FROM 12:02 P.M. UNTIL 1:14  
7 P.M., AND THE PROCEEDINGS CONTINUED AS FOLLOWS:)

8 THE COURT: Remain seated, please.

9 THE BAILIFF: Commonwealth Court is now in  
10 session.

11 MS. SCHNEIDER: Your Honor, my name is Marian  
12 Schneider. I'm with The Advancement Project. The Petitioners  
13 call Margaret Pennington.

14 THE COURT: Okay. Very good.

15 MS. SCHNEIDER: Your Honor, may I approach the  
16 witness? She has some vision problems.

17 THE COURT: Very good.

18 MARGARET PENNINGTON, having been  
19 first duly sworn according to the law, was examined and  
20 testified as follows:

21 DIRECT EXAMINATION

22 BY MS. SCHNEIDER:

23 Q. Good afternoon, Mrs. Pennington.

24 A. Good afternoon.

25 Q. You can put your hand down now.

1 Can you please state your name for the record?

2 A. Margaret Pennington.

3 Q. Where do you live, Margaret?

4 A. I'm now living in Avondale, Pennsylvania, 218  
5 Pennsylvania Avenue, Avondale, Pennsylvania.

6 Q. When is your birthday?

7 A. January 29th. I was born in 1923.

8 Q. So, how old are you?

9 A. 90.

10 Q. Where were you born?

11 A. I was born at home in Ashland, Delaware, where I grew  
12 up.

13 Q. Okay. So, now, who do you live with in Avondale?

14 A. I live with my oldest daughter, Susan McHugh.

15 Q. How long have you lived there?

16 A. About a month. A little more than a month. I did live  
17 by myself in a Burnt Mill address, but old Kenneth Road and  
18 Burnt Mill Road, 400 Burnt Mill Road.

19 Q. Where is Burnt Mill Road near? What town is that near?

20 A. That's three mile east of Kenneth and three miles from  
21 Longwood and right at the Delaware state line.

22 Q. How long did you live on Burnt Mill Road?

23 A. 54 years.

24 Q. Tell me about your house on Burnt Mill Road.

25 A. I have it up for sale. It has the equivalent of five

1 bedroom and it's a pretty large house with almost three acres  
2 of ground, and my husband built the house and there's a  
3 separate matching garage.

4 Q. So, your husband built the house and then you moved in?

5 A. Yeah.

6 Q. Okay. Now, are you still married?

7 A. No. My husband is deceased.

8 Q. When did your husband pass away?

9 A. He passed away when he was 86. He's been gone about six  
10 years.

11 Q. What was your husband's name?

12 A. Ralph J. Pennington.

13 Q. What did he do for a living?

14 A. He was a machinist technician for the DuPont  
15 Experimental Station.

16 Q. Did he work on any special projects at DuPont?

17 A. Yes. He did some plastics work for the first explorer  
18 that went to the moon.

19 Q. Do you have any children besides the daughter that you  
20 live with?

21 A. Yes, I have two sons and another daughter.

22 Q. Do you have any grandchildren?

23 A. About seven, yes.

24 Q. Is there one on the way?

25 A. There is a great grandchild on the way, and I have two

1 other great grandchildren.

2 Q. Okay. Did you work earlier?

3 A. Yes, I was an RN. I worked 28 years of my adult life as  
4 a nurse.

5 Q. Where were you a nurse?

6 A. I lived at the Alfred DuPont institute when I was  
7 single, and I worked in the operating room, and I trained at  
8 Memorial. That was torn down. It was in Wilmington, and I  
9 worked at St. Francis for a while.

10 Q. Now, I want to talk to you a little bit about photo ID.  
11 Do you drive, Mrs. Pennington?

12 A. No longer. I had to give up driving about seven years  
13 ago, or -- because I'm legally blind, and my hearing is not  
14 too acute.

15 Q. Can you explain -- tell us a little bit about what  
16 causes your blindness?

17 A. Macular degeneration.

18 Q. So, did you used to have a Pennsylvania driver's  
19 license?

20 A. Oh, yes.

21 Q. Did it expire?

22 A. It expired about seven years ago.

23 Q. Okay. Do you have a U.S. passport?

24 A. No.

25 Q. No. Okay. Do you have any other identification with

1 your picture on it?

2 A. No.

3 Q. When your driver's license expired, did anyone ever tell  
4 you that you could get a non-driver ID?

5 A. Well, when I tried to get an ID to go vote and what --  
6 one thing or another, I tried to get an ID, but I have my  
7 driver's license. The same picture taken again, but I  
8 couldn't do it.

9 Q. Let's talk about that a little bit. When did you try to  
10 get a non-driver ID?

11 A. At this last voting season.

12 Q. Where did you go to try to get an ID?

13 A. We went to Oxford and they refused to do it because that  
14 wasn't their specialty. They had all the equipment, but they  
15 only did for the regular driver's card.

16 Q. So, what did they tell you; did they tell you would have  
17 to go somewhere else?

18 A. They told us to go to Frazer, but my oldest daughter  
19 does all my driving, and it's not convenient for her to take a  
20 whole day for everything, because she has a lot of driving for  
21 me as it is.

22 Q. Okay.

23 A. And Frazer was too far away.

24 Q. Well, we'll talk about that in a minute. I want to talk  
25 about your ID. Do you still have your expired driver's

1 license?

2 A. Yes.

3 Q. And it has a picture of you on it, right?

4 A. Yes.

5 Q. Do you still look like you did when your photo was taken  
6 for that picture?

7 A. Well, more or less.

8 Q. Well, do you have any reason to believe that if you  
9 showed that to a poll worker that they wouldn't be able to  
10 tell that you're the same person?

11 A. I think they would be able to tell, but --

12 Q. Okay.

13 A. -- but it's expired, so I don't think that legally,  
14 maybe they wouldn't be allowed to use it.

15 Q. Okay. So, let's talk a little bit more about getting to  
16 PennDOT center. When you went to Oxford, you couldn't get an  
17 ID there; right?

18 A. No.

19 Q. Where is Frazer from Avondale.

20 A. It was another hour's drive away. I'm not exactly sure  
21 where it's located.

22 Q. But it's far away from where you live?

23 A. Oh, yes.

24 Q. Now, is there a reason it would be hard for your  
25 daughter to drive you to Frazer?

1 A. Sure. Because it takes a lot of time, and she has a  
2 business she has to run; and if she's not at her business, she  
3 has to pay someone in her absence to run her business.

4 Q. Okay. Is there a retail store that she runs?

5 A. Yes. There's retail and she does all kinds of -- she  
6 goes to people's homes to do all kind of measuring and give  
7 them advice on colors and fabrics, and she does interior  
8 decorating and home furnishings, and she can get you just  
9 about anything you need.

10 Q. Where is the retail store?

11 A. It's at 3 -- 218 Pennsylvania Avenue, Avondale,  
12 Pennsylvania. It's between Third Street and 41 on the corner.

13 Q. Okay. So, is it near -- where is it in relation to  
14 where you live?

15 A. Nextdoor.

16 Q. Okay.

17 A. It's in a separate, but it's nextdoor.

18 Q. Okay. So, what would happen if she had to take time to  
19 take you to Frazer with the store?

20 A. She would have to either close the store or find one of  
21 the people that occasionally worked for her to replace her for  
22 the day and pay them, of course.

23 Q. Okay. I want to talk about voting. Are you registered  
24 to vote?

25 A. I was always registered to vote, yes.

1 Q. Okay. When did you first register to vote?

2 A. When I was around 21.

3 Q. Do you remember the first time you voted?

4 A. Yes.

5 Q. Who -- who was running at that time, do you remember?

6 A. I think it was Roosevelt, and I voted in Centerville,  
7 Delaware, near about three miles from where I lived.

8 Q. Now, are you a regular voter?

9 A. Oh, yes.

10 Q. And when you lived in -- on near Chadds Ford near  
11 Longwood, where did you vote?

12 A. Over near -- I called it Greenwood School, and we voted  
13 at the school and then they built a new county building around  
14 three miles from me, but it was right, not too far from me,  
15 original Greenwood School.

16 Q. Okay. So, how did you get there when you voted?

17 A. Last time I voted, my daughter, Susan, took me, and of  
18 course, she had to drive five miles to my house to get me and  
19 then three miles to the voting place, and she had to walk in  
20 with me because I couldn't read the ballot.

21 Q. Okay. Is this -- when was the last time you voted?

22 A. The last -- this past year, when they had the last vote,  
23 you know.

24 Q. The presidential election?

25 A. Presidential election, yes.

1 Q. Okay. Now, you mentioned that you recently moved to  
2 Avondale. Where would you vote in Avondale?

3 A. I can walk to the borough building. It's about more  
4 than a city block, but it's just a nice walk. I can walk  
5 there.

6 Q. Okay.

7 A. But I wouldn't probably go by myself.

8 Q. Okay. Now, do you know about the Pennsylvania voter ID  
9 law?

10 A. I've heard about it.

11 Q. Okay. What did you hear about it?

12 A. Well, I heard that they demand your identification.

13 Q. And --

14 A. You can't vote without a -- your driver's license or  
15 another card with your identity.

16 Q. What do you think about that?

17 A. Well, I think it should be made simpler. Either people  
18 should be able to vote as long as they're legal and registered  
19 to vote, or it should be easier for them to get a picture.

20 Q. Okay. Have you ever voted by absentee ballot?

21 A. I tried, but I didn't get the absentee ballot until  
22 about a day before I was supposed to go vote.

23 Q. Well, if you're daughter -- you said that you could walk  
24 to your polling place in Avondale.

25 A. Yes.

1 Q. Or your daughter would go with you.

2 A. Sure.

3 Q. If your daughter goes with you, and you have -- do you  
4 have any reason why you can't go to vote in person in  
5 Avondale?

6 A. No. I just can't go by myself. I wouldn't go by myself  
7 because of my eyesight, and if I can't read the ballot,  
8 there's no point in me going by myself.

9 Q. Who helps you read the ballot when you vote?

10 A. My daughter, Susan.

11 Q. Okay. Now, is voting important to you?

12 A. Oh, absolutely. My people were very politically  
13 oriented, and my daughter -- my mother worked at the polls  
14 every voting time until she was in her mid 70s.

15 Q. So, that -- how important was voting to your family,  
16 then, growing up?

17 A. Oh, very important.

18 Q. Now, how long did it take you to get here today?

19 A. Oh, a couple of hours, I think. I mean, we had a driver  
20 named Carl. He was very good, and it was a very comfortable  
21 ride, but it took a lot of time.

22 Q. Well, why did you choose to take the time to come here  
23 today?

24 A. Well, I wanted to see what they could do about this  
25 voting ID problem.

1 Q. Because, as you said before, you think it should be  
2 easier; is that why?

3 A. Sure. And I'm no longer employed, and I don't have --  
4 there's not that much that I have to do, and I was happy to do  
5 it.

6 Q. Okay.

7 MS. SCHNEIDER: Well, thank you. That's all  
8 the questions I have.

9 Your Honor, it might be better if  
10 Mr. Hutchison approaches the witness for the cross, because of  
11 her eyesight.

12 MR. HUTCHISON: I was going to ask.

13 Your Honor, Todd Hutchison for the  
14 Respondents. Is it all right if I question the witness at the  
15 standing.

16 THE COURT: Sure.

17 CROSS-EXAMINATION

18 BY MR. HUTCHISON:

19 Q. Good afternoon, Mrs. Pennington.

20 A. Good afternoon.

21 Q. Thank you for coming today.

22 A. Oh, you're welcome. Thank you.

23 Q. So, you said that you used to have a Pennsylvania  
24 driver's license; correct?

25 A. Oh, yes.

1 Q. That expired?

2 A. Yes.

3 Q. Did you ever call PennDOT to see what you could do about  
4 getting a new ID?

5 A. No, I never called PennDOT. It's been a good while  
6 since I was able to look through the phone book and pick out a  
7 number and read it. I no longer can do that. I memorize the  
8 numbers I use all the time.

9 Q. Do you think your daughter Susan would be able to help  
10 you find that phone number?

11 A. Oh, yes.

12 Q. Have you asked her to do that?

13 A. No, I didn't know that I could get help that way.

14 Q. Would you be willing to do that, to ask Susan to call  
15 PennDOT to see if they would?

16 A. Well, what would they be able to do for me?

17 Q. If they were able to give you an accommodation, would  
18 you be interested in doing that?

19 A. Well, I don't travel without -- either my younger  
20 daughter or my older daughter going with me because when I get  
21 off of the -- you know, when I get out of the vehicle, it's  
22 sometimes a little dangerous, you know, seeing curbs and  
23 stuff.

24 Q. If it was possible to do it by mail, would you be  
25 interested in doing that?

1 A. If I could do it by mail, yes.

2 Q. Would you be willing to ask Susan to contact PennDOT to  
3 ask about that? So ask about doing it by mail?

4 A. Well, I guess so. I don't see why not. What would you  
5 do, send me the literature, and she could tend to it?

6 Q. I think PennDOT would be -- when you call them, would be  
7 able to tell you exactly what you need to do, if you were  
8 interested in doing that.

9 A. Well, where would be the place they would send me to  
10 have my photo?

11 Q. Those are probably questions that they could answer if  
12 you call or if Susan calls.

13 A. Well, they told us Frazer, and she wasn't too happy  
14 about driving all the way to Frazer and closing her business  
15 to do it.

16 Q. Would you be willing to try again?

17 A. I don't think she would like that idea because she has a  
18 lot of driving to do for me. She has to take me to the  
19 retinologist and the dentist and the drugstore and at medical  
20 doctor and everyplace else.

21 Q. You mentioned that your younger daughter also drives  
22 you, correct?

23 A. Well, she doesn't have a vehicle at this point. She  
24 hasn't had a car for a couple of years.

25 Q. You said you had two other kids?

1 A. Well, yeah, but one lives in Florida, and the other one  
2 is not -- neither one of them are in good health. My oldest  
3 son just got out of the Vets hospital a month or so ago. He  
4 was unconscious for 11 days. He has a very bad heart.

5 Q. You said you got to court today, a man named Carl drove  
6 you?

7 A. Yes, he did -- was a very wonderful driver.

8 Q. And where did you get this ride?

9 A. He picked us up at -- I'm trying to think. He picked us  
10 up where my daughter lives in Phoenixville.

11 Q. Do you know who arranged for that?

12 A. I think -- I think Susan probably arranged it through  
13 contact -- not herself, but she talked to someone that knew  
14 who to call.

15 Q. Do you know who she spoke with?

16 A. No, I don't.

17 Q. Was it somebody from the Petitioners?

18 A. From where?

19 Q. From -- was it one of the Petitioners' counsel, do you  
20 know? If do you know if it was Marian, Ms. Schneider.

21 A. Probably. I don't know all these people that well.

22 Q. Did you know that there's a -- is Susan here with you  
23 today?

24 A. No.

25 Q. Is it just Carl?

1 A. She will be leaving -- she is leaving today on a river  
2 cruise, and she won't be back for ten days. And she is taking  
3 a much-needed vacation with a couple of her girlfriends.

4 Q. Did anybody else come with you today?

5 A. My youngest daughter, Faye Smith, who lives in  
6 Phoenixville, came with us.

7 Q. So your youngest daughter is here today?

8 A. Yes, Faye Smith.

9 Q. Did you know that there -- how far did you say it was to  
10 the Frazer driver's license center?

11 A. Oh, it would have been another hour from Oxford.

12 Q. An hour from Oxford?

13 A. Another hour, and we had to drive a good ways to get to  
14 Oxford.

15 Q. Do you know how far it would be from your daughter's  
16 house in Avondale?

17 A. I have no idea, but it's -- it would take a pretty big  
18 hole out of her work day. A couple of three -- a couple of  
19 hours, and you know, that's not the whole story. You have to  
20 take that time, and arrange for somebody to replace her.

21 Q. Does she have any employees?

22 A. She has people that work part-time. She has one lady  
23 that works usually a couple of days a week, but she's not the  
24 one -- you know, they don't do any driving for my daughter.  
25 They just watch the shop.

1 Q. They help out in the shop.

2 A. They help out in the shop and answer the phone and that  
3 sort of a thing.

4 Q. Did you know that there's a driver's license center  
5 approximately a mile from the courthouse?

6 A. From the -- which courthouse?

7 Q. From where we are right now.

8 A. There's --

9 Q. A driver's license center where you could get your  
10 picture taken?

11 A. Well, my -- I live an awful ways from here.

12 Q. But could you -- would you be willing to go today when  
13 you are done testifying?

14 A. And get my picture taken?

15 Q. And get your ID for voting.

16 A. I don't know why I wouldn't, but I -- that wasn't put --  
17 pointed out to me before.

18 Q. Would you be willing to ask Carl to take you to -- give  
19 you a ride there?

20 A. I guess.

21 Q. Do you think your daughter would help you get into the  
22 driver's license center?

23 A. I think so. My youngest daughter could go with us.

24 Q. Ms. Schneider asked you if you had any other photo  
25 identification.

1 A. I don't have any other photo identification.

2 Q. Do you have your voter registration card?

3 A. No, I don't have -- well, I have two cards that she gave  
4 me, but I don't have any voter registration card, no.

5 Q. Who is she?

6 A. Miss Schneider.

7 Q. What cards did she give you?

8 A. I can't read them. They're in my purse, and my daughter  
9 has my purse.

10 MR. HUTCHISON: Your Honor, would it be  
11 possible to ask her daughter to produce those cards?

12 MS. SCHNEIDER: Your Honor, those are my  
13 business cards that I gave her at lunch, so if you will accept  
14 that representation.

15 THE WITNESS: I don't think there was anything  
16 on there that entitles me to anything. It's probably just her  
17 name. It's just like a business card, I would think.

18 MR. HUTCHISON: Okay. Thank you.

19 BY MR. HUTCHISON:

20 Q. Do you have any other non-photo ID from the State of  
21 Pennsylvania?

22 A. No.

23 Q. Do you have any other non-photo ID from the U.S.  
24 government?

25 A. Not that I know of, no. Huh-uh.

1 Q. Do you have a firearm permit?

2 A. A firearm?

3 Q. Permit.

4 A. No.

5 Q. Do you currently receive any bills at your daughter's  
6 house? Like a utility bill?

7 A. She just changed -- see, I have only been there a little  
8 over a month and she just went to Chadds Ford post office and  
9 had my mail changed from 400 Burnt Mill to 218 Pennsylvania  
10 Avenue, Avondale, Pennsylvania. She is now getting my bills  
11 and whatever refers to me in her mailbox.

12 Q. And does your daughter pay the utilities where you  
13 currently live?

14 A. At where I -- well, she pays utilities. That's where  
15 I'm living, in her home.

16 Q. And she pays those bills?

17 A. Oh, yes.

18 Q. They come in her name?

19 A. They're her -- I'm tacking on to her utilities.

20 Q. Okay. Are you -- is your name on any of those bills?

21 A. No. Not her bills, no.

22 Q. Do you have a bank account? Do you receive a bank  
23 statement?

24 A. She receives -- she is my -- what do you call it, PC.  
25 Or you know, my person that signs my names because I can't

1 sign anything. She tends to all of my business.

