

D539flo3

1 UNITED STATES DISTRICT COURT  
1 SOUTHERN DISTRICT OF NEW YORK

2 -----x

3 DAVID FLOYD, et al.,

4 Plaintiffs,

5 v.

08 CV 1034(SAS)

6 CITY OF NEW YORK, et al.,

7 Defendants.

8 -----x

New York, N.Y.  
May 3, 2013  
10:05 a.m.

10 Before:

11 HON. SHIRA A. SCHEINDLIN,

12 District Judge

13 APPEARANCES

14 BELDOCK LEVINE & HOFFMAN, LLP  
15 Attorneys for Plaintiffs  
15 BY: JONATHAN MOORE  
16 JENN ROLNICK BORCHETTA

17 COVINGTON & BURLING, LLP  
17 Attorneys for Plaintiffs  
18 BY: KASEY MARTINI  
18 GRETCHEN HOFF VARNER  
19 ERIC HELLERMAN  
19 BRUCE COREY

20 CENTER FOR CONSTITUTIONAL RIGHTS  
21 Attorneys for Plaintiffs  
21 BY: DARIUS CHARNEY  
22 SUNITA PATEL  
22 BAHER AZMY

D539flo3

1  
2  
2  
3  
3  
4  
4  
5  
5  
6  
6  
7  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

APPEARANCES (Cont'd)

MICHAEL A. CARDOZO  
Corporation Counsel for the City of New York  
Attorney for Defendants  
BY: HEIDI GROSSMAN  
BRENDA E. COOKE  
JOSEPH MARUTOLLO  
MORGAN D. KUNZ  
SUZANNA PUBLICKER  
LINDA DONAHUE  
LISA M. RICHARDSON  
JUDSON VICKERS

D539flo3

1 (Trial resumed)

2 THE COURT: Good morning everyone.

3 One quick thing. Judge Pitman called my chambers and  
4 said before you leave the courthouse would you check with his  
5 chambers whether he needs you today. He may want to see you  
6 directly after you're done but he said he wasn't sure so just  
7 check with him before you leave.

8 All right.

9 MR. CHARNEY: Good morning.

10 ROBERT PURTELL, resumed

11 CROSS-EXAMINATION

12 BY MR. CHARNEY:

13 Q. Good morning, Professor Purtell.

14 A. Good morning.

15 Q. When we finished yesterday we were talking about the  
16 results of Professor Fagan's table 5 in his first report.

17 A. Yes.

18 Q. Exhibit 411. If we could pull that up again. I believe  
19 it's page 33.

20 MR. CHARNEY: Your Honor, actually, sorry. I was  
21 going to ask if -- Professor Fagan is here today. Is it okay  
22 if he sits here in case I have a question for him?

23 THE COURT: It is fine. People can consult with their  
24 experts.

25 Have you met Professor Fagan?

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3

Purtell - cross

1 THE WITNESS: No. I don't think we have.

2 THE COURT: Well there he is. He's been talking about  
3 you for a day and here you are.

4 THE WITNESS: I feel bad. No one ever talks about me.

5 THE COURT: Maybe they will.

6 THE WITNESS: Maybe they will.

7 Q. So yesterday we were discussing the -- we were discussing  
8 the statistical significance of each of the particular  
9 variables and we were talking about I guess the T-tests that  
10 results when you would divide the coefficient by the standard  
11 error. Remember?

12 A. Correct, yes.

13 Q. And we had talked about how when you did that for the  
14 percent Black and the percent Hispanic variables that the  
15 result you would get when you did those divisions showed that  
16 those variables actually had more statistical significance than  
17 some of the other predictor variables.

18 Do you remember that?

19 A. Yes. That's correct.

20 Q. Would you say that that T-test also measures -- another way  
21 to put it is it measures the strength of the association  
22 between those predictor variables and the --

23 A. That's what it means to have statistical significance, yes.

24 Q. I wanted to ask you about the testimony you gave yesterday  
25 on direct about I think the proper exposure variable for this

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3 Purtell - cross

1 kind of analysis.

2 Do you remember that?

3 A. Yes.

4 Q. You said that there were really three things that had to be  
5 accounted for?

6 A. I believe you told me I couldn't testify about that because  
7 I'm not an expert on it.

8 Q. Okay. I didn't think that testimony was stricken, but.

9 I guess I just wanted to ask you, you said there was  
10 the probability of an officer encountering the person  
11 exhibiting the behavior that was -- would lead to the stop.

12 Do you remember that testimony?

13 A. I do. But I'm sure it was stricken from the record.

14 Q. Then we'll move on. I'll leave that for Professor Smith.

15 So let's -- I want to ask you about one of the  
16 alternative regressions you ran. This is in Defendants'  
17 Exhibit O8. This is the declaration that Professor Smith  
18 submitted -- this is the first alternative regression analysis  
19 you did. It's Exhibit I of that declaration?

20 THE COURT: What page is that -- it's right at the  
21 end. It's the last couple pages, right?

22 Q. Generalized estimating equation that you ran.

23 Do you recall that?

24 A. Yes.

25 Q. If you have it in front of you, you can just look at it.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3 Purtell - cross

1 A. Well it's on the screen.

2 MR. CHARNEY: Is it in evidence yet?

3 MS. COOKE: Yes.

4 MR. CHARNEY: Okay.

5 Q. So you would agree with me that one of your critiques of  
6 Professor Fagan's analysis was that you believe he was guilty  
7 of omitted variable bias, right?

8 A. That's correct.

9 THE COURT: Omitted what.

10 Q