2 Q. So, are you -- is your name on your bank account?

3 A. Yes.

4 Q. And do you have --

5 A. I have -- my home on Burnt Mill Road is for sale.

6 Q. Mm-hmm. And do you receive a paycheck?

7 A. Social Security.

8 Q. Social Security.

9 A. And yeah, my a little bit of pension money from DuPont,  
10 not -- it doesn't. It's not that large an amount. But I  
11 lived by myself for seven years, and I lived on that.

12 Q. Do you remember who contacted you to ask you to testify  
13 today?

14 A. I don't know. I think it came through one of my  
15 daughters, and they told me who it was, but I couldn't tell  
16 you.

17 Q. Do you remember when that was?

18 A. She -- it was probably three or so weeks ago, or more.

19 Q. Do you know where they were calling from?

20 A. No.

21 Q. Do you know how they got in touch with you?

22 A. No, I don't. I really don't know.

23 Q. Did you speak with anyone about it?

24 A. No, I didn't advance any of this. It came to me through  
25 other people.

1 Q. And then did you talk to any of those people?

2 A. Yeah. A lady came and talked to me one day, a good  
3 while ago.

4 Q. Do you remember who that was?

5 A. I don't know whether her name was Schneider.

6 Q. Do you remember what you talked about?

7 A. Well, we talked about voter problems.

8 Q. What type of voter problems?

9 A. I told her I had trouble getting an absentee ballot, and  
10 I told her I had trouble getting to the polls, and my daughter  
11 had to take me and so forth.

12 Q. Did she offer to help you with your absentee ballot?

13 A. Not really.

14 Q. Did she offer to help you with getting to the polls?

15 A. No.

16 Q. Did she ever offer to help you get photo ID?

17 A. Well, she discussed photo ID and we tried to do it.

18 Q. And how did you try to do it?

19 A. My daughter drove me to Oxford and they wouldn't do it,  
20 and she wasn't willing to take the rest of the day to drive  
21 all the way to Frazer.

22 Q. Is that when this other woman met with you?

23 A. I know, I think I met with her, let's see -- I guess I  
24 did meet with her after that. It was around the same time,  
25 but not the same week.

1 Q. But after you tried to go to Oxford?

2 A. Yes.

3 Q. Before you went to Oxford, did you call -- did anybody  
4 call PennDOT?

5 A. No.

6 Q. So, nobody called to find out what location you should  
7 go to?

8 A. No. I don't think so.

9 Q. Does your daughter have internet access at her house?

10 A. Oh, yes, she has a regular office with all of the  
11 equipment.

12 Q. Did she ever look up online?

13 A. I don't think so.

14 Q. Where to go -- when to go to PennDOT?

15 A. I don't know. She knows more about that type of thing  
16 than I do, but I don't know. She didn't specify.

17 Q. When this other woman came and met with you about two or  
18 three weeks ago, did they -- did she ever tell you how you  
19 could get photo ID?

20 A. I don't think so. I don't recall her saying that.

21 Q. You said you moved to Avondale in the last month?

22 A. Yeah.

23 Q. Is that right?

24 A. A little more than a month ago, yes.

25 MR. HUTCHISON: I think that's all the

1 questions that I have for you.

2 BY MR. HUTCHISON:

3 Q. However, I want to ask one more time, would you be  
4 willing to ask Carl to take you to the PennDOT location today?

5 A. He's going to take us back to Avondale, yes.

6 Q. Would you consider asking him to take you to the PennDOT  
7 location in Harrisburg?

8 A. Well, I guess so.

9 Q. Will you ask him?

10 A. Yeah, I'll ask him.

11 Q. Thank you. Thank you for coming in today.

12 A. Thank you.

13 MS. SCHNEIDER: Your Honor, I have no further  
14 questions.

15 THE COURT: You might want to assist her.

16 MS. SCHNEIDER: Her daughter is going to  
17 escort her. Thank you, Your Honor.

18 MR. RUBIN: And Your Honor, we'll bring  
19 Dr. Siskin back in.

20 CROSS-EXAMINATION

21 BY MS. HICKOK:

22 Q. Good afternoon, Dr. Siskin.

23 A. Good afternoon.

24 Q. My name is Alicia Hickok, and I'm here on behalf of the  
25 Respondents, and I'm going to be asking you some follow-up

1 questions to clarify the testimony that we heard this morning.

2 First of all, you had mentioned that you're charging  
3 \$475 per hour for this matter. Is that your standard rate?

4 A. No, it's not.

5 Q. What is your standard rate?

6 A. \$675 an hour. That's my standard government rate.

7 Q. And do you charge more to non-government, typically,  
8 or --

9 A. Yes, I charge, I said \$675 is my non-government rate. I  
10 charge \$475 for the government or non-profit type operations.

11 Q. Okay. So, the reduced rate was because this was a  
12 non-profit organization that retained you?

13 A. Correct.

14 Q. Who actually retained you; was it Arnold & Porter, or  
15 was it one of the other organizations?

16 A. I don't know that this -- I thought the first time I  
17 heard, it was the Woman's League of Voters but I'm not quite  
18 sure who actually retained us. The bookkeepers would know,  
19 but I don't.

20 Q. Do you have an engagement letter?

21 A. Yes. I said, my staff, my bookkeepers would know, the  
22 office managers, but I don't know.

23 Q. Okay. Now, as I understand what you did, you received a  
24 copy of the full SURE database and you received a copy of the  
25 full PennDOT database; is that correct?

1 A. That's correct.

2 Q. And you had stated that one of the things that you had  
3 in the PennDOT database was that you had driver's license  
4 data, you had non-driver's license data, and you had  
5 Department of State ID data?

6 A. Correct.

7 Q. You did not mention whether you had non-photo ID data;  
8 did you have that?

9 A. What about -- I don't recall. We wouldn't have used it,  
10 if it's relevant, so I don't recall.

11 Q. And are you aware of what non-photo ID is?

12 A. No, assuming -- I don't recall. You don't mean like  
13 Social Security. It has a Social Security number and birth  
14 date and things like that. You don't mean those types of IDs.  
15 You mean a formal ID that's non-photo?

16 Q. Yes, that's used often by people of religious beliefs  
17 who are opposed to having their photograph taken, and it  
18 actually acts as a secure ID in the same way that a driver's  
19 license would.

20 A. I don't recall that, and I would have to go back and  
21 check on that if we did anything. I don't recall using it.

22 Q. Okay, but you can define the parameters of the data that  
23 you wanted from PennDOT.

24 A. Correct.

25 Q. Now, just so that we're talking on the same wavelength

1 as we get started, are you contending that the numbers that  
2 you generated represent the numbers and types of persons who  
3 cannot vote under Act 18, and who deserve to vote?

4 A. No.

5 Q. What are you contending?

6 A. I'm contending the numbers that I produced are the  
7 numbers of people who are registered voters, that are eligible  
8 to vote, but do not maintain a photo PennDOT ID with either a  
9 driver's license or non-driver's license photo ID or  
10 Department of State ID; and that number, my best estimate, is  
11 511,000 people, but clearly, it's in the hundreds of  
12 thousands.

13 Q. And I have to tell you, you know that both of the  
14 databases that you had were secure, and so because they were  
15 both secure, I have never been able to see the underlying  
16 data. So, the questions that I'm going to ask you are going  
17 to be based upon my understanding of the data, and my  
18 understanding of your report as compared to publicly available  
19 information.

20 So, I'm going to be trying to clarify with you what it  
21 is you did, but you need to understand that I -- I didn't have  
22 something that was the underlying data that I myself was  
23 looking at. Okay.

24 A. You didn't have access to the SURE, the secure database,  
25 the voters.

1 Q. I didn't have access to any of the raw databases.

2 A. To the full voter export data.

3 MR. RUBIN: Your Honor, we object to the  
4 speech that counsel is giving of what she had or did not have  
5 access to.

6 MS. HICKOK: I'm explaining why I'm going to  
7 be using ways to try to explain.

8 THE COURT: Let's let Counsel, give her a  
9 little bit of room.

10 BY MS. HICKOK:

11 Q. Okay. When you talked about the fact that you assess  
12 and merge databases regularly in your line of work; is that  
13 correct?

14 A. Correct. My staff does.

15 Q. And when you do that, do you first undertake to  
16 understand how the data have been assembled, and what the data  
17 are that are captured in each part of the database?

18 A. The staff would, yes. We would.

19 Q. Okay. And was that done here?

20 A. I believe so.

21 Q. Okay. Do you also understand the limitations of the  
22 data, and, you know, what it is that it cannot tell you as  
23 well as what it is that it can tell you?

24 A. Generally, yes.

25 Q. And did you undertake to do that here?

1 A. It was clear what limitations there were on this data in  
2 terms of matching, there was no common ID and things like  
3 that, correct.

4 Q. Was it clear what limitations were in each set of data?

5 A. That's -- you'd have to explain further. I'm not quite  
6 sure I follow.

7 Q. Okay. For example, do you know how the SURE database is  
8 populated?

9 A. Well, we looked at the fields. I don't know the  
10 mechanics of the process, per se, no. We looked at the  
11 fields. We looked at what was in the fields. We looked at  
12 the completeness of what the fields were that we had and  
13 understanding and we didn't get behind the total mechanics,  
14 the -- I don't know the answer to that totally because  
15 Dr. Cupingood did the actual mechanics a lot of times and  
16 would have asked some questions if need be, but they weren't  
17 relevant, necessarily, to my decisions.

18 Q. Okay. And did you look at data and assess any of it  
19 based upon like a common sense understanding to say, you know,  
20 this makes sense to me, or this doesn't make sense to me?

21 A. Generally, yes.

22 Q. Now, would you agree with me that a registered voter  
23 only needs photographic proof of identification under Act 18,  
24 if that voter is legally entitled to vote and will not be  
25 voting absentee?

1 A. I think that would follow, if a person is not legally  
2 eligible to vote, he can't -- he won't need an ID to vote.

3 Q. And you mentioned dates on the two databases. As I  
4 understand it, the SURE database was dated May 6, 2013, that  
5 was produced to you, but I'm not sure that was the date that  
6 it was actually generated. Do you have the date that it was  
7 generated?

8 A. That was the date we received it. I don't have the date  
9 readily available when it was actually generated.

10 Q. But it was sometime before May 6th?

11 A. Correct.

12 Q. And the PennDOT database that was generated on or before  
13 May 30th; is that correct?

14 A. That's correct.

15 Q. And are you aware that the PennDOT database is updated  
16 in real time, so as a person comes into the PennDOT center and  
17 the information is entered, it shows up in the database at  
18 that moment?

19 A. I'm aware, I was aware of that. Obviously, when we are  
20 talking about the matching, anybody that picks up -- there's  
21 two things that will occur. The limitations to the data. For  
22 the extent that somebody gets an ID after the 23rd, we will  
23 not have that in our database. They will be considered  
24 mismatches. Or if they update their license again, it would  
25 be a mismatch.

1           Conversely, people who register to vote after this date  
2   may be in this database and not have a matching in the DOT.  
3   We wouldn't see those so they would be a limitation to the  
4   data. So this data is limited to the population of the data  
5   that we have.

6   Q.     It's also limited to the specific points in time.

7   A.     That's what I meant.

8   Q.     Those points in time are different but the SURE data are  
9   earlier than your PennDOT data.

10   A.     But that could mean to the extent that the PennDOT data  
11   is updated, it's more accurate than assessing the SURE data.

12   Q.     That's correct, but there's a change of name or change  
13   of address in the PennDOT it would generate a non-match with  
14   the SURE data.

15   A.     It may or may not, depending what we match. For  
16   example, if they change the last name, the first name is the  
17   same and the birth date is the same, and we would have picked  
18   them up as a match.

19   Q.     Only if all of the other information that you were  
20   looking at was the same, would you pick it up as a match?

21   A.     We had -- at the end we went down to Social Security  
22   number and names, so that would have picked it up. We went to  
23   first name and date of birth or a zip code or a -- what's the  
24   last one. Or the Social Security number matched, we would  
25   have picked it up so. We could have missed some of it; but to

1 the extent that we missed them, those should have also been  
2 measured in the error rates so that shouldn't have been an  
3 issue in your analysis.

4 Q. You don't think there's any issue in having data that  
5 are separated by a month in time?

6 A. It would have been much more problematic if it would  
7 have been the other direction. If the SURE data would have  
8 been after the Department of Transportation database. So,  
9 then you would have had people getting licenses, et cetera,  
10 you wouldn't have seen, wouldn't have picked up, with you  
11 going after it, okay.

12 The only problem that you are really going to run into  
13 is people changing address or changing their last names. Most  
14 of that would have been picked up in the analysis; and to the  
15 extent that occurred, we would have seen that in the error  
16 rate when we did the reliability study. So they're not issues  
17 which would have caused significant problems in terms of these  
18 conclusions.

19 Q. Now, is that also true if you also understand that the  
20 SURE data are not updated in real time?

21 A. If the SURE data is not updated in real time, then you  
22 have the problem again of last names being changed. Again,  
23 that's not -- shouldn't be a problem.

24 Q. And addresses being changed?

25 A. Generally, mostly, ultimately -- matching we did not

1 require any address match, so that --

2 Q. But --

3 A. -- so that would have very little effect, and again, to  
4 the extent that other than that, to the extent that they're  
5 going to mismatch, we would see -- should see it in the prior  
6 address in the Department of Transportation database. That's  
7 one of the things we did pick up when we did our audits that  
8 did lead to a reasonable number of those 14 cases where the  
9 prior address in the DOT matched the address in the SURE, so  
10 the cases that you're talking about should have been picked up  
11 in that sample process for editing. So that shouldn't be an  
12 issue, either.

13 Q. As long as the name was the same?

14 A. First name -- if it's a female, it would be, had to be  
15 the same as the first name.

16 Q. At the 12th step where you also have to have other data?

17 A. All you needed -- in the 12th step all you needed was  
18 birth date and -- birth date and Social Security number or  
19 step 11, all of that matches the first name and either the  
20 zip, the birth date, you wouldn't have updated the birth date,  
21 so that should hit. So, they should match.

22 And to the extent that it is that occurring, it should  
23 have been picked up, again and it was picked up, in some of  
24 the errors when we did our auditing. One of the things we saw  
25 which helped us really mechanically see it, we saw the prior

1 address, and we saw the prior address matching the old address  
2 and we looked at it and said, this could possibly be the same  
3 person.

4 Q. Did you also look at the prior name field --

5 A. Yes.

6 Q. -- in the PennDOT data.

7 A. Mm-hmm.

8 Q. Did you find matches because of that?

9 A. I don't recall seeing that, the prior address led to  
10 some corrections. Not corrections, but the error rate that we  
11 picked up, but I don't recall seeing name doing that. Or the  
12 name didn't seem to matter. That may have been simply because  
13 of the way we had been doing it. Most people don't change  
14 their name, unless it's in most cases it's a female, it's  
15 because they're going to get married or divorced and going  
16 back, and our methodology basically picked most of those  
17 people up to start with.

18 Q. Now, again, you had testified, there were a significant  
19 number, I think you said 9% of the database that didn't have  
20 Social Security numbers?

21 A. Correct.

22 Q. And you also said that there were significant number of  
23 people in the database that had markers in the SURE database  
24 for the date of birth because the date of birth was unknown?

25 A. Correct.

1 Q. So any of those persons who had changed address or who  
2 had changed names would not get caught on either the SSN match  
3 or the date of birth match; is that not correct?

4 A. On last one, correct. When we did the earlier matches,  
5 the whole series, you will recall we brought back the security  
6 number just for that reason. So if that was the only problem,  
7 they would have been matched.

8 Again, the other portion is ultimately, those are the  
9 ones we would have been looking at in the sample and should  
10 have been in the, you know, represented statistically in our  
11 reliabilities. They're the -- which do occur to some extent.  
12 And they're the type of things which cause that 14% mismatch  
13 error rate that you're talking about, but that number as I  
14 pointed out in terms of the whole process did not affect the  
15 conclusions of the number significantly.

16 Q. Now, you talked about the potential duplicative entries  
17 that were in the SURE database. The potential -- you said  
18 there were 70,000 roughly --

19 A. Yes.

20 Q. -- of ones where you found one driver's license number  
21 but multiple identifying information. Do you know how voter  
22 registrations are entered and checked for duplicates?

23 A. Not specifically, no.

24 Q. So, a voter registration form is submitted and if, when  
25 the voter registration form is submitted, it is checked for

1 first name and last name, if a person has changed that name,  
2 that name would not come up as a match; is that correct?

3 A. That's correct.

4 Q. So, SURE would not see that as a duplicate; is that  
5 correct?

6 A. Correct.

7 Q. So, if they then searched on last name and another  
8 identifying piece of information, and the last name had  
9 changed by marriage or whatever, that duplicate would also not  
10 be caught; is that correct?

11 A. I think you're confusing -- what you are talking about  
12 is a situation where the same person could be in the SURE  
13 database more than once. Once with a maiden name, once  
14 without a maiden name.

15 Q. That's correct.

16 A. We could match that person to the same ID twice. And  
17 that would have been the case where it would have been  
18 correct.

19 Q. So -- right. Even though that person had a single  
20 driver's license, they could have more than one registration  
21 record in SURE, if SURE --

22 A. Correct.

23 Q. -- if SURE is using the last name as one of the measures  
24 to determine whether that person is already in the database?

25 A. I'm not sure I follow you, but I think what you are

1     trying to say is there can be duplicates in the SURE database,  
2     but I thought you said that they match on names, so it can't  
3     be the exact name duplicates so they could have changed their  
4     name.

5     Q.     Right. Right. So, the driver's license number may  
6     actually link to a single person, even though there may be two  
7     or three records associated with it in SURE because of the  
8     fact --

9     A.     Right. As I testified, I said that 73,000 people, okay,  
10    could, if there are duplicate records in SURE --

11    Q.     Mm-hmm.

12    A.     -- okay, the same person, be representative of a  
13    circumstance where we did a good job of matching. Okay? But  
14    that would require a fairly substantial, and I looked at a lot  
15    of them and a good percentage of those matches actually were  
16    the result of the truncation of names and it did not make --  
17    was clearly not the same person. They clearly were not.

18           Using the truncation of names, you couldn't tell which  
19    of the people it would realistically be. That's why I  
20    mentioned the Asian name problem that showed up frequently in  
21    that circumstance. But there were some, I'm sure as we  
22    pointed out, some of these were real duplicates and the  
23    matching worked.

24    Q.     And to the extent they are duplicates, those are people  
25    who are only going to be eligible to vote once; isn't that

1 correct?

2 A. Correct. But we would have matched them all. So they  
3 would never be in our count. None of those would have been in  
4 our count of people who were not matched.

5 Q. But it would have overstated the number of registered  
6 voters.

7 A. We would have overstated the number of registered voters  
8 to the extent -- yeah, our number of registered voters are in  
9 the count in the population, it's true. So if, when we  
10 counted 8 million, to the extent there are duplicate  
11 registered voters in there, the number of registered voters  
12 would come down, but the number of people that we estimate do  
13 not have matching driver's license would be totally unchanged  
14 by that. Okay. We did it very conservatively so that would  
15 have no impact.

16 Q. And I want to understand better when you talk about your  
17 truncation. How is it that you truncated the names in order  
18 to capture alternative names?

19 A. Again, what we saw in the database and we see some  
20 people in the database who had an initial or say, Rob, or in  
21 another case it would say Robert. We were worried about, as I  
22 said, maiden names. We would see somebody, Jones-dash-Smith,  
23 and then in the other database we saw just Jones, and the rest  
24 seemed to match.

25 So, again, to be very conservative, we used the concept

1 of if a name is truncated, okay, and it's totally encased in  
2 the other name, it's the same name. That's probably overly  
3 going to create some false positives, but it should narrow the  
4 false negatives down to cases that we call no, non-mismatches.  
5 Picking up hyphenated names of marriages or picking up people  
6 who use an initial or people who use a shortening of their  
7 name in one of the databases. So again, we made that choice,  
8 again, to be conservative.

9 Q. That was done with both first name and last name?

10 A. First and last name.

11 Q. So, a person whose last name might have two names to it  
12 that is treated in one database as having a middle name and a  
13 last name, and in the -- in the second database as having two  
14 last names --

15 A. If they -- yeah, if they -- and so, this is the case why  
16 we ultimately do reliability checks at the end. Okay. If it  
17 had been entered with the middle name first and then the last  
18 name in one database and just the last name in the other  
19 database, it wouldn't have been -- wouldn't have been included  
20 in it, because it wouldn't have been a truncated name. They  
21 would not have matched. But if they put it last name, middle  
22 name, and then last name in the other database, it would have  
23 been a match.

24 Q. Okay. So, there might be people with last names such as  
25 Wei Li, who have Wei as a middle name and Li as a last name in

1 one database and have Wei Li as a last name in the other  
2 database, and it would have shown up as a non-match?

3 A. No. Let me say -- go ahead and repeat that again  
4 because I misunderstood you.

5 Q. Okay. So, if a person's name is whatever the first name  
6 is, and their last name is Wei which is one word, W-E-I, and  
7 L-I, for the second part of their last name, and one database  
8 picked it up as Wei as the middle name --

9 A. Right. W-E-I.

10 Q. Right.

11 A. And the other database picks it up --

12 Q. And Li as the last name. And the other database --

13 A. And so that base only has the last name being L-I.

14 Q. Right.

15 A. Okay.

16 Q. And the other database has Wei Li as the last name.

17 A. That would not be a match on last name.

18 Q. Even though it is the same person?

19 A. That's correct. Because they had the same -- again, if  
20 they had the same birth date, and Social Security number, we  
21 would have picked them up. If there was other -- in the fuzzy  
22 possibility, they might have come in, either though their last  
23 names didn't match. And lastly, this is why we did the  
24 validity check at the end, reliability check to determine how  
25 frequently those types of things seem to occur.

1 Q. Now, there is also a name that's, I think come up  
2 before, which is there is a gentleman whose last name is  
3 Lopez-Panero, but who has used both Lopez and Lopez as the  
4 middle name and Panero as his last name. In that case,  
5 depending upon how that configuration is in the database, that  
6 would be another one that would come up as a non-match?

7 A. That's the Wei situation. If he puts Lopez in one  
8 database and Lopez-dash in the other database, that would be a  
9 match. If they flip them so the middle name starts first, it  
10 wouldn't be a match.

11 Q. And did you look to see whether those kinds of errors  
12 were more prevalent among certain ethnic groups than others?

13 A. No. I did not look at that.

14 Q. And is it possible that it would have affected your  
15 ethnic database demographics if you found out that a  
16 significant number fell into that non-matched category that  
17 was disproportionately racial?

18 A. It would affect, I believe, if -- if the two logical  
19 things you are talking about would be Asian and Hispanic. I'd  
20 have to really think about that. I mean, to the extent that  
21 it occurs, it could affect it. Given the magnitude of the  
22 error rates that we are seeing, 14% maximum, and they were all  
23 clearly, I looked at those by name and in the sample, and in  
24 the sample, we didn't see that. I did not see a  
25 disproportionate number of -- because I went through all of

1    them personally, and it didn't hit me being look at all of  
2    these Hispanics, look at all of the Asians in there.

3           So, I would doubt, based on that, that that's the case;  
4    but it could have some effect.

5    Q.     Okay. Talking about birth dates for a minute. You  
6    mentioned the fact that there were a series of birth dates  
7    that were actually just back-fill birth dates?

8    A.     Correct.

9    Q.     When I look at your 12 steps, most of your 12 steps  
10   depend either on having a license match or on having an exact  
11   birth date match or on having the year of birth match; isn't  
12   that correct?

13   A.     Correct, when we did that --

14   Q.     And yet you would know that for those people that had  
15   1/1/1900, you could not get an exact birth date match.

16   A.     You could get a match of those cases through the same  
17   thing. Both databases show up the same, it would show up if  
18   they're using those as the placers. But generally, no, but we  
19   did do in the transition, in one of the steps -- I think it  
20   was 11 where we did fuzzy logic -- we allowed if the date of  
21   birth was that way, you still could be matched.

22   Q.     If the date --

23   A.     It didn't matter. No, you could --

24   Q.     If the day and month, if the day and month didn't match,  
25   but the year still had to match.

1 A. But, you didn't need to match their birth in 11. All  
2 you needed to match -- we gave them points. To match the --

3 MS. HICKOK: Could you call up the match date.

4 MR. RUBIN: Your Honor, the witness was  
5 finishing answering the question and counsel is interrupting.

6 MS. HICKOK: I'm just asking so he can look at  
7 it and refresh his recollection as he's talking about it.

8 THE WITNESS: The methodology used looked at  
9 names as a perfect match, and then looked at a perfect match  
10 for zip code, perfect match for Social Security, and perfect  
11 match for birth date and a fuzzy match for each of these; and  
12 you got points whether you got a fuzzy match or a perfect  
13 match. And all you had to do was get two-and-a-half points  
14 which could be done totally without birth date, and then you  
15 needed one of the variables. Either Social Security match,  
16 birth date match or zip code match.

17 If you get one of those, you are still in the  
18 list. So, we would pick some of those up. To the extent that  
19 we would not pick those up and they would cause a problem,  
20 again, that's why we did the audit check, so we would be  
21 looking at things like that. That's why -- that's exactly  
22 why, as I said, when we are done, we recognize that any  
23 matching procedure is going to have some errors. Okay? Going  
24 to have some problems in the data. You want to get a feel for  
25 how large that is and whether that's going to change your

1 results. Okay?

2                   And we found -- yeah, it doesn't because of  
3 the error rates and we do it -- they wash out and we are able  
4 to determine that. When I looked at that data, by the way, I  
5 did not see that problem in birth dates. I think it's because  
6 in 11, those types of people match enough other  
7 characteristics as well as there's a whole series where we  
8 don't look at -- well, 11, where we don't look at that, and it  
9 worked.

10 BY MS. HICKOK:

11 Q. Walk me through 11 for a moment.

12 A. 11 is simplified here, but it's a very complex process.  
13 You look at the first name/last name.

14 Q. And it says matching exact.

15 A. Matching exact.

16 Q. Okay.

17 A. You get a point. If either the first name matches or  
18 the last name matches. Okay? You then get a point -- a half  
19 a point if either the first name or last name matches fuzzy.  
20 Okay?

21           You then look at birth date exact. If that matches, you  
22 get a point, if it matches fuzzy, which is transition on the  
23 year matches, day or month matches, you get a half a point.

24           You get a point for Social Security, if it matches  
25 perfectly. You get a half a point if it matches fuzzily, so

1 you allow for the transcription of the numbers and, you get a  
2 point if the zip code matches.

3 If you get two-and-a-half points, okay, and you're  
4 female and your first name matched or your male, okay, and the  
5 last name matches and things, you're in.

6 Okay. Provided that you get at least one other match  
7 besides name and that could be on the birth date, it could be  
8 on Social Security, it could be on the zip code.

9 So, that allowed us to get a fairly wide spread of cases  
10 to minimize the false negatives, and with enough controls that  
11 it turns out when we did the audit, it actually didn't create  
12 that many false positives, either. So it actually created  
13 more false positives than false negatives, but it worked  
14 pretty well for us in terms of adding in.

15 Q. You had talked about the fact that when you went to do  
16 your distance evaluation, and your geocoding and your other --  
17 sorry, I forgot the acronym. BILS or something like that?

18 A. Bayesian Improved Surname Geocoding. BISG.

19 Q. BISG, thank you very much. That when you did that, you  
20 found that there were several instances where you could not  
21 put the address in.

22 A. To the zip code. I mean, you couldn't get a block code  
23 for it, that's correct.

24 Q. And that was because of what characteristic of the  
25 address that you were looking at?

1 A. In order to match the address, there's a whole  
2 computerized system by the census to do this type of process.  
3 And it requires an address. For instance, I live in  
4 Philadelphia in an apartment building called the Wellington.  
5 And if you enter in the Wellington and my apartment number,  
6 you will not get a match, okay? And I actually, in the  
7 database, when I was looking at the students that Dr. Wecker  
8 had developed, there were nine students who lived in the  
9 Wellington, which -- according to him -- because we're about a  
10 mile from the University of Pennsylvania, close to the Art  
11 Institute, I guess.

12 And I looked at those addresses. Some of those  
13 addresses said simply, you know, apartment number, Wellington.  
14 That will not match. If they had written down 135 South 19th  
15 Street, which is the actual address, then you can match it in  
16 the geocoding.

17 Q. So, what happens if PennDOT is using the 135 and SURE is  
18 using the Wellington? If you have those two different  
19 descriptors, or, for example, if are you in a rural county and  
20 you have one that describes something as a rural route or a  
21 rural road or a post office box, do those then look like  
22 non-matching addresses to you?

23 A. The zip code matching that we do for those analyses do  
24 not require us to get to the census block. You can take the  
25 Wellington, look at the zip code attached with that address,

1 and put it in a census track and do that zip code matching,  
2 put it to the center of the geocode. The center of the  
3 census. And then we always -- you know, how close it was  
4 within five miles, one miles, and they would be included in  
5 when we use geographic matching, they would have matched.

6 Q. Okay.

7 A. So, when you are doing that, they will match that way.  
8 The only problem that becomes is when we do the race coding  
9 and distance travelling, you can't do it -- putting in the  
10 average of the census population, because you really need  
11 exact latitudes and longitudes, but when we are doing  
12 matching, we never use exact latitudes and longitudes. So we  
13 always say within a mile, within a half mile or within five  
14 miles, so that would not create a problem for us.

15 Q. So you wouldn't have a problem if somebody put post  
16 office box X and somebody else put rural route 4 or something  
17 like that?

18 A. No, that gives us a zip plus, which is the post office,  
19 the zip plus nine code, and even if that's a post office box,  
20 a zipless, we can locate that zip plus nine. In a sense it's  
21 tracked, okay, and therefore, we can match that to somebody  
22 who gives us an exact address.

23 We can't get them perfectly matched, but we never  
24 require the addresses to be perfectly matched. We expect them  
25 to be within a certain physical relationship to one another,

1 and that's why we do that.

2 Q. And what about if towns are named different things? For  
3 example, where I live, I live in the Borough of Rutledge and  
4 the Borough of Rutledge has a Morton post office. Therefore,  
5 half of the time people enter automatically a default which  
6 says Morton, even though I actually live in Rutledge.

7 A. The answer to that is the geocoding handles that. I'm  
8 pretty sure. The reason I know that is because I have a  
9 second property which is listed under Beach Haven, Long Beach  
10 Island, High Borough -- exactly what you are saying. Five  
11 different things, and I was curious once we ran them through  
12 and they all came up with the exact same location.

13 As long as it has an address portion to it, the actual  
14 physical address, the computer probably will know that  
15 physical address with any of these towns is located right  
16 here, and it's able to do that match.

17 Q. And it's able to do that match between the SURE database  
18 and PennDOT regardless of which comes up?

19 A. Yes, because it's going to give it the exact same  
20 latitude and longitude, put it in the same census block and  
21 same census track. It's not fooled. The programs are fairly  
22 sophisticated and developed to do geocoding.

23 Q. And so, when you were doing your match, you weren't  
24 actually seeking for entries that correlated; you were looking  
25 for geocoding between PennDOT and DOS?

1 A. Yeah. Given the report -- I'll give you an example.  
2 Somebody gives an apartment number, and if you are looking at  
3 the name and address, you are going to say, 5 Not Road, 5 N  
4 Not Road, are they the same, et cetera.

5 What we use is we use the geocode program which ignores  
6 all that, takes you out to the physical address and the  
7 information and puts it in the latitude and longitude which is  
8 a specific point. Okay? We.

9 Then see if the two comes up to the same point, they're  
10 matched. Actually, if they're within a half mile of each  
11 other or a mile of each other, we consider them matches. We  
12 actually matched to five miles in some of these matches, as  
13 you recall. So, those would have created problems in this  
14 process.

15 Q. Now, have you taken into account the numbers of people  
16 who move each year?

17 A. Only indirectly. You know, I tried obviously for people  
18 that had moved out of state, had gotten licenses. I assumed  
19 therefore they moved and we tried to take them out. You will  
20 recall that -- in a lot of the analysis we do, we ignore  
21 geography, totally. So, I don't care where they are.

22 So, I tried to get around that problem by not focusing  
23 too heavily on geography and expanding it so that we try to  
24 minimize the false negatives.

25 Q. So, let's talk for a minute about the out-of-state code.

1 What did you understand the out-of-state code to represent?

2 A. My understanding of the out-of-state code is that  
3 somebody's -- you get a license in New Jersey, okay, and you  
4 give it -- and you don't want to take the driver's test, so  
5 you give them your Pennsylvania license. They will notify  
6 most, most notify Pennsylvania that you have gotten the New  
7 Jersey license. Okay? So, anybody that's gotten a -- taken  
8 -- gotten a driver's license in another state and tried to  
9 waive the taking of the actual driving test by showing them  
10 the license, my understanding is the state will be notified  
11 that that occurred, and it's noted on the PennDOT file, and  
12 our assumption is, as pointed out, that this person has  
13 probably moved out of the state.

14 Q. All right. And you said that the only thing --

15 A. Even though some of those people did vote in the  
16 November elections. A handful of them did.

17 Q. That's just what I was going to bring up. You said that  
18 there were some people who voted in November, 2012.

19 A. Right.

20 Q. But you also have data that post-dates November, 2012,  
21 by a significant amount.

22 A. Yeah, they might have voted and then changed their  
23 license afterwards. Or they could have gotten a license there  
24 and still be registered and voting out of Pennsylvania. I  
25 mean, those things can happen.

1 Q. Isn't that part of what the idea is supposed to address  
2 is people who might be voting in two different places, and  
3 prevent that?

4 MR. RUBIN: Objection, Your Honor.

5 THE COURT: Overruled. We'll allow it.

6 THE WITNESS: I don't know. I thought it was  
7 more to notify the state that you got another driver's license  
8 so you don't drive with two driver's licenses. But I'm just  
9 guessing. I really don't know what the negotiations are or  
10 why that occurs.

11 BY MS. HICKOK:

12 Q. So, are you aware that there are some people who move  
13 and have time left on their current state's driver's license  
14 who wait to turn it in until they actually need to renew it?

15 A. You lost me on that one. Again --

16 Q. So, you decide that you are going to move from  
17 Pennsylvania to New Jersey, and you just renewed your  
18 Pennsylvania driver's license.

19 A. They may wait before they get the license in New Jersey,  
20 sure.

21 Q. Right. So, to the extent that you wait and for the  
22 amount of time that you wait, there is no indication at  
23 PennDOT that you actually are out of state; is that correct?

24 A. That's correct. If you are asking me is the SURE  
25 database 100% accurate, that it contains only people that are

1 still registered and living and voting in Pennsylvania? Of  
2 course not. Everybody database has problems and errors.

3 Q. And did you take any, like, national or voting  
4 registration -- or you know, voting statistics that are  
5 reported to the EAC or any of those data to look to see if the  
6 out-of-state number accurately captured the numbers of people  
7 that are leaving the jurisdiction each year?

8 A. No, but I wouldn't expect that it would. I mean, I  
9 would expect that people that leave and don't change -- get a  
10 new license or don't bother, and there's some people that  
11 probably just get a new license and take the driver's test for  
12 whatever reason.

13 I would never expect that the OSS data is complete of  
14 everybody that left the state and isn't voting. I would never  
15 assume that.

16 Q. So --

17 A. I took them out, conservative, because I assume that all  
18 these did.

19 Q. Right. But when you have a significant number of  
20 expired licenses, if some of those people are actually not in  
21 the state at all, but have simply not turned in their PennDOT  
22 driver's license, it doesn't say anything about whether those  
23 people have valid ID for voting, what they are; does it?

24 A. I think what you are saying, and I'm going to -- to the  
25 extent that there are people in this database who have expired

1 IDs, and that's an indicator that they're left the state,  
2 okay, to the extent that those people have left the state and  
3 that's why their license has expired, then to that extent,  
4 these people would not be necessarily eligible voters who are  
5 being in the sense that they live in the state and would be  
6 properly registered.

7 Q. Okay.

8 A. But there's no way of knowing that. That's a limitation  
9 of the data.

10 Q. Unless you have looked at --

11 A. But you have to --

12 Q. -- say, national change of address forms or some other  
13 measurement that measures the number of the people who leave  
14 the jurisdiction each year.

15 A. They'd have to run these people through, and you would  
16 have to assume huge numbers of these people have left, but we  
17 did not do that.

18 Q. You did not do that. Thank you.

19 A. Right.

20 Q. Now, what is your understanding of an inactive voter?

21 A. My understanding of an inactive voter, this -- is that  
22 it's somebody who has, for some reason, the election board has  
23 reason to communicate with the person and the person didn't  
24 respond.

25 Q. And do you know what things prompt a communication with

1 the person that was responded to?

2 A. Not completely, no.

3 Q. Okay. I believe it's Exhibit -- I believe it's 235.

4 MS. HICKOK: There should be -- I think it's  
5 Appendix D that we're looking for. And this is the 2000 -- go  
6 back to the cover for him for a minute.

7 MR. RUBIN: Your Honor, could Counsel have a  
8 copy and also the witness have a copy so I'm not --

9 MS. HICKOK: Yes, they're getting the copies  
10 right now. Sorry.

11 MR. RUBIN: Fantastic. Thank you.

12 BY MS. HICKOK:

13 Q. Just this report is the 2012 report to the General  
14 Assembly by the Pennsylvania Department of State. It's posted  
15 on their website under hot topics, which is talking about the  
16 administration of voter registration in Pennsylvania, and  
17 you've been given a complete report.

18 I'm going to draw your attention, if you will, to what I  
19 believe is Appendix D; is that correct?

20 A. Appendix B?

21 Q. D.

22 A. D. Okay.

23 MS. HICKOK: Do you wanted to blow that up a  
24 little bit. Make it larger.

25 BY MS. HICKOK:

1 Q. You will see that this says this is the list maintenance  
2 activities that you were referring to where they sent  
3 communications to voters, and then the voters are supposed to  
4 respond to them. And if you see on the cover, there are four  
5 separate types of communications that are made. Do you know  
6 what those four types represent?

7 A. I guess, of these four types here?

8 Q. Yes.

9 A. Confirmation mailings, national change of address  
10 program, PennDOT change of address reports, and five-year  
11 notice mailings.

12 I assume these are different sources which are trying to  
13 determine why somebody left, which is the national change of  
14 address.

15 Q. Right.

16 A. Sort the PennDOT change of address reports, whatever  
17 that thing is within. And confirmation mailings, I think  
18 would probably be something that they want to confirm  
19 something. And five-year notice may be if you haven't voted  
20 for five years or something?

21 Q. That's correct.

22 A. Okay.

23 Q. So all of those can give rise to inactive voters.

24 A. Oh. Good.

25 Q. You said that inactive voters were immaterial to your

1 analysis.

2 A. Yeah. The reason for that is, I left them in as I  
3 pointed out because I was told -- and you have seen the  
4 data -- the inactive voters vote. And you are not ineligible  
5 to vote just because you are inactive.

6 Q. But you are if you have actually moved.

7 A. Correct. I took out all of the ineligible voters. You  
8 have 383,000 people who do not have registered, do not have  
9 valid IDs. Removing all of the odds from the analysis to see  
10 whether this would have changed significantly, my conclusion  
11 is that there's hundreds of thousands of people who do not  
12 have voter IDs. The answer is it doesn't. It reduces it by  
13 25%, but it clearly does not change your conclusion that  
14 there's hundreds of thousands. That's why my ultimate  
15 conclusion was hundreds of thousands. Make sure that -- you  
16 know, I was trying to be conservative. So, I did remove it --  
17 because I was curious about this. And I did remove all of the  
18 I's from the 511,314 and it winds up 383,000 and change.

19 Q. So removing all of the inactive voters --

20 A. That's actually important, because I didn't even realize  
21 all of the general confirmation and general mailings, et  
22 cetera, so that's probably a much more better number to deal  
23 with than the current voter population or the, you know,  
24 that's probably the right answer in the middle there. And  
25 that's pretty solid, then, my conclusion, that it's hundreds

1 of thousands.

2 Q. Okay. Let's break up what you just said. So, you did  
3 an analysis where you took out all of the inactive voters?

4 A. Correct.

5 Q. And you took out all of the inactive voters. Did you  
6 break that down by how that impacted expired licenses versus  
7 how that impacted non-matches?

8 A. I would have, but I didn't look at that, per se. I was  
9 just interested in simply what the numbers would be, the total  
10 numbers.

11 Q. Okay. So, the number of inactive voters that you took  
12 out was how many?

13 A. Everybody that has an I, was about 25% of the voting  
14 population.

15 Q. Okay. 25% of the voting population?

16 A. Of the -- of the 511.

17 Q. Of the 511,000. So, 25%, that's roughly 125,000,  
18 130,000?

19 A. The actual number brings it down to 383 and change.

20 Q. Hold on. Hold on. But if all of those people were  
21 actually in your expired license list, because all of those  
22 people were people who actually had moved --

23 A. Right.

24 Q. -- and they were inactive because of moving, then that  
25 actually takes your expired license list down by over half;

1 doesn't it?

2 A. Yeah. But there's still people for no matches in the  
3 total would be 383,000. I don't know the actual sitting here  
4 what those numbers are by group.

5 Q. I understand that.

6 Now, one of the things that you talked about when you  
7 were talking about the out-of-state as possibly overstating  
8 numbers, is you were talking about students; and you said,  
9 well, you know, students may have obtained an out-of-state  
10 license. Are you aware of the demographics of the student --  
11 college student population in Pennsylvania?

12 A. What do you mean by demographics?

13 Q. Are you aware, for example, how many college students  
14 are in Pennsylvania? How many of those come from out of  
15 state? How many come from out of the country? Anything that  
16 gives you a sense of what that college population is?

17 A. I've looked at the age mix of the college population in  
18 Pennsylvania. In the past, I've looked at such things as the  
19 demographics of it. I don't recall ever looking at an issue  
20 of who is a citizen and who is not a citizen, who is out of  
21 state and so forth. Out of this country.

22 Q. So, a person -- and let's talk for a minute -- are you  
23 aware of what the requirements are to have a valid voter  
24 registration?

25 A. For a college student?

1 Q. Period. Just for anybody. In Pennsylvania, what are  
2 the requirements to have --

3 A. Generally, it has to be a photo ID, which is  
4 substantially conforming in name, and with --

5 Q. Can I correct you for a moment. I'm asking about to  
6 register to vote. Just the very process of registering to  
7 vote.

8 A. Oh, to register to vote?

9 Q. Yes. What are you required to be or to have or to do in  
10 order to register to vote.

11 A. I don't recall seeing any -- you don't need a photo ID  
12 to register to vote. I know that.

13 Q. No, you do not need a photo ID to register to vote.  
14 Okay. In order to apply --

15 If I can represent to you, and I can pull it up if you  
16 need it; but you can apply to register to vote if, as of the  
17 date of the next election, you will have been a citizen of the  
18 United States for at least one month, a resident of  
19 Pennsylvania and the election district in which you seek to  
20 register and vote for at least 30 days, and be at least 18  
21 years of age.

22 Now, we'll get in a minute to talking about what can  
23 pull you out of that category, but that -- those are the  
24 requirements in order to register to vote. Okay?

25 So, any foreign students who are studying in the United

1 States are not eligible to register to vote; is that correct?

2 A. They're not a citizen of the United States. You can't  
3 vote.

4 Q. And any people who have -- are not intending to be  
5 residents of Pennsylvania are not eligible to vote; is that  
6 correct?

7 A. Correct.

8 Q. So, if a college student determines that they were  
9 coming here from New York, and they were going to go back to  
10 New York just as soon as they possibly could after they got  
11 out of Pennsylvania, which seems to be New York City's  
12 attitude towards us -- and they decided to keep their New York  
13 license, and they wanted to vote, could they vote absentee in  
14 their home state?

15 A. Could they vote absentee in their own state?

16 Q. Absentee. Could they vote in New York by absentee  
17 ballot?

18 A. I can't answer that specifically. I would assume so,  
19 but --

20 Q. Okay. And you know, New York is not very far away.  
21 They could drive to the polls that day, if they wanted to.

22 A. But they wouldn't be registered in Pennsylvania.

23 Q. Well --

24 A. If they're voting in New York.

25 Q. No, that's correct. They would be registered in New

1 York.

2 A. Right.

3 Q. But if somebody registered in Pennsylvania, and kept  
4 their New York driver's license, does that person have valid  
5 identification that will enable them to drive, even though  
6 they do not have a valid PennDOT product?

7 A. I don't know the answer to that if they're living in  
8 Pennsylvania and they haven't changed their license to, from  
9 their old state and they're driving on their old state  
10 license, is it still good in Pennsylvania? I don't know the  
11 answer to that question.

12 Q. Okay.

13 A. I don't know what the Pennsylvania laws are about that,  
14 whether you can drive on an out-of-state license even though  
15 you are a resident of Pennsylvania for a period of time. I  
16 don't know.

17 Q. Well, do you understand residency to turn on intent,  
18 that a person is a resident if they intend to live in  
19 Pennsylvania and call Pennsylvania their residence?

20 A. Right. As opposed -- like, I could intend to live in  
21 Pennsylvania. Okay? Registered in Pennsylvania. Maybe buy a  
22 car so I could drive. Register it in Pennsylvania because I'm  
23 now in Pennsylvania, but never change my driver's license and  
24 still keep the New York license. Can I drive on that New York  
25 license? I don't know. That's what I'm saying. I don't

1 know.

2 Q. Okay.

3 MR. RUBIN: Your Honor, this line of  
4 questioning we object to as outside the scope of his subject  
5 area, and direct examination.

6 MS. HICKOK: Actually, it's done, Your Honor.  
7 He was testifying that there was no need to look at the  
8 population of college students, and that it did not at all  
9 impact his analysis, and particularly, his analysis of the 18-  
10 to 22-year-olds, and he made statements that these were people  
11 who needed PennDOT ID and did not have them, and he drew  
12 inferences in his distance tables, in his demographic table,  
13 and his population tables, that these were people who were  
14 going to have trouble getting to PennDOT because they did not  
15 have a valid means of getting to PennDOT.

16 To the extent that these people are college  
17 students who have come from out of state, with identification  
18 that is out-of-state identification that they are using to get  
19 around in Pennsylvania, they have no problem getting to  
20 PennDOT to get any kind of ID that they desire.

21 So, the inferences that he's drawing and that  
22 go way down through his tables are very relevant to this line  
23 of questioning.

24 THE COURT: Are you going to present an expert  
25 to tie this together?

1 MS. HICKOK: We will have both factual and  
2 expert witnesses that will tie this together.

3 THE COURT: I'll let her ask those questions.

4 MR. RUBIN: Your Honor, on the expert point,  
5 we're not aware of any expert report that has been submitted  
6 per the scheduling order that addresses this issue.

7 THE COURT: We'll let her continue.

8 MR. RUBIN: Okay.

9 BY MS. HICKOK:

10 Q. Now, let's talk for a moment about these people who are  
11 out-of-state persons that are on a college campus in  
12 Pennsylvania.

13 A. Okay.

14 Q. If those people get a Department of State ID, those  
15 people can vote -- and they're registered to vote in  
16 Pennsylvania, then those people can vote in Pennsylvania; is  
17 that correct?

18 A. That's correct.

19 Q. And if those people have a student ID that is valid  
20 under Pennsylvania's law, they could vote in Pennsylvania; is  
21 that correct?

22 A. That's correct.

23 Q. Now, if those people kept their out-of-state ID, we just  
24 went through the scenario where they actually also could vote  
25 in another state; is that correct?

1 A. If they're registered in that state.

2 Q. Right. And --

3 A. Registered in two states? You mean they're registered  
4 in Pennsylvania and New York right now? Theoretically, they  
5 could choose where they wanted to vote. I mean --

6 MR. RUBIN: Objection, Your Honor, this  
7 violates the stipulation I believe on fraud. I believe she is  
8 suggesting that this somehow is evidence of voter fraud which  
9 they stipulated they're not bringing into this case and making  
10 no arguments or offering any evidence on it.

11 I think this squarely violates the stipulation  
12 that's in effect in this case.

13 MS. HICKOK: The stipulation was in effect for  
14 the preliminary injunction. There has been a supplemental  
15 interrogatory response, and the stipulation talked about  
16 in-person voter fraud. It did not talk about the possibility  
17 that would be precluded by looking for identification as a way  
18 to prevent people from voting in two places.

19 MR. RUBIN: Your Honor, the stipulation  
20 specifically and clearly -- I'm having my co-counsel obtain it  
21 for the Court -- says that it applies to this action. It was  
22 in no way limited to the preliminary injunction. It is still  
23 fully binding. There's only one paragraph to it that spoke to  
24 the November 2012 election. I'm happy to hand that up to the  
25 Court at this time.

1 MS. HICKOK: The supplemental interrogatory  
2 response -- can we get the supplemental interrogatory  
3 response -- which superceded that stipulation.

4 THE COURT: Counsel, I'm going to let her  
5 continue because it's cross-examination; and if she is  
6 successful in bringing something out that weakens in any  
7 fashion Dr. Siskin's testimony in chief, I'm going to permit  
8 it. Okay?

9 MR. RUBIN: May we have an exception and  
10 reserve our right to object --

11 THE COURT: Sure.

12 MR. RUBIN: -- if they try to use this  
13 testimony to argue some sort of fraud issue?

14 THE COURT: Sure. And you will be able to  
15 talk to Dr. Siskin again on redirect. Okay.

16 MR. RUBIN: Thank you, Your Honor.

17 MS. HICKOK: Can we put what we're calling the  
18 sticker tracker up, please. I believe it's 127.

19 BY MS. HICKOK:

20 Q. Dr. Siskin, let me represent to you that this is a  
21 document that's maintained in the ordinary course of business  
22 by the Department of State. It was generated in response to  
23 Act 18, and was a way of measuring -- and there will be  
24 factual testimony from our witnesses later on in this hearing  
25 that will establish that this was maintained in the ordinary

1 course of business as a way of tracking for the 183  
2 institutions of higher education in this state, which of those  
3 are issuing compliant voter ID. Does this have the full --  
4 it's truncated to me.

5 Okay. I see. Thank you.

6 As you look down this list, you can see that -- and as I  
7 had heard you testify, you are -- you have been -- you have  
8 done your graduate and undergraduate education in  
9 Pennsylvania, so I'm certain that as you look down this list  
10 at the colleges that are already providing compliant  
11 identification, that you will see that the largest colleges  
12 and universities in Pennsylvania are providing compliant  
13 identification; is that correct?

14 MR. RUBIN: Objection, Your Honor. Misstates  
15 the exhibit.

16 MS. HICKOK: I'm sorry?

17 MR. RUBIN: She is making representations  
18 about the exhibit that are not in evidence, lack of  
19 foundation, and it patently misstates what's on the exhibit  
20 itself.

21 THE COURT: Overruled.

22 THE WITNESS: I haven't gone through this  
23 exhibit, but I -- I'm not going to challenge it, if you say  
24 that. I assume that a lot of colleges would give IDs with  
25 stickers.

1 BY MS. HICKOK:

2 Q. And if you could look for me at the University of  
3 Pennsylvania.

4 A. Yes.

5 Q. And that is highlighted as being one of the institutions  
6 that is offering compliant ID.

7 A. Yes.

8 Q. In your distance table, when you were talking about  
9 distances in Philadelphia, you had 620 voters that listed  
10 their address as being at 3901 Locust, which is the actual  
11 address of the University of Pennsylvania, and that distance  
12 was 2.89 miles.

13 Now, if you had taken into account in your analysis the  
14 fact that all of those students had access to ID, and did not  
15 need driver's licenses, then the distance table would change,  
16 and the number of people who needed identification would  
17 change, and would not also the demographics change? Isn't the  
18 University of Pennsylvania a model of diversity?

19 MR. RUBIN: Objection. Compound question.

20 I'm not sure which one she wants the witness to answer.

21 MS. HICKOK: I'm sorry. I can break it down.

22 THE COURT: If Mr. Siskin needs some help, he  
23 can --

24 THE WITNESS: I'm trying to answer, but  
25 correct me if I'm missing --

1 MS. HICKOK: I apologize for making that  
2 compound.

3 THE WITNESS: I do believe Pennsylvania makes  
4 significant efforts to try to be a diverse university.

5 The demographics of the study would change,  
6 yes and no. And be careful -- my study says these are people  
7 that do not have PennDOT IDs. What's the diversity of that  
8 group and how far does it take them to get to this group, and  
9 the answer is, those numbers don't change. Those answers in  
10 my report is the -- my report is the correct answer for that.

11 If you are asking me if I were able to -- it  
12 would be more than Pennsylvania -- remove everybody who is a  
13 college student and has access to a college ID, would that  
14 change things? I don't think much that it would change the  
15 driving distances that differently because we are taking out  
16 people, colleges are typically going to be no greater or  
17 further away from the -- from the driving license centers.

18 So I doubt that that's going to have much of  
19 an impact. I mean, anything is possible because you don't  
20 know until you run numbers.

21 BY MS. HICKOK:

22 Q. But it could well impact your demographic then.

23 A. Would it impact the demographics? The question there is  
24 well, it's a university. Most colleges, even the diverse  
25 colleges, underestimate the number of minorities in the

1 general population because minorities are less likely to go to  
2 college. Okay? Therefore, it's not clear to me and I would  
3 have to look at some numbers to say whether I could say  
4 anything or not.

5 Hold on a second. Okay. These numbers show white  
6 population being about -- it shows the black population,  
7 89,265 -- about 18% African-American.

8 The question would be, and I would have to check, if the  
9 college population in this state is more than 18%  
10 African-American, it could -- it would -- be expected,  
11 therefore, assuming it's random, to increase it. If it's less  
12 than 18%, it would decrease it.

13 My guess is that African-American population of college  
14 students in this state is probably not much different or may  
15 be a little less than 18%. I would have to check the numbers,  
16 but I -- I don't think it would have much of an effect,  
17 because I think -- that's something that I would want to do,  
18 but check with the population of college students is black  
19 among Pennsylvania residents. You can get those numbers, and  
20 you look to get to this number and it will give you a ballpark  
21 idea.

22 Q. And are you generally familiar with the Department of  
23 Education's data about how many college students there are in  
24 Pennsylvania?

25 A. I am familiar with the database. I have used it

1 frequently. Do I remember those numbers off the top of my  
2 head? No.

3 Q. If I represent to you it's about 835,000 people, does  
4 that sound right?

5 A. 835 people in Pennsylvania?

6 Q. 835,000 college students in Pennsylvania; does that  
7 sound right to you?

8 A. I had some numbers -- yeah, that probably is correct. I  
9 wouldn't dispute that, that sounds -- I did some age numbers.

10 Q. So, to the extent that the demographics on those college  
11 campuses are demographics that would impact -- well, they  
12 certainly impact your 18- to 22-year-olds; is that correct?

13 A. Well, if they're going to be there, they're going to be  
14 more likely in the 18- to the 22-year-old group; that's  
15 correct.

16 Q. So, your number, which said that the 18- to 22-year-olds  
17 disproportionately lack PennDOT ID --

18 A. Is correct.

19 Q. Is -- is correct --

20 A. But --

21 Q. It's correct for that, but to the extent that it doesn't  
22 take into account the fact that those people may feel no need  
23 to get a PennDOT ID because they have a valid student ID, it  
24 doesn't in any way impact their ability to vote.

25 A. The analysis -- you are -- what you are saying is

1 correct, that if you -- my studies did not address the  
2 question of having other IDs. There was no way of doing it  
3 within the dataset effectively and efficiently.

4 The question would be obviously college IDs, to the  
5 extent these people have college IDs and could vote that way,  
6 they're going to be disproportionately in the 18- to  
7 22-year-old group. There was no question about that.

8 Q. Okay.

9 A. If you take out all of the 18- to 22-year-old group,  
10 you're still left with hundreds of thousands of people without  
11 an ID, so that's not going to explain that problem; but it  
12 would change that demographic somewhat in that group.

13 That's why I think to a certain extent that young group  
14 stays out, because you recall what I said is things associated  
15 with age, and one of those things would be that they may be in  
16 college and therefore less likely to need a PennDOT ID.

17 Q. But, again, to the extent that they have other ways of  
18 getting about -- I mean, obviously, they're doing what they  
19 need to do to survive on campus, so so long as they are  
20 voting, whether they have a PennDOT ID is not probative of any  
21 question in this action; is that correct?

22 MR. RUBIN: Objection, to the extent it calls  
23 for the witness to offer a legal opinion as to what's  
24 probative.

25 MS. HICKOK: I'm sorry. He testified that his

1 data were probative, and I actually have the quote somewhere.

2 And I was following up on his own words.

3 THE WITNESS: Well, what I was going to say  
4 is, to the extent -- and my analysis says three things. The  
5 extent of my analysis says these people do not have PennDOT  
6 IDs. I think that's absolutely -- that data is correct and  
7 reliable. To the extent that I'm saying that -- I do not say  
8 that they do not have other types of IDs. Okay?

9 To the extent that they would have college  
10 degrees -- the IDs, the 18- to 22-year-olds cannot explain and  
11 change my conclusions of hundreds of thousands of people  
12 without IDs because there are just not enough of them in that  
13 population of people without IDs.

14 Would it change the demographics? Yes. Would  
15 it mean that these people are not being harmed by not having a  
16 PennDOT ID in terms of voting because they have a school ID?  
17 Of course. If they have a school ID which is valid, they  
18 don't need a PennDOT ID.

19 BY MS. HICKOK:

20 Q. And if you look at Carnegie Mellon University -- and can  
21 you --

22 A. I'm familiar with them. My daughter-in-law went there.  
23 And I went to Pitt. They were nextdoor neighbors.

24 Q. On the sticker tracker. Is Carnegie Mellon also one of  
25 those that's issuing compliant ID?

1 A. Yes.

2 Q. And in Carnegie Mellon, when you were measuring the  
3 distance to -- that they would have to travel to go to a  
4 PennDOT center, you said that the most common distance would  
5 be 2.89 miles. For the 1,039 voters that listed as their  
6 address Carnegie Mellon University, would that impact your  
7 Allegheny County data at all, to know that those people don't  
8 actually need to get to PennDOT?

9 A. Assuming they don't, it would change those numbers, but  
10 if you take this and look at what we have -- we have that  
11 Table for PennDOT which is Pittsburgh, Allegheny County.

12 You said it would take them how many miles?

13 Q. You said 2.89, I believe.

14 A. Right. Yeah, it would -- Allegheny County, the average  
15 -- the median distance, 2.9, is a low -- very short distance.  
16 So, by taking that, times the travel, it goes up. It's a  
17 further distance and the longer travel for the remaining  
18 people.

19 As I said, I didn't see what colleges would be generally  
20 not either as close or -- originally distributed close to the  
21 PennDOT license places.

22 Q. Now, what about --

23 A. But these are all --

24 Q. What about an outlying county like Clinton County, where  
25 I believe Lock Haven University is in Clinton County? And to

1 the extent that you have a significant number of students that  
2 are living at Lock Haven University, that would have a  
3 significant impact on that smaller county; would it not?

4 A. You're correct. When we look at your data and the  
5 smaller you make your datasets, when you look at data by  
6 county in the report, it's going to be much more sensitive to  
7 the random error. So, therefore, if there are errors and  
8 there's a problem with the schools, it will distort that data  
9 much more frequently and much more significantly than its  
10 having any effect on the full set of data.

11 So, when you look at a specific county, a situation  
12 where there's a college in that town. You are looking at that  
13 county's data by isolation. Should be done with a little bit  
14 of caution. I mean, it -- it doesn't affect what I was saying  
15 because I wasn't studying the issue of college, but if you  
16 wanted to address the issue of colleges, okay, then I would  
17 say, reading the data when you get to the specific counties,  
18 that is something that one should take care of.

19 But it shouldn't have an effect overall in the overall  
20 patterns of driving patterns, et cetera. The smaller you make  
21 the data, the more sensitive your results are to those  
22 exceptions.

23 Q. And didn't you understand Dr. Wecker's point to be that  
24 he thought that it was necessary for you to take into account  
25 where there are colleges and universities with compliant ID,

1 that he thought that was an important piece of your analysis  
2 that wasn't done?

3 A. No. I thought his -- I thought Dr. Wecker's concern was  
4 he -- in terms of my analysis, is that my analysis is -- as I  
5 pointed upfront and maintained, of course, was looking at a  
6 very specific question dealing with PennDOT IDs. He pointed  
7 out that he thought it was of no value because it didn't look  
8 at these other IDs. And as I pointed out and explained two  
9 things. One is, okay, you do get information directly from  
10 this in terms of how many people don't have PennDOT IDs.

11 Estimating how many have other IDs is a much more  
12 difficult data problem because there's not very direct data  
13 for that. Survey data may be much more reliable. Other  
14 techniques may be much more reliable to estimating those  
15 issues.

16 The -- Dr. Wecker's attempt to show that college  
17 students matter I think is inappropriate, and if you take his  
18 data in terms of college students, and if you take the data as  
19 I pointed out, just assuming that everybody between 18 and 22  
20 years old are college students, clearly does not change my  
21 conclusion, which is exactly what I'm saying.

22 And if we start with the PennDOT data and we know what  
23 those numbers are, we can make some assumptions or guesses for  
24 other information included in your decision to determine how  
25 many of these people logically or consistently have college

1 degrees, have nursing home degrees -- have nursing -- excuse  
2 me, not degrees. Have college IDs. Live in a nursing home.

3 And the third one, I -- it's nursing home...

4 Q. Military bases.

5 A. Military. Okay. And you could figure out whether it's  
6 reasonable to assume that 80% of this group have those IDs.  
7 Okay? And everything that I've seen would say that's not an  
8 unreasonable assumption at all.

9 The other question of when I get down to the question of  
10 I'm looking at a county which is small numbers, could the fact  
11 that they're a college town, change those numbers from those  
12 towns. And I never put those counties out to be stand-alone  
13 items and draw conclusions from those counties in isolation.  
14 It was always looking at the general patterns overall.

15 Q. Although, you did talk about driving distances.

16 A. Well, to get an overall for the whole groups of  
17 counties, et cetera. And for driving distances, it's not  
18 clear to me that the college students would have much of an  
19 impact on that. I mean, that's not --

20 Q. Even in a place like Clinton where Lock Haven University  
21 is so large or a place like Franklin County --

22 A. But if you are looking at Clinton and Lock Haven is so  
23 large, everybody that's left is still in the same county and  
24 the question is how far do they have to drive. And they are  
25 driving the same distances as Lockheed [SIC], unless Lockheed

1 [SIC] University tends to be right -- seems to be far away  
2 from the DOL, for some reason, the averages will probably work  
3 out on that aspect. What will change is the number of people  
4 without appropriate ID to vote in that county. That number  
5 would change more significantly.

6 THE COURT: Do you want it take a ten-minute  
7 recess now? Okay. We'll do that.

8 MS. HICKOK: Thank you.

9 (THERE WAS A RECESS FROM 2:56 P.M. AND UNTIL  
10 AT 3:10 P.M., AND THE PROCEEDINGS CONTINUED AS FOLLOWS:)

11 THE BAILIFF: Commonwealth Court is now in  
12 session.

13 THE COURT: Okay.

14 MS. HICKOK: Thank you, Your Honor.

15 BY MS. HICKOK:

16 Q. Before the break, we were discussing some of the  
17 comments that Dr. Wecker had made, and in your testimony one  
18 of things that you had said is that you questioned why he  
19 would take a care facility from the list and expand the  
20 geography to look at a tenth of a mile or that circumference  
21 around that facility; is that correct?

22 A. Right.

23 Q. And did you look at any of the descriptions of those  
24 facilities to understand why he did that?

25 A. I had the name and addresses, no. I didn't look at the

1 facility.

2 Q. So, you didn't look them up. Are you familiar with the  
3 concept called a continuing care community?

4 A. No.

5 Q. In your non-match and expired license data, there were a  
6 number of places that had come up. Willow Valley is one of  
7 them. Lima Estates is another. Willow Village is another.  
8 I'm trying to name names you might be familiar with in  
9 Delaware County and that area. There are facilities that  
10 offer a continuum of care where they have a skilled nursing  
11 facility, they have an assisted living facility, they have  
12 independent living apartments or homes or areas like that; and  
13 some of them are quite remarkable, actually, as I'm sitting  
14 here on the websites looking at these places.

15 And because they are part of a complex, they are all  
16 enabled to offer ID to everyone who is a resident in any form  
17 of that facility. And so, the fact that there is an address  
18 that has, say, the assisted care facility, or the skilled  
19 nursing facility, that address does not accurately capture the  
20 addresses of seniors who are entitled to the IDs by the  
21 facilities that issue them.

22 And it is for that reason that Dr. Wecker had  
23 concluded -- and of course he'll testify to this, but I was  
24 wondering if in your analysis that he should not have used  
25 that, you took into consideration the fact that there actually

1 are different addresses associated with the different levels  
2 of care that are offered by those communities?

3 A. I did not see that. If he did that -- and because  
4 essentially what I saw is he took a .10th of a mile around  
5 every facility. So every facility would have to have been  
6 that way. If he had done it on selected ones, I would have  
7 questioned it and figured out why.

8 If it turns out that all of these facilities do have  
9 this ring around it and therefore people that are in that  
10 facility are within a tenth of a mile, then I would not object  
11 to what he did. But I didn't know that and I'm not sure  
12 that's really true.

13 For every facility you can give an example for a handful  
14 of facilities, and this is of course one of the problems with  
15 trying to do this.

16 Q. And I fully agree with that. I was just asking if you  
17 had looked into the way that the community -- that the  
18 continuing care facilities don't present just a single  
19 address.

20 A. No, I didn't -- again, I -- my initial studies didn't  
21 deal with that. When I looked at what Dr. Wecker did, I  
22 didn't go a lot further than to say I looked at his  
23 methodology. I have serious questions about most of the  
24 methodology. I thought it overestimated in almost all of the  
25 cases the number of people, the numbers; and again, and then I

1 said, if I accept -- even if I accepted all of his numbers,  
2 we're still going to have the same conclusion it's hundreds of  
3 thousands of people without a license, or not going to have  
4 them be in the care facilities, not going to be in the  
5 military facilities. So that I didn't need -- there was no  
6 reason to have to go into that kind of detail in the study.

7 Q. Did you understand him to have undertaken an exhaustive  
8 summary of all of the eligible forms of ID that are available  
9 in Pennsylvania?

10 A. No, but he looked at those. My comments were with  
11 respect to those IDs. And you can have other IDs which,  
12 again, I didn't study -- didn't study, and again, I don't know  
13 how you would study them other than maybe through a survey.

14 Q. So, for senior facilities did you understand him to have  
15 assessed the population in every care center, and I -- on the  
16 extensive list that is qualified to issue IDs, or to have  
17 taken every community that is qualified to issue IDs, and to  
18 have added those together?

19 A. That was my understanding is he took all of those on his  
20 list, he took within and added them. My understanding when I  
21 looked at his programs, that's what I thought he was doing.

22 Q. Did you understand that he was only looking at your data  
23 and not looking at --

24 A. No, but my data -- he is using it on my people because  
25 that's the only people that are relevant. He's asking the

1 question how many of my people live in those facilities.

2 Okay, so therefore he's doing all, but he's looking -- my  
3 understanding is he looked at all of the facilities. If any  
4 of them lived within a tenth of a mile of the facility, he  
5 counted them.

6 Q. Did you also understand that he looked at a random  
7 sample in the same way that you have looked at random samples?  
8 He didn't look at every piece of data, is that correct?

9 A. I did not assume that it was a random sample, but that  
10 wouldn't matter as a statistician, did a valid random sample,  
11 should get the right result, but we would have the same  
12 problem.

13 Q. Okay. Are you -- you had testified earlier about  
14 absentee voters and you had said that it was your  
15 understanding that unless you were military, that you needed  
16 to have four digits of the Social Security number or a  
17 driver's license number or photo ID; is that correct?

18 A. That was my reading of it. And again, I'm not a lawyer.

19 Q. I understand. I understand.

20 A. I read the statute and I might not be totally correct.

21 Q. And if I were to tell you that there are actually other  
22 statutes and actually Act 18 refers to other statutes that  
23 become exempt from the identification requirements -- for  
24 example, the people who come under the BAEH, which is the --  
25 I'm not going to do it right -- the voting accessibility for

1 the elderly and the handicapped? People who are under that  
2 statute are exempt from the absentee requirements. People who  
3 are subject to UMOGA, which is the state statute that was  
4 recently enacted that protects veterans and protects military,  
5 those are entitled to absentee ballots. Would that impact --

6 A. Entitled to absentee ballots or entitled to --

7 Q. Without the, without the identification requirements.

8 A. Okay.

9 Q. Would that impact your assessment of whether absentee  
10 ballots would have been important to look at?

11 A. No. My concern was that the absentee ballots, the way  
12 they were being looked at, are not appropriate estimates.  
13 Clearly, there are people that can vote absentee, and cannot,  
14 would not be required to have a PennDOT ID or any other photo  
15 IDs. But my concern was, major concern was the population in  
16 these counties, people that ever voted absentees.

17 And as I said, 38% of those people who I looked at voted  
18 absentee and then voted at the polls. When they voted at the  
19 polls, those exemptions all fall away, and they would have to  
20 have a voter ID. So, that -- and the people that were putting  
21 in the Social Security numbers, are going to be reduced by the  
22 problem of having a -- not having a valid Social Security.

23 So, my concern there, constraint there, as I pointed  
24 out, was that that number was much too large an adjustment.

25 To consider absentee ballots as a circumstance that some

1 of these people can vote absentee, okay, would be in the same  
2 category with, you know, some people could pick up nursing  
3 home IDs. Some people may be able to get a college ID.  
4 They're all aspects which my study is not directly addressing  
5 and could have some indication of reducing that number. But  
6 I'm saying that everything that I have seen in the data, and  
7 everything that Dr. Wecker has done, and everything in his  
8 counts would lead you to conclude that you're still going to  
9 wind up with hundreds of thousands of people, no matter what  
10 you do, unless -- unless, the absentee ballots go tremendously  
11 through the roof.

12 Q. Well, I think my question was --

13 A. So --

14 Q. I think my question is a little different.

15 You had identified two different demographic groups that  
16 you said were specifically disadvantaged in terms of being  
17 able to get PennDOT ID.

18 One you identified was the 18- to 22-year-olds, and the  
19 others that you identified -- and if I can group them  
20 together -- I believe it started at 70.

21 A. Right.

22 Q. And then as you go from 70, and you go up, those numbers  
23 get increasingly higher?

24 A. Right.

25 Q. But the 18- to 22-year-olds, the college identification

1 is specifically targeted in the statute to reach that group  
2 that might not otherwise have PennDOT ID, and both the senior  
3 center IDs and the absentee ballots, and particularly, the  
4 no-requirement absentee ballots, are designed specifically to  
5 reach people such as aging veterans, such as the very elderly,  
6 such as the handicapped, in which case the fact that those  
7 people might have PennDOT ID, and in disproportionate, was  
8 actually something that was factored in in the statute; was it  
9 not?

10 A. I would agree with you if what you are saying is that  
11 there are -- for those two groups, some of the factors, which  
12 may be correlated of causing that disparity, not making it go  
13 away, but causing some of that disparity, which would be on  
14 the up-side, the higher side that they're in nursing home and  
15 care facilities, making it easier for them to vote absentee  
16 without a ballot, and the younger being college students,  
17 yeah, that would, that would -- I would assume -- minimize to  
18 a certain extent the disparities with those groups.

19 Q. But because it wasn't a part of your analysis, you can't  
20 quantify the extent to which it would minimize it; can you?

21 A. I can't do it within the dataset that I have reliably,  
22 that's correct, because of --

23 Q. Thank you.

24 A. It would be, you know -- you could probably get an  
25 estimate of what portion -- some portion, you could get some

1 very rough estimates; but it would be very difficult to do.

2 Q. And did you look, when you were looking at your  
3 individual counties, at where the military bases are --

4 A. No.

5 Q. -- in Pennsylvania?

6 So, to the extent that you have a county like Franklin  
7 County, and you have -- I don't remember exactly. You can  
8 pull it back up. I think you had just about 3,000 people in  
9 Franklin County that did not have ID, driver's licenses; and  
10 the largest employer in Franklin County is the Letterkenny --  
11 if I'm pronouncing it correctly -- the Letterkenny Depot which  
12 employs 3600 people as a military base.

13 Couldn't that explain your PennDOT, because those people  
14 are coming in stationed from other states, right? So, they  
15 wouldn't necessarily -- if they were stationed for a while and  
16 then went out, they wouldn't necessarily get PennDOT ID.

17 A. That could explain. That could explain it. And if you  
18 read my report, you will see that I said, as I testified, I  
19 was asked to break it out by county, which I did, and the only  
20 conclusion I drew in there was that in every single county,  
21 there's a shortage of people who do not have -- not a  
22 shortage. There's a number of people who do not have a -- and  
23 a reasonable portion of people who do not have a valid PennDOT  
24 things --

25 Q. But they may have other alternative explanations for

1 people --

2 A. If you are going to study each of the counties  
3 individually and make a conclusion, you would probably want to  
4 factor those, those aspects which were not part of my study  
5 into that.

6 Q. And did you take into account at all the indigency  
7 exception that is in the statute?

8 A. I don't remember that. If you are reporting ways for a  
9 picture ID -- I don't remember that, if that's what you are  
10 talking about. I don't remember that -- I don't know what you  
11 are talking about.

12 Q. So, you didn't study it at all and look at how that  
13 might impact the information that you're look at?

14 A. The studies that I did statistically, when I'm doing  
15 demographics tell you where there's an association between  
16 those factors and the outcome. It tells you where there's a  
17 difference, and it tells you that those differences are real.

18 Those studies are not designed to tell you why. That  
19 requires the next step. Statistical study is telling you is  
20 that blacks are much less likely to have voter IDs. It may  
21 tell you that certain counties have higher numbers. Okay? It  
22 tells you that the older and younger, okay? It doesn't tell  
23 you what that -- and it tells you there's something related to  
24 it. It doesn't say it's because of. It never says because  
25 of. It says something related to it.

1 That next step would require these type of -- somebody  
2 looking at the data, a judge, looking at all of the facts and  
3 the situations to see whether that's -- what that's telling  
4 you and what the questions you're asking are.

5 Q. And you didn't undertake that?

6 A. No, I wasn't charged with that.

7 Q. Thank you. Now, you had testified that Dr. Wecker had  
8 pointed out, I believe it's the DC code in the status codes on  
9 the PennDOT database which represents the dead voters?

10 A. Correct.

11 Q. And do you know how a DC code gets put into the PennDOT  
12 database?

13 A. Not specifically, no.

14 Q. Okay. As I'm sure you're aware, the Department of  
15 Health is the one who maintains the vital statistics, and then  
16 reports it out to the agencies. So, when PennDOT gets it, the  
17 OH reporter will upload it. When SURE gets it, the OH  
18 reporter will upload, you know, whenever that comes.

19 So there could be a lag time, could there not, between  
20 the time that a person is actually deceased and the time that  
21 Department of Health reports the death?

22 A. Sure.

23 Q. And if that lag time was not accounted for in your  
24 database, then there may be more deceased voters than the ones  
25 that Dr. Wecker found; is that correct?

1 A. Sure. There are people that are dead that aren't  
2 reported in the database yet. They wouldn't -- they wouldn't  
3 be included. That's one of the limitations. It just says  
4 there are people who have registered to vote after this  
5 database. Not all of those people are going to have licenses  
6 and they're not included, either.

7 Q. And certainly, a person who is deceased is not going to  
8 be able to renew their license; is that correct?

9 A. It would be very difficult.

10 Q. So, they might be on your expired license list, but for  
11 a legitimate reason. They also are not going to show up to  
12 vote in the November. At least we hope not, right?

13 A. As I testified, I had no problem with Dr. Wecker's  
14 suggestion of removing the people who were those -- where  
15 there's any indication of being dead. I have no problem with  
16 that.

17 Q. But they are in your report as it stands?

18 A. Yes. As I said, they won't change the conclusion  
19 because they're small number, but the answer is yes, I would  
20 have removed them if I --

21 Q. And had you done anything where you like looked for  
22 obituaries or anything like that to test whether your data  
23 were current?

24 A. The death rates of these people are likely that it could  
25 change these numbers are zero or to significantly so that that

1 type of -- that type of exercise is a waste of resources.

2 Q. Now, did you look at the data on felons on hold?

3 A. Felons on hold?

4 Q. Mm-hmm.

5 A. No.

6 Q. Do you know what felons on hold is?

7 A. No, I assume that's -- no, I do not specifically.

8 Q. It's one of the status codes in the SURE database that  
9 you were given, and it is --

10 A. It's one of those codes which I'm not sure gives you an  
11 X, and therefore, knocks you out of being eligible.

12 Q. Right. If it's marked, it tells you that that person is  
13 ineligible?

14 A. Correct. That's one of the -- there's a slew of them  
15 and I saw the death codes and --

16 Q. Right.

17 A. That gets you an X, and that's why I said, you only pick  
18 A and Is.

19 Q. And to the extent that that captures those people who  
20 cannot vote because they are incarcerated, that number is a  
21 good number. But to the extent that it vastly understates  
22 that number, then there has to be a way to take into account  
23 incarcerated felons, does there not?

24 A. If you're saying that there are lots of people in the  
25 database who are felons but have not been removed yet, and

1 those felons would be likely not to have a driver's license or  
2 a PennDOT ID, then it could affect the results. I mean,  
3 there's no way of knowing that.

4 Q. Well, let me walk you through a couple of documents, so  
5 we can explore that further.

6 MS. HICKOK: Can you put up R 225 for me.

7 BY MS. HICKOK:

8 Q. Dr. Siskin, I will represent to you that this is the  
9 invalid status that you were talking about, and this was a  
10 extract that was done by SURE to talk about the numbers of  
11 felons on hold that were in the database, and those are people  
12 that have been reported to SURE as being felons who are  
13 serving their time.

14 And if you look at this, does anything look remarkable  
15 to you about it?

16 A. It's a small number of people.

17 Q. It is a very small number of people. Is Philadelphia on  
18 here?

19 A. No.

20 Q. Would you find it incredible that there would be no  
21 currently incarcerated felons from Philadelphia?

22 A. No. Clearly, people in jail, felons in Philadelphia.

23 Q. I would think so. So I thought I would run my own  
24 little test. Okay. So, if we could just put up the screen  
25 shots from my little test.

1 And in order to get into the public SURE portal, you  
2 have to have a date of birth. So, I took, you know, somebody  
3 who has been in the news, former Senator Fumo, and I did a  
4 Wikipedia lookup to get a date of birth on him and --

5 MS. HICKOK: Ron, do you want to go to the  
6 next one.

7 BY MS. HICKOK:

8 Q. So then I went to the Federal Bureau of Prisons'  
9 website, and I looked up Senator Fumo to make certain and I  
10 was correct, he is still in federal prison right now.

11 And I then went to the SURE site, public SURE site, and  
12 I looked up Senator Fumo in the public SURE site, and he is  
13 actually listed as an active voter in Philadelphia, even  
14 though he is not currently eligible to vote.

15 And as you said earlier, one would expect that there  
16 were actually a number of other people from Philadelphia who  
17 were in that position; is that correct?

18 A. I would assume there's some, sure.

19 Q. And state-wide, one would assume that there are other  
20 people in that position?

21 A. Right.

22 Q. Did you at all look at demographics from the state  
23 penitentiaries or the federal prisons or any of the other  
24 things to estimate how many people you would have expected to  
25 see as inactive voters?

1 A. No.

2 Q. Would you expect somebody who was incarcerated to be  
3 renewing their driver's license?

4 A. I do not know.

5 Q. Well, I mean, if you are incarcerated for ten years, you  
6 might not think that that's the most important thing to do,  
7 but it could explain some number of your expired driver's  
8 licenses, at least, could it not?

9 A. Sure. It's possible.

10 Q. Okay. If we could pull up R 245, please. I know you  
11 had had -- were talking about the community corrections  
12 centers, and you were expressing some confusion about who can  
13 vote, and when they can vote, and how they can vote.

14 And so I pulled up the policy on the voting rights of  
15 convicted felons, misdemeanants and pretrial detainees. And  
16 if you look on that -- and I'll give you a moment to read it,  
17 but the first question I'm going to ask you is whether a  
18 community correction center is considered incarceration.

19 A. If a community --

20 Q. Correction center, which I think you referred to as a  
21 halfway house?

22 A. Right.

23 Q. Is considered incarceration for the purposes of  
24 determining eligibility to vote.

25 A. I don't know the answer to that.

1 Q. It's --

2 A. I can read it?

3 Q. Yeah.

4 Can you put up the page.

5 A. What --

6 Q. So, right here where it says, who cannot register and  
7 vote.

8 A. Right.

9 Q. Do you see where it says individuals in a halfway house  
10 or other alternative correctional facility on pre-release  
11 status for conviction of a felony --

12 A. Will not be released before the date of the next  
13 election.

14 Q. That's correct.

15 A. Right.

16 Q. And when you put in the numbers of people in  
17 Philadelphia -- and we only looked at Philadelphia. That's  
18 why there's not other places in the state.

19 But when you put in the numbers of the people from  
20 Philadelphia who registered using a halfway house address, if  
21 you look at residency, does it say that you are not allowed to  
22 use a community corrections center or halfway house to  
23 register, and that indeed, those people, if they were  
24 convicted for a felony, are not eligible at all to vote?

25 A. I think you're going to -- my reading is a lay person's

1 reading.

2 Q. That's fine.

3 A. You know, I'm just reading it says here, to me, for the  
4 purposes of determining residency, an inmate in a penal  
5 institution is deemed not to -- is deemed to reside where he  
6 last registered to vote.

7 Q. Okay.

8 A. Before.

9 Q. Which is not the halfway house, correct?

10 A. I mean, was not registered to vote prior to confinement,  
11 the individual is deemed to reside at the last known address  
12 before confinement.

13 And new residency established while confined, for  
14 example, the inmate's spouse established a new residence or if  
15 he leaves a penal institution, including a halfway house,  
16 cannot be residential address for registering to vote.

17 I have no idea what -- in your question which of those  
18 it falls into, if any.

19 Q. Well, if it says a penal institution, including a  
20 halfway house, cannot be used to register to vote --

21 A. Right.

22 Q. Then a halfway house is an invalid address for voter  
23 registration purposes; is it not?

24 A. I assume -- my understanding of that would be if there  
25 are halfway houses which do more than taking people from

1 prisons, and they can do drug treatments and other things that  
2 people there living in that halfway house for other reasons  
3 would be able to register to vote. It would only be the  
4 persons from the criminal, who are coming out of the prisons,  
5 which would not be allowed to use that for registering to  
6 vote.

7 Q. It is your understanding that a community corrections  
8 center is not a place of sentencing; that it is a place that  
9 is like somewhere where a paid person would go to get drug and  
10 alcohol treatment?

11 A. I guess I'm confused. This says, penal institution  
12 including a halfway house.

13 Q. That's right.

14 A. My understanding -- and I may be wrong, my understanding  
15 in discussions is that there are halfway houses --

16 Q. That's correct.

17 A. -- which house prisoners.

18 Q. And which are on your database?

19 A. And prelease --

20 Q. And which are on your database as people with expired  
21 licenses.

22 A. But they're also in that -- let me finish -- and  
23 my understanding -- if I'm wrong, then they're invalid -- but  
24 my understanding was that in that halfway house as well would  
25 be people that could be there, for example, for drug treatment

1 and not being released from prison.

2 Q. Did you understand that those people were sentenced to  
3 treatment? I mean, it was part -- it is still a penal  
4 institution. It's part of the penal system; is it not? I  
5 mean, that's why I was asking you. It's not someplace that  
6 somebody's going to pay to go because they want to get clean  
7 and sober?

8 A. I guess I'm confused. If you're telling me -- and I  
9 have no idea. If you're telling me to assume because it's the  
10 only way I can do this, assume that any of the correctional  
11 institutions that were in Dr. Wecker's study, anybody living  
12 in that institution could not be registered there, so there  
13 should have been zero people registered there, so those  
14 people's addresses were incorrect, okay?

15 Q. Mm-hmm.

16 A. Then you're saying they could not vote or that the  
17 address is wrong.

18 Q. I'm saying that they could not register using that  
19 address.

20 A. Right. So, there's the mistake in the address, you're  
21 telling me?

22 Q. Well, hold on. The limitation on voting, if we can go  
23 back up to the who cannot vote and how you can vote, but --  
24 you know, can we take the top two-thirds instead.

25 So, a convicted misdemeanor may vote, but vote

1 absentee, because the convicted misdemeanant is being  
2 incarcerated. A convicted felon cannot vote while they are  
3 incarcerated.

4 A. Okay.

5 Q. Once they are released, then they become eligible to  
6 vote. They cannot register to vote until they will be  
7 released by the next election.

8 Now, when you took your data, which was in April and  
9 May, there was an election that was coming up, which was the  
10 main -- the municipal election. And so, the only people who  
11 would be eligible to vote who were incarcerated felons would  
12 be people who would have been released by that time in order  
13 to vote in that municipal election.

14 So, to the extent that you have those people captured in  
15 your database, and especially those people captured as people  
16 who might have expired licenses, or might have mismatched  
17 information, shouldn't those people not be there at all  
18 because they are not eligible voters?

19 A. I think what you're saying is, and there's no way of  
20 identifying that in this database. Okay? The example you  
21 give doesn't hold up in terms of being able to identify  
22 somebody because you're telling me if you have got a halfway  
23 house address, it shouldn't be registered there to start with,  
24 and you have no idea whether that's a felon or misdemeanor or  
25 anything. So there's no way of knowing. Okay?

1 To the extent that there are people in this database who  
2 have registered to vote, and have an active code or inactive  
3 code, and in reality, can't vote, yeah, then that -- to that  
4 extent that's a limitation of the data, and those people would  
5 be -- should be appropriately removed.

6 Now, how many of those show up as not having driver's  
7 license, if any, I have no way of knowing. And that's --

8 Q. You didn't undertake.

9 A. Except when you look at the counts in terms of the  
10 halfway houses and those numbers, and the fact that -- you  
11 know, as I said, 333 actually voted in the last election, will  
12 that change the numbers which says that, you know, I can  
13 assume all of those are incorrect, even though as I pointed  
14 out, most people really don't live in the halfway houses.

15 You can assume all of them were incorrect and take them  
16 out, and it's going to have a diminimus effect on the total  
17 number of people you are still left with who do not have valid  
18 IDs.

19 Q. For those who have the wrong address.

20 But now, did you ever look at how many people are being  
21 housed in correctional institutions who will on the SURE  
22 database?

23 A. Well, if you are giving me a hypothetical --

24 Q. I'm just asking you if you undertook --

25 A. No, no, but I can -- as I said, if you assume that huge

1 numbers of people who do not have driver's licenses or do not  
2 have expired -- have expired licenses are really convicted  
3 felons in jail, college students and nursing homes, are going  
4 to vote absentee, all things which the studies are not -- not  
5 study -- are all fraudulent voters or whatever, you can assume  
6 away the problem. There's no question. You can assume away  
7 anything if you make enough assumptions.

8 The question you know what the numbers are, you know  
9 what the shortfalls are, and somebody has to make a valid  
10 judgment based on the other evidence, is that reasonable that  
11 there's hundreds of thousands of people on the rolls who are  
12 convicted felons --

13 Q. And I'm asking you, did you look to see --

14 A. -- who all do not have driver's license or expired  
15 driver's licenses.

16 Q. I understand. Well --

17 A. I mean, I have no way of answering that question.

18 Q. Let me follow up on that. Are you aware of the joint  
19 undertaking by the Department of Corrections and PennDOT to  
20 get identification to every person who is incarcerated upon  
21 his release?

22 A. No.

23 Q. The fact that they are doing that, doesn't that suggest  
24 that those are persons who don't have valid identification  
25 because of the fact that they have been incarcerated, but once

1 they are eligible to vote, they will have valid  
2 identification?

3 A. And you're saying all of those people are currently  
4 registered to vote and on the data list?

5 Q. Well, I'm asking you if you have assessed at all --

6 A. No.

7 Q. We just looked at the fact that only 130 people  
8 state-wide are listed as inactive on the SURE database.

9 So, we know the number is vastly underreported, and that  
10 we looked at the fact that one person, who happened to be  
11 somebody that I knew the name of, was somebody who actually  
12 should have been in that inactive status, and was an active,  
13 registered voter on the SURE database.

14 A. Did you check and see if he has a driver's license?

15 Q. I don't have access to --

16 A. Sorry.

17 Q. Believe me, I cannot look at anything PennDOT has.

18 A. I apologize. I did not mean -- I was just curious.  
19 That would be something I would be curious about.

20 They're all hypotheticals which are possible.

21 Q. And you didn't investigate those or do the data --

22 A. No. I didn't have any ability to investigate that.

23 Q. And are you familiar with PennDOT's policy on  
24 suspensions and suspended licenses?

25 A. Not specifically, no.

1 Q. Do you know that PennDOT has, in an effort to be  
2 consumer friendly, said that if you renew a suspended license,  
3 they will keep it on the expired list until you come off  
4 suspension so that you get full four years with that driver's  
5 license?

6 A. If you have a suspended license, then you what -- I'm  
7 not sure I follow.

8 Q. You have a suspended license and it expires.

9 A. Right.

10 Q. And so, you go in and you renew your license because you  
11 want to keep it current, but you can't get it back because  
12 it's suspended. PennDOT will make a special notation of that,  
13 but will keep it shown as expiring on the date that it  
14 originally expired --

15 A. Until you can get it.

16 Q. So that when you get it back, you get it back with a  
17 full four years.

18 So, say my license expired in October 2012, and it  
19 became suspended in September 2012, and it's -- you know, one  
20 of the financial responsibilities. I didn't have my insurance  
21 card with me. So, it's a 90-day suspension.

22 Or say it's one of the other things that affects a  
23 tremendous number of people in this Commonwealth, and it's the  
24 six-month suspension, and let's say six months because that  
25 will capture you on this database.

1           So it got suspended in September. It expired in  
2   October. I mailed in a renewal on my license. PennDOT will  
3   not say that my license was renewed in October. They will  
4   keep it as expired until my six months is up, and I go back in  
5   and get my license.

6           And when I go back in and get my license, then they will  
7   post-date the renewal date so that I get my four full years.

8   A.     I guess what I'm not following is when the license is  
9   suspended, even though I have tried to renew it, okay, can I  
10   use a suspended license which is not renewed to vote?

11   Q.     No.

12   A.     But once it becomes unsuspended, I get it.

13   Q.     You get it back.

14   A.     But until then, the data is going to show, and in the  
15   data period, the data is correct, that person does not have a  
16   valid driver's license.

17           Don't forget, you are suspended for over a year ago. It  
18   has to be suspended over a year ago. As of November 12th it  
19   has to be -- November '12, it was --

20   Q.     But if you get it back in the interim, if you had one of  
21   those short term suspension, which is the vast majority of the  
22   suspensions, so that you're going to get your license back in  
23   May or June or July or August, you will then have a fully  
24   valid license, but it will have shown up on the expired  
25   licenses even though you had a valid PennDOT product.

1 A. I guess I'm not following because I don't know what you  
2 mean by valid PennDOT product.

3 Let's say that I had not renewed my license and it was  
4 suspended. Okay. My suspension is going to be up in 2014.  
5 Okay. So, I renew it in anticipation of that. Could I go to  
6 the polls and show my suspended license and vote?

7 Q. No. But if it's going to be --

8 A. So, I can't vote until that license gets renewed. So,  
9 when you're pointing out is that there are people in this  
10 database, and this is the point you are making which I think  
11 is -- there are people in the database who do not have -- who  
12 have expired licenses.

13 They could renew those licenses before November 13th,  
14 but as of now --

15 Q. And they may actually have already renewed them, but not  
16 have that renewal date showing because of the suspension.

17 A. That's true.

18 Q. But it's a short term --

19 A. But they would be the same as anybody who could renew.  
20 But then there are people who have license will who gets  
21 suspended. I don't know what happens then.

22 What happens on the flip side of that? If your license  
23 is suspended, do they take it away and you don't have a  
24 driver's license so that we would have people who have a  
25 license that we have to take them out of this population?

1           They're the nuances which I can't believe have any real  
2    impact on anything.

3    Q.     Could we put up the driver's license center data, the  
4    table that has the centers on it. What we are looking at now  
5    is an attachment to the pretrial brief, and it is Exhibit B.

6           As I understand it, Dr. Siskin, this is the document  
7    that you used in order to determine which driver's license  
8    center you were using for your distance measurements; is that  
9    correct?

10   A.    That's correct.

11   Q.    And in your statement, you said that Westmoreland County  
12   had a driver's license center which is Belle Vernon, that was  
13   open two days a week; is that correct? That there was only  
14   one that was open, and that was Belle Vernon.

15   A.    I don't recall that off the top of my head. If it's  
16   asterisks, it is.

17   Q.    It is asterisk in your table. Could you look at  
18   Greensburg.

19   A.    Excuse me. Which one? Greensburg.

20   Q.    Greensburg.

21   A.    Okay.

22   Q.    Is Greensburg also in Westmoreland County.

23   A.    Appears to be.

24   Q.    How many days a week is it open?

25   A.    Five days a week.

1 Q. Five days a week.

2 A. Six days.

3 Q. Six days. Okay.

4 A. And -- or Sunday. Five days.

5 Q. So, how did you determine what the closest driver's  
6 license center was to a person for purposes of distance?

7 A. We had all of the centers in, and we picked the one  
8 which the map -- giving its address as closest.

9 Q. Okay. And did you -- were you looking as the crow flies  
10 closest or --

11 A. No, Mapquest.

12 Q. Mapquest.

13 A. Actually, on the equivalent of Mapquest for driving  
14 distance -- mapquest for driving time.

15 Q. Did you take into account at all walking distance?

16 A. Walking?

17 Q. Yeah. So, the people who are less than a mile from the  
18 center in Philadelphia, did you --

19 A. For Philadelphia, we did driving and we did public  
20 transportation. But -- in the sample, if they walked it, we  
21 would have said they're driving it. We calculated driving.  
22 We calculated distance which was the same, and then driving  
23 time which is faster, I assume, than walking.

24 Q. And the same thing in Allegheny County. Did you assess  
25 how many people actually live within one mile of the nearest

1 driver's license center?

2 A. We have that information, yes. It's done for each  
3 person, the distance between that and closest.

4 Q. And is that reported somewhere in your report?

5 A. Well, it's reported in the percentiles. It gives you  
6 the shortest distance. We give you the 2.5 percentile. So,  
7 that's the shortest distance for which 2.5% of the population  
8 -- 97.5% of the population travel that distance or more.

9 So that means 2.5 travel less than that distance.

10 Q. But from that I can't actually say there's actually  
11 thousands of people within a mile of a PennDOT center.

12 A. Well, you can say -- whatever that number is, depending  
13 what it is, you can say that there are 2.5% of the people that  
14 travel that or less, and you can take the numbers and multiply  
15 them and figure out how many would travel that or less.

16 That doesn't -- we weren't asked the question how many  
17 people live within a mile.

18 Q. Okay. So, you don't actually know how many people could  
19 walk to their PennDOT center.

20 A. I could calculate that easily enough, but we weren't  
21 asked to do that.

22 Q. But you weren't asked to do that?

23 A. We had the data, and we didn't produce that data. You  
24 had to produce how many people are close and how close they  
25 are.

1 Q. Okay. Now, you made a statement early on in your  
2 testimony that all you did was look at data and assess it.

3 A. Right.

4 Q. But throughout your testimony today, you've actually  
5 been talking about applying judgments and discretion as to how  
6 you're treating certain data, when you are deciding that data  
7 are relevant or irrelevant.

8 That's part of what you're bringing your expertise to  
9 do?

10 A. That's what we mean by assessing data and analyzing it.

11 Q. So, you're not saying that you just look at data and  
12 read it or interpret it. You're saying that you also apply  
13 your judgment and discretion to it.

14 A. If all I had to do was read the data and say this is  
15 this number and tell it back to you, no one would pay me the  
16 rates that I'm getting paid.

17 We get paid because we're portraying to assess data and  
18 analysis data and determine what data says or doesn't say, and  
19 what the limitations are of data and what you can and cannot  
20 say from that data and making reasonable judgments for it.

21 MS. HICKOK: Thank you very much, Dr. Siskin.

22 MR. RUBIN: May I inquire, Your Honor.

23 THE COURT: Sure.

24 REDIRECT EXAMINATION

25 BY MR. RUBIN:

1 Q. Good to see you again, Dr. Siskin. It's getting late.

2 I'll try to make this as brief as possible. I have a few  
3 follow-up questions.

4 A. I appreciate that.

5 Q. You were asked a lot of hypothetical questions; do you  
6 recall that?

7 A. Correct.

8 Q. A lot of hypothetical questions about a lot of data that  
9 supposedly is available that you may not have looked at; is  
10 that fair?

11 A. Correct.

12 Q. Was any of the data that you were asked about  
13 unavailable to the Respondents themselves as far as you know?

14 A. No. She has been talking about public data generally  
15 and should be available to them as well, sometimes she is  
16 talking about data which the government -- state agencies have  
17 which should be readily available to them and not necessarily  
18 the general public.

19 Q. For example, you were asked questions about felons and  
20 data on felons; is that right?

21 A. Yes, but let me point out -- the type of questions that  
22 you asked are not really useful for analysis purposes because  
23 there's no way -- the data on felons, counts for felons, et  
24 cetera, and it can tell you information about the limitations  
25 of the data.

1 And that's why I said, when we are ultimately done,  
2 people have to make judgments on reading and other  
3 information. But there's no way that I can get the name,  
4 address, and I don't know about the file, if it's going to  
5 give me the name, address, birth dates, and four digit SSNs,  
6 et cetera, for felons that I can match against this database  
7 to see what the magnitude of the problem actually is among  
8 those people who don't have licenses.

9 Q. Now, I understand that you may not have that data, but  
10 is it your understanding that the Respondents would?

11 A. No. They are more likely to have it than I have it.

12 Q. Right. That's my question.

13 A. That's not going to be public information to my  
14 knowledge. You cannot get lists of people who are felons from  
15 the state.

16 Q. If the Respondents had wanted to make all of the  
17 adjustments that were suggested to you by counsel using the  
18 data that's in their possession, custody and control, as an  
19 expert in statistics and database analysis, can you conceive  
20 of any reason they could not have done that?

21 A. Within the limitations of that data, which I don't know,  
22 and the limitations of it, no. You should be able to do those  
23 types of analyses with that kind of data, if it really  
24 existed.

25 Q. If they didn't have the expertise in-house to do that,

1 they could have asked Dr. Wecker for his assistance, right?

2 A. Right.

3 Q. As far as you know in the last 16 months since Act 18  
4 was adopted, have the Respondents ever done the type of  
5 analysis that was suggested to you by counsel in order to  
6 identify how many voters lack ID?

7 A. I have seen nothing. I'm aware of nothing.

8 Q. Are you aware of any work they've done to try to get  
9 those people ID?

10 A. No.

11 Q. And throughout the questioning, were you presented with  
12 any actual data?

13 A. No.

14 Q. Do you remember at the very beginning of the  
15 questioning, counsel represented to you that she didn't have  
16 access to your underlying data?

17 A. That's correct.

18 Q. When you read Dr. Wecker's report, do you recall  
19 seeing -- and I believe you have it in front of you, and if  
20 you don't, I can hand another copy to you. His reliance list.  
21 It's Attachment C.

22 A. Yeah. Full voter export file database. These are all  
23 the data that we have.

24 Q. And were you able to take, for example, Dr. Wecker's  
25 confidential numbers, convert them into reports that you could

1 provide to counsel in a non-confidential way?

2 A. Sure. Once you had the IDs, you can go to that file and  
3 match against the ID for the person. That's what we -- we  
4 interacted. We gave Dr. Wecker all of our people we were  
5 identifying, and he gave us back all of the people that he  
6 identified, and then we could go to these files and match them  
7 off. And if you -- once you do that, you can go to that  
8 non-confidential file, pick those IDs and give that  
9 information to anybody who asks for it because it's not under  
10 the confidentiality law.

11 Q. And in fact, just so we understand, you gave all of your  
12 data to Dr. Wecker?

13 A. We gave him the lists -- the counts so he could do his  
14 study, as he gave the counts to us so that we could do our  
15 study.

16 Q. You were able to take his data and present  
17 non-confidential reports to counsel, right?

18 A. Correct.

19 Q. Is there any reason that Dr. Wecker could not have done  
20 the same thing, you know, the way counsel --

21 A. No. Of course, he could have done the same thing.

22 Q. There was also questions at the beginning about -- sort  
23 of data mismatches in terms of the SURE database and when you  
24 got that, and the PennDOT database and when you got that; do  
25 you remember those questions?

1 A. Correct.

2 Q. How long did it take you to get the data that you needed  
3 from the Respondents after you first asked for it?

4 A. You're asking the wrong person. That's not something  
5 that would be on the top of my mind. I don't recall.

6 Q. Do you recall receiving multiple versions of the PennDOT  
7 database?

8 A. Yes. I remember we had some trouble getting it, and  
9 they sent us originally, we had to get multiple versions, and  
10 ultimately, they sent it without the expiration date. And we  
11 ultimately got it and it wasn't an issue.

12 Q. They also sent it originally without the Department of  
13 State ID?

14 A. Correct. That was another --

15 Q. Do you remember questions from counsel suggesting that  
16 the data that you were provided by the Respondents for some  
17 reason omitted IDs that are issued without a photograph by  
18 PennDOT, for example, Amish who object to a photo ID?

19 A. It is possible, but I don't remember sitting here today.

20 Q. You don't remember her asking those questions?

21 A. No, I don't.

22 Q. Okay. I'll represent to you --

23 A. I remember she had asking me questions about it.

24 Q. Okay.

25 A. But I think you were asking me did we get data, and I

1 don't remember.

2 Q. My first question was do you remember her question?

3 A. Yes.

4 Q. Okay.

5 A. I'm sorry. That, I do remember.

6 Q. When you put together the data requests that you wanted,  
7 did you exclude any data, any fields that you didn't want from  
8 PennDOT?

9 A. No. We asked for anything that could potentially be  
10 useful.

11 Q. So, eye color, you didn't want?

12 A. What?

13 Q. Eye color, for example, was not useful for to you?

14 A. Yes.

15 Q. You said, I don't want that.

16 A. Correct. You can't match eye color because voter  
17 registration doesn't ask you your eye color. Had to be things  
18 we could use to match across.

19 Q. Did you ever exclude in your request non-photo ID cards  
20 that are issued to people with religious objections?

21 A. No, not to my knowledge. If we did, it was an error.  
22 It wouldn't -- I don't think we would have.

23 Q. As far as you know, did PennDOT or the Respondents ever  
24 tell you when they conveyed the data to you that they were  
25 omitting that data?

1 A. As I said, I don't recall this area well at all.

2 Q. There are also some questions about whether you  
3 understood various fields and how information was populated  
4 into the various databases; do you remember those questions?

5 A. Yes.

6 Q. When you had questions about the SURE database or the  
7 PennDOT database, were those questions, those technical  
8 questions, conveyed to the Respondents, to the Department of  
9 State, to the PennDOT?

10 A. Yes.

11 Q. And did you get answers back from them?

12 A. Generally, yes.

13 Q. Did you rely upon the information that they provided to  
14 you?

15 A. Yes.

16 Q. Do you still have in front of you Respondents Exhibit  
17 235.

18 A. I do. Finding it is another question.

19 Q. This one.

20 A. I have it.

21 Q. The questioning about this, do you recall, related to  
22 removing from the registered voter rolls voters who were no  
23 longer active; is that right?

24 A. Correct.

25 Q. Removing people who had been inactive from the rolls,

1 correct?

2 A. Right.

3 Q. And remind us, how many registered voter were in the  
4 database that you received in May of 2013 that you used for  
5 your analysis?

6 A. The original database?

7 Q. Yes.

8 A. 13-point-some million.

9 Q. Then you looked and you cut it down to the registered  
10 voters who were active on inactive?

11 A. Correct. Anybody who was --

12 Q. And that number was?

13 A. 8 million, 8.2 million.

14 Q. Can you look on the second page of exhibit --  
15 Respondents Exhibit 235.

16 A. Second page.

17 Q. Yes. It's the letter dated June 30th, 2013, from Carol  
18 Aichele, Secretary of the Commonwealth.

19 A. What are we looking at on the exhibit.

20 Q. Yes. It's what I -- it's this. I'm pulling it up.

21 A. Yeah. Okay. I have got it.

22 Q. Toby, can you highlight and blow up the paragraph that  
23 begins the statewide uniform registry.

24 Doctor, do you see the sentence that begins, "As of  
25 December 31st."

1 A. I have a different page than you.

2 Q. Well, why don't we do it off the screen, then.

3 A. Off the screen, yeah. Yeah. There were approximately  
4 8.5 million registered voters in Pennsylvania.

5 Q. Can you read that into the record, please.

6 A. "As of December 31, 2012, there are approximately 8.5  
7 million registered voters in Pennsylvania. We remain  
8 confident that the SURE system will be an integral part in the  
9 success of Pennsylvania's electoral process well through the  
10 21st century."

11 Q. According to this and according to the records that you  
12 got in May, how many registered voters were removed from  
13 registered voter status between the end of 2012 and when you  
14 got the database?

15 A. Since May 6, 2013, approximately 250,000 voters.

16 Q. Do you recall counsel asked you a question that referred  
17 to people who, quote, deserve to vote?

18 A. Who what?

19 Q. Who, quote, deserve to vote?

20 A. Deserve to vote?

21 Q. Do you remember a question along those lines?

22 A. No.

23 Q. Are you familiar with any concept about people who  
24 deserve to vote?

25 A. No.

1 Q. Is there any data in the SURE database to distinguish  
2 registered voters from voters who deserve to vote?

3 A. No.

4 Q. Does deserving to vote have anything to do with the work  
5 that you did?

6 A. No.

7 Q. Doctor, you were asked some questions about military  
8 bases; do you remember that?

9 A. Yes.

10 Q. Do you recall from Dr. Wecker's report how many people  
11 he found to live within three miles of a military base?

12 A. He found 2,547 voters.

13 Q. Within three miles of a military base?

14 A. Within three miles in the group that do not have valid  
15 IDs.

16 Q. Thank you. There were some questions about military  
17 bases in remote areas. You went to school in Pittsburgh; is  
18 that right?

19 A. Right.

20 Q. Do you know if there's a military base in Pittsburgh?

21 A. No.

22 Q. If there are military bases in major cities, would three  
23 miles capture a lot of people?

24 A. Yes, it would.

25 Q. Does the fact that a local employer, the largest local

1 employer happens to be a military base, does that mean all  
2 employees, including civilians, would have, as far as you  
3 know, acceptable ID with an expiration date and a photo issued  
4 by the U.S. government or the Commonwealth of Pennsylvania to  
5 vote?

6 A. I don't know the answer to that. That's -- I can't  
7 answer that question.

8 Q. There was also questions about deceased voters; do you  
9 recall that?

10 A. Yes.

11 Q. And there was questions about how, I believe, it was the  
12 Department of Health's responsibility to convey out to the  
13 various agencies when someone dies?

14 A. Correct.

15 Q. So that those agencies can update their databases?

16 A. Correct.

17 Q. And as far as you know, does the Department of Health  
18 convey that information both to PennDOT and to the Department  
19 of State?

20 A. I would assume so.

21 Q. And in fact, in the Department of State SURE database,  
22 did you see --

23 A. There's a whole slew of codes indicating that people are  
24 dead. There's even one code which says, "possibly dead." So,  
25 that they have some indication that they have the person may

1 be dead.

2 There weren't many people in that, by the way.

3 Q. That's good. Do you have an explanation as to why, in  
4 your experience with databases and database management, why  
5 there may be a slight disconnect and time lag in records  
6 between the PennDOT records and Department of State records  
7 and when they update Department of Health notifications?

8 A. Typically I find two reasons, and there's combining two  
9 databases, and they would cross them, and they did not match  
10 in who they consider dead. And SURE database thinks they're  
11 active and PennDOT thinks 1,800 people are dead that SURE  
12 thinks is active. They'll occur for two reasons.

13 One is timing. Sometimes in terms if they're updating  
14 it from a common source. The other is each of them may have  
15 other indications of why someone is passed away independent of  
16 the updating from the Department of Health.

17 For example, if you send out a driver's license and  
18 there's notification coming back and the person is deceased,  
19 they may enter it. And I'm just guessing, but from my  
20 experience, you will find that different databases often  
21 handle data slightly different and get it from different  
22 sources. So there's certain disconnects between databases  
23 like this.

24 Q. What is the official record of registered voters in  
25 Pennsylvania?

1 A. SURE database.

2 Q. And even if you assume the 17,000, 18,000 people in  
3 PennDOT are actually dead, does that change your conclusions?

4 A. No. We took out all of the people that were dead, and  
5 it's not going to have any significant impact upon my  
6 conclusions that there are significant numbers, hundreds of  
7 thousands of people that still do not have a PennDOT -- valid  
8 ID.

9 Q. Do you remember questions about care facilities?

10 A. Yes.

11 Q. Do you remember a question that suggested that said that  
12 residents of various community care facilities would be,  
13 quote, entitled to IDs?

14 A. I think that she meant be eligible. My understanding is  
15 that there's no requirement for a nursing home to give out  
16 IDs, and to give out IDs which have expiration dates on it,  
17 that they're eligible to get it. If the nursing home gives  
18 them that, they can do it. But there's no -- my understanding  
19 is there's no law or requirement for nursing homes to do that.

20 Q. And you said that nursing home. Care facilities?

21 A. Nursing home, care facility. I'm using those  
22 interchangeably.

23 Q. I understood. I just want the record to be clear.

24 As far as you understand, is there any entitlement or  
25 a right for a resident to demand an ID from a care facility?

1 A. Not to my knowledge. Anything that I have read, these  
2 IDs are up to the facility to decide whether or not they  
3 actually want to give them.

4 Q. Did you see in Dr. Wecker's data, and you were shown one  
5 of the -- one of the exhibits, Exhibit 137 for colleges, a  
6 list of colleges that were actually issuing IDs and some that  
7 were not?

8 A. Correct.

9 Q. Okay. Did you see anything similar in Dr. Wecker's  
10 reliance materials or his underlying data for care facilities?

11 A. No. There was no indication whether they gave IDs or  
12 not in the care facilities.

13 Q. Counsel also asked you and suggested that Dr. Wecker  
14 didn't look at all care facilities, but did a random sample of  
15 care facilities; do you remember that?

16 A. Yeah. I know she said that, did you I didn't see that  
17 in the data.

18 Q. So, let me ask you about his report. Did you see it in  
19 his report?

20 A. No.

21 Q. Did you see it in the underlying data?

22 A. No.

23 Q. Is there certain programming that would need to be  
24 created in order to generate a random sample?

25 A. Correct.

1 Q. And was that programming disclosed to you?

2 A. No. I think that she misunderstood what Dr. Wecker did.  
3 Dr. Wecker took out our population, 511,415 people, and ran it  
4 through that program to determine the addresses -- whether any  
5 of those addresses came within one-tenth of a mile of any of  
6 those care facilities in the list that he had.

7 We saw that output in the data, and we saw that data,  
8 and I'm pretty sure that's what he actually did.

9 Q. Now, let's talk about Exhibit 137. Can you pull it up,  
10 Toby. This was I think the sticker tracker, as counsel  
11 referred to it.

12 A. Yes. Institutions of higher education as to whether or  
13 not they give IDs with expiration dates.

14 Q. And when you -- and there was some question about  
15 suggesting that all of the big schools are offering valid IDs  
16 now; do you remember that?

17 A. No, she asked me about Pitt and Penn, since that's where  
18 I went.

19 Q. Okay.

20 A. And she did mention Carnegie Mellon.

21 Q. And how about Penn State. Can you look the a page  
22 three, and there are a lot of campuses, so it goes on to page  
23 four as well.

24 A. Yeah. If you do Penn State -- I saw this and I didn't  
25 quite understand. There are all of these yes to new students.

1 Q. Is it your understanding that only new students are  
2 getting valid IDs?

3 A. I didn't do this study. I can only interpret what's  
4 read here. I didn't follow up and ask questions.

5 So, what it says here is yes, the yeses to new students.  
6 What that means, you would have to ask somebody that actually  
7 produced this document.

8 Q. And do you remember in Dr. Wecker's report, he looked at  
9 specific counties?

10 A. Yes.

11 Q. And was one of them Union County?

12 A. Yes.

13 Q. And he looked at Union County because that's where  
14 Bucknell is; do you remember that?

15 A. Yes.

16 Q. Looking on this chart on page one, can you tell us -- I  
17 know you didn't write this. What does it say about whether  
18 Bucknell is issuing valid IDs?

19 A. No.

20 Q. No, you can't tell us, or no -- or the answer is they're  
21 not?

22 A. Let me see. What it says for Bucknell is photo, yes,  
23 expiration date, no. Sticker, no. So, that would be a  
24 non-valid ID as it stands here.

25 Q. There were questions about the correctional facilities

1 as well, right?

2 A. Yes.

3 Q. And there's a lot of discussion about felons and who  
4 could and who couldn't vote?

5 A. Yes.

6 Q. Do you remember that?

7 Dr. Wecker in his report, did he look at all of the  
8 correctional facilities?

9 A. In the -- in the one region.

10 Q. In all of Pennsylvania?

11 A. No.

12 Q. He didn't to that work?

13 A. Correctional facilities. I think he only used Region  
14 One.

15 Q. That's the Philadelphia area?

16 A. Right.

17 Q. And he had specific addresses for specific facilities?

18 A. Correct.

19 Q. I think that's what you said earlier.

20 When you looked at the actual -- let me ask this  
21 question: How many people did this analysis turn up, all-in.

22 A. Correctional, 1,294.

23 Q. And what impact would that number be if Dr. Wecker is  
24 completely right, what impact would have that is on your  
25 conclusions?

1 A. It would change -- it explains 8.3% of the shortfall of  
2 people that do not have licenses to bring it down to 100,000.  
3 So it's a diminimus -- no number is small in terms of people  
4 who can't vote, but it's diminimus in terms of the numbers of  
5 people who we are estimating as not having valid IDs.

6 Q. Does it in any way undermine your ultimate conclusion in  
7 this case?

8 A. Not at all.

9 Q. When you went into this actual data and looked at the  
10 actual 1,294 people, were they all actual at these halfway  
11 house or correctional facilities?

12 A. No. 26, for example, lived within .10%, .10th percent  
13 of a mile of the regional office which is not a correctional  
14 institution.

15 Q. There was an actual address for each of those people,  
16 right?

17 A. Correct.

18 Q. And the address was not the correctional facility; is  
19 that right?

20 A. Right. I cannot say in every case Burke a lot of theme  
21 were not.

22 Q. But for the regional office, it wasn't the correctional  
23 facility.

24 A. The regional office is not a correctional facility, and  
25 people were counted if they were in within a tenth of a mile

1 of that office. I know -- I know we talked about living in  
2 the office.

3 Q. Fair enough. Was that observation, when you looked at  
4 the actual addresses, limited to the regional office?

5 A. The actual addresses, was it within -- if it was  
6 considered a hit on that, it was within one tenth of a mile of  
7 the regional office.

8 Q. But was your observation that there were address that  
9 didn't -- that were different than the address that supposedly  
10 was the correctional facility?

11 A. Yes.

12 Q. Was that limited to the region?

13 A. No, no, no, no. It was consistent. What I don't  
14 remember is there was a lot that were not. I don't remember  
15 any actually matching the facility. There was some, I  
16 remember, some of them were outside the -- did not match the  
17 address.

18 Q. Do you remember a question about what if all of the  
19 inactive, the I-voters, were actually people who had -- were  
20 in the expired license group; do you remember that?

21 A. Yes.

22 Q. That would bring your number down, I believe the  
23 question was?

24 A. Well, I told you how much -- I identified if you take  
25 that 25%, roughly, if you take out all of the I-voters, the

1 511,415 falls to 383,000 and change. But I don't know and --  
2 that comes out of the people that you consider not matching,  
3 or having invalid -- expired IDs.

4 The question was, assume all of those were from the --  
5 the expired IDs, how much would that reduce it, that's an  
6 arithmetic question. You simply subtract those numbers and  
7 then take it away from what's in the table, and you can figure  
8 it out. I don't know the answer sitting here how many were  
9 actually in each of those categories.

10 Q. Do you have any reason to believe sitting here today  
11 that all of the Is are in your expired license group?

12 A. No.

13 Q. Do you have any reason to believe it's  
14 disproportionately in that group?

15 A. No.

16 Q. But that would be in the data that you produced to the  
17 Respondents?

18 A. Yes. I can check that.

19 Q. There were questions about people moving out of state  
20 and still being an active voter in Pennsylvania, and a lot of  
21 hypotheticals given to you; do you remember that?

22 A. I remember the question. I don't know if I ever  
23 understood them, but I do remember the questions.

24 Q. Fair enough. As part of your study and your work, did  
25 you do anything to look at real voters in Pennsylvania?

1 That's a term. I don't know if it's deserved, but real  
2 voters. People who actually voted in, say, the November 2012  
3 election.

4 A. Yeah. There was a whole -- every study that was done  
5 was restricted to people who actually voted on November 12th  
6 in the presidential election of 2012.

7 Q. And remind us what your finding was for that group?

8 A. The finding was for that group, it's 143,000 people  
9 would not have valid photo IDs.

10 Q. And --

11 A. Of the type we're studying which are the PennDOT IDs.

12 Q. Fair enough. Do you remember there was a lot of  
13 questions about college students as well?

14 A. Correct.

15 Q. There was a number of 835,000 college students in  
16 Pennsylvania that was asked of you?

17 A. Yes.

18 Q. How many 18 to 22-year-olds did you find in Pennsylvania  
19 that lacked ID?

20 A. 37,128.

21 Q. And how many 18 to 28-year-olds did Dr. Wecker find  
22 living within one mile of a college or University,  
23 approximately.

24 A. What age groups?

25 Q. The 18 to 28 age group that he used.

1 A. Oh.

2 Q. Paragraph 12 of his report.

3 A. Yeah. He found 48,046.

4 Q. And if you looked at within .10 miles, what was the  
5 number?

6 A. If you went up to 10 miles?

7 Q. No. .10, I'm sorry.

8 A. Oh, .10. It's 11,000.

9 Q. Given that data, is the 835,000 college students in  
10 Pennsylvania in any way relevant to your findings of people  
11 who lack ID?

12 A. No.

13 Q. Is there any way, based upon your data and Dr. Wecker's  
14 data, for college students having valid college ID or having  
15 an out-of-state driver's license that would let them get to  
16 PennDOT and get a DOS ID, is that group of voters in any way  
17 possible to explain your 511,000?

18 A. No.

19 Q. Counsel asked you about some of your subgroup analysis,  
20 specifically about race; do you remember that?

21 A. Yes.

22 Q. And some hypotheticals about name issues affecting that.

23 A. Correct.

24 Q. Did any of those theories that she offered to you cause  
25 you to doubt your conclusions about the racial disparities

1 that you observed?

2 A. As I said, it wouldn't change my conclusions at all  
3 about the racial disparity. The only potential effect it has  
4 is explaining why it's occurring, not that it's occurring.

5 Q. And in Dr. Wecker's report, did he cast any -- ask any  
6 questions about your subgroup analysis?

7 A. No.

8 Q. Or your geography analysis?

9 A. No.

10 Q. There's some questions about how geography played a role  
11 in your matching; do you remember those?

12 A. Yes.

13 Q. Can you remind us what you did in step ten concerning  
14 the geography and geography restrictions?

15 A. In step ten, there's actually no geography control.

16 Q. And by doing that, how many do you add?

17 A. As in step 12.

18 Q. How many do you add to that?

19 A. 31,613.

20 Q. And in step 12 how many did you add?

21 A. 29,190.

22 Q. Do you remember hypotheticals about various Hispanic or  
23 Asian names that might affect your ability to do the match?

24 A. Yes.

25 Q. Did Dr. Wecker raise any concerns about that?

1 A. No.

2 Q. In your testing of your own data, did you actually  
3 observe that to be any significant problem?

4 A. No.

5 Q. And --

6 A. As I said, the key there was when we looked at the  
7 ultimate errors in the matches, and I went through and looked  
8 at the names, they're not disproportionately Hispanic and Asian  
9 names.

10 So we were saying there's where we were saying there's  
11 no mismatch. If anything, I think we overmatched the Asian  
12 names because of the truncation problem.

13 Q. And step three, remind us what step three was in your  
14 match?

15 A. Step three is just using the license plate -- if there's  
16 two license plates -- not license plates. I mean, driver's  
17 license numbers -- in the SURE file and in the DOT, we  
18 considered that a match, period, regardless of anything else.

19 Q. The concern about name, did that affect that match step  
20 at all?

21 A. Name is not relevant to that step.

22 Q. And in your last step where you looked at date of birth  
23 and Social Security numbers and matched on that, did names  
24 play any role in that?

25 A. No. It did not play any role in the matches. It did

1 make a -- it played a major role in terms of how good the  
2 matching was. For those cases where you didn't have any  
3 matching names, they were almost always incorrect.

4 Q. But you still counted them as matches; is that right?

5 A. Correct.

6 Q. There was a question specifically about Vince Fumo; Do  
7 you remember? Did Respondents have the ability to see whether  
8 Vince Fumo was in your 511,000?

9 A. Yes, they would.

10 Q. And was there any suggestion that he was?

11 A. I don't think there was any discussion he was or was  
12 not.

13 Q. You were provided a list of printouts from a website  
14 labelled Exhibit B.

15 A. Correct.

16 Q. You had this as one of your reliance materials as well?

17 A. Correct.

18 Q. And is it your understanding is there was something else  
19 that went along with this. Was it a stipulation?

20 A. As I say, sitting here today, I don't recall.

21 Q. What was that?

22 A. I really don't recall that issue. It was minor.

23 Q. Fair enough. The record will speak to that.

24 MR. RUBIN: Your Honor, those are all of the  
25 questions that we have of Dr. Siskin.

1 THE COURT: Thank you, counsel.

2 MR. RUBIN: Thank you.

3 THE COURT: Thank you, Dr. Doctor.

4 MS. HICKOK: Your Honor, may I ask briefly one  
5 area of re-cross, sir.

6 THE COURT: Sure.

7 RECROSS-EXAMINATION

8 BY MS. HICKOK:

9 Q. You were asked a question a moment ago, Dr. Siskin,  
10 about the full voter export file. The data that you generated  
11 for the petitioners, could you have generated that without  
12 utilizing the data that was confidential that was provided to  
13 you by PennDOT, and the data that were confidential that was  
14 provided to you by SURE, by the Department of State?

15 A. I don't understand your question.

16 Q. Counsel asked you a moment ago about providing them data  
17 using the full voter export file.

18 A. Yeah. That's what we do. We do things, and then we go  
19 to that file to produce lists and so forth that counsel  
20 request. The other data is confidential and can't be used.

21 Q. But could you have generated those lists without first  
22 using the confidential data from PennDOT and the Department of  
23 State?

24 A. It depends what they asked for. I mean, if they're  
25 asking us for something which is the result of our analysis,

1 we would have had to run the analysis on our database to  
2 determine who we're going to send -- send them the lists of.

3 If they asked something more general, those would have  
4 been totally adequate to answer the question. It would have  
5 been done. I generally -- those types of things are not  
6 analysis questions. I generally did not have a role in that  
7 process.

8 Q. And --

9 A. So --

10 Q. In your report you mentioned that there was a specific  
11 list that you sent to counsel using the full voter export file  
12 upon their request. Was that list generated from an analysis  
13 that you did using the confidential data from PennDOT and the  
14 confidential data from the Department of State?

15 THE COURT: Miss Hickok, maybe you can help me  
16 out. I'm a little confused. The confidential data from the  
17 Department of State, I think anybody can walk in and get that.  
18 If you're the Election Department -- I have election  
19 challenges, unfortunately, that we hear, and they are  
20 challenges to people who sign a petition, the name, the  
21 occupation, the borough, whatever. I'm sure you've seen them  
22 all over.

23 MS. HICKOK: Your Honor, there is a level of  
24 data that are non-confidential that are produced for specific  
25 purposes, and then there is another level of data that are

1 confidential that include things such as the Social Security  
2 numbers that he was referring to earlier and other private  
3 data. And all of the confidential data were -- and especially  
4 PennDOT's highly secure confidential data were produced  
5 subject to certain protect protective orders in this case that  
6 were very restrictive and are the reason that I have not seen  
7 either of the underlying databases.

8 THE COURT: Okay.

9 MR. RUBIN: Your Honor, this was already  
10 subject to a Motion in Limine that was denied.

11 MS. HICKOK: Your Honor, he opened the  
12 questioning. I'm simply trying to ascertain --

13 THE COURT: Let's finish the questioning,  
14 okay.

15 THE WITNESS: If you are referring to the  
16 requests at the end they asked for us certain people to  
17 determine whether or not they had -- our analysis would  
18 indicate they had no valid ID, we ran that on the full  
19 database to see whether they were on our list and then  
20 verbally told counsel the response whether they were or were  
21 not.

22 MS. HICKOK: Thank you, Dr. Siskin.

23 THE COURT: Thank you. You can step down.  
24 Thank you, doctor.

25 Counsel, if you stick around just for a couple

1 of minutes on the Motion in Limine issue.

2 MR. RUBIN: Yes, Your Honor.

3 THE COURT: I would appreciate it. Maybe we  
4 could do it tonight, but I think it would only take ten  
5 minutes. That's all I'm going to limit your arguments to,  
6 just a couple of minutes, so we can send our reporter home.  
7 She did an excellent job. Thank you, by the way on producing  
8 that overnight, the transcript.

9 But we'll call it quits for the day, and we'll  
10 start up again tomorrow at 9:30.

11 MR. RUBIN: Your Honor, not surprising after  
12 the first day, the schedule will change a little bit for  
13 tomorrow because.

14 THE COURT: I see that.

15 MR. RUBIN: I believe.

16 THE COURT: Martin.

17 MR. RUBIN: Marks Jonathan Marks, who was  
18 supposed to testify today, will testify tomorrow, and we'll  
19 reschedule Rebecca Oyler to a date to be determined.

20 THE COURT: Very good. Thank you, counsel.

21 (THE TRIAL PROCEEDINGS WERE CONCLUDED AT 4:36  
22 P.M., AND THE FOLLOWING COLLOQUY OCCURRED WITH THE COURT AND  
23 COUNSEL ONLY IN ATTENDANCE AT 4:38 P.M. AS FOLLOWS:)

24 THE COURT: Okay. Counsel, I have a question.  
25 The two exhibits, 1132, and the privilege is that it discloses

1 attorney mental impressions and opinions.

2 Who was the author of this memo, do we know?  
3 I don't I think I can figure out who it was that.

4 MR. HUTCHISON: Your Honor, the Exhibit 1132  
5 would have been drafted by PennDOT's in-house counsel, and for  
6 accuracy of the record, Mr. Rubin and Ms. Peterson and I met  
7 last night to discuss these, and we left it that I would  
8 follow up with questions that they had.

9 So, our understanding was that they were still  
10 -- we were still working through it, and that was information  
11 that we were prepared to give them today.

12 And what we have learned is that the Exhibit  
13 1132 was drafted by an in-house PennDOT counsel, circulated  
14 within PennDOT, and it would go to the Governor's office for  
15 consideration, too, but all internal within the executive  
16 branch of the Commonwealth similar to 1677, which is an  
17 internal Department of State document circulated within the  
18 Department of State and was drafted by Department of State  
19 counsel.

20 THE COURT: Okay. So, what have you come to,  
21 that you agree about with Exhibit No. 1677?

22 MR. HUTCHISON: 1677 is a -- portions that are  
23 non-privileged and non-confidential are the top header, and  
24 Section 1, the agency's recommendation. Everything after that  
25 section is prepared by counsel with input from the client, and

1 then it's cited to the legislative office to make the  
2 recommendation in Section 1.

3 THE COURT: Everybody agrees that certain of  
4 that is privileged?

5 MR. HUTCHISON: I think they disagree as to  
6 whether it's privileged.

7 MR. RUBIN: Yes, we do disagree with that,  
8 Your Honor, and at the end there's a list of who the authors  
9 are, and they're attorneys and non-attorneys.

10 I think it's apparent that this is -- what's  
11 in the bill summary is solely authored by the attorneys.

12 There is a legal section specifically, but we  
13 don't see sort of as a prima facie case of this is privileged,  
14 but our primary argument on this is that it was produced over  
15 a year ago, due care was not taken. Counsel was notified of  
16 problems with their privilege productions, and nothing was  
17 done for over a year, and we believe any privilege has been  
18 waived. That's on 1677.

19 THE COURT: Okay. Let's give opposition  
20 counsel a chance to respond to that.

21 MR. HUTCHISON: With regard to the author, I  
22 don't think they're -- Section 10 starts with identifying who  
23 participates. It's the attorneys who drafted it with the  
24 assistance of members of the Department of State. Getting  
25 input from the client to develop an attorney work product or

1 an attorney-client communication does not undermine the  
2 privilege.

3 THE COURT: Okay. Anything further you want  
4 to throw in on that, or --

5 MR. RUBIN: No, Your Honor, just the waiver  
6 issues is our primary argument.

7 THE COURT: Very good. 1132.

8 MR. HUTCHISON: Your Honor, 1132 is a PennDOT  
9 document, who, as Your Honor is aware, is not a party to this  
10 action, but they are also agencies within the Commonwealth.  
11 Their in-house counsel prepares this, again, for the same  
12 purpose to inform their legislative office to develop the  
13 recommendation which is then circulated within PennDOT.

14 THE COURT: Okay. And again, this is a  
15 PennDOT counsel.

16 MR. HUTCHISON: Yes.

17 MR. RUBIN: Your Honor, there's nothing on the  
18 face of this document that has any actual legal analysis.  
19 It's all about the fiscal impact of the law, but again, it's a  
20 moot point. It was used at deposition without objection, this  
21 specific one. An earlier version, which contains all of the  
22 same language plus some additional language was actually  
23 entered at trial in July. It's in evidence as Exhibit 27.  
24 There was extensive cross-examination of Kurt Meyer about it,  
25 all without objection. The Court's already relied upon it.

1 There's no way of that having been waived.

2 THE COURT: Okay.

3 MR. HUTCHISON: Your Honor, Exhibit 27 is a  
4 different document. On the top, there's a Bill House No.  
5 934, Printer No. 1003. Exhibit 1132 is a subsequent Printer  
6 No. 1805. It's a different document. And as counsel is  
7 aware, PennDOT was not a party either at the preliminary  
8 injunction hearing or at the deposition.

9 THE COURT: Okay.

10 MR. RUBIN: However, Your Honor, PennDOT has  
11 actively participated. Respondents have said repeatedly that  
12 PennDOT did not need to be a party. When their rights were at  
13 issue, they participated in the hearings with the Court and  
14 have been heard. So, I don't see that as any way relevant to  
15 the fact that there was waiver, and that this was used as  
16 trial with the Attorney General representing the Governor, the  
17 Commonwealth, and the Department of State, along with making  
18 productions on behalf of PennDOT.

19 THE COURT: How would you wish to use these  
20 two exhibits?

21 MR. RUBIN: I'm sorry, Your Honor.

22 THE COURT: How would you seek to use the two  
23 exhibits?

24 MR. RUBIN: Exhibit 1132 would be used, if at  
25 all, with Kurt Myers. The bigger concern, Your Honor, is that

1 it's already been used. That evidence is already in the  
2 record, and if for some -- somehow 1132 were clawed back, what  
3 is the impact of the evidence that's already in. We have no  
4 intention of repeating questioning that's already happened.  
5 We may not, in fact, use it.

6 Our greater concern is the fact that they  
7 can't claim privilege to one document when the other one is  
8 already in evidence. What does that do to the evidentiary  
9 record.

10 THE COURT: Okay. Well, I'll have to take a  
11 look at those two.

12 MR. RUBIN: And then 1677, Your Honor, we  
13 would use with Rebecca Oyler. It supports a number of the  
14 theories that were laid out in opening statements along with  
15 other documents that also disclose the same type of conduct --  
16 content. So it would be used on our, I guess, hostile direct  
17 examination with Ms. Oyler.

18 MR. HUTCHISON: Your Honor, picking up on  
19 counsel's response to Exhibit 27, that it has almost the exact  
20 content as Exhibit 1132, considering his agreement that it has  
21 the same content, it wouldn't affect the evidentiary record to  
22 be privileged.

23 THE COURT: Okay. I'll take a look at it.  
24 Talk to you tomorrow.

25 MR. RUBIN: Do you have copies, Your Honor.

1 THE COURT: Do we have clean copies?

2 LAW CLERK: We don't have copies. It would  
3 probably be helpful if we had the Exhibit 27, Exhibit 1132,  
4 and Exhibit 1677.

5 THE COURT: Anything further.

6 MR. RUBIN: Just to note, Your Honor, that  
7 because Ms. Oyler is not being called tomorrow. You have a  
8 little time.

9 THE COURT: Very good. We'll recess until  
10 tomorrow.

11 MS. HICKOK: What time?

12 THE COURT: 9:30.

13 MR. RUBIN: And thank you for going long, Your  
14 Honor.

15 THE COURT: Have a good night.

16 (THE PROCEEDINGS WERE ADJOURNED FOR THE DAY AT  
17 4:45 P.M.)

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## REPORTER'S CERTIFICATE

I, Marjorie Peters, a Registered Merit Reporter, Certified Realtime Reporter, and Notary Public in and for the State of Pennsylvania, that the foregoing record was taken at the time and place stated herein and was recorded stenographically by me and then reduced to typewriting under my direction, and constitutes a true record to the best of my skill and ability.

I certify that I am not a relative or employee of either counsel, and that I am in no way interested, directly or indirectly, in this action.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal of office this            day of            2013.

\_\_\_\_\_  
Marjorie Peters, RMR, CRR

My commission expires March 13, 2016

Original Certification on file at Miller Verbano Reporting.

Adam D. Millers, Custodian











































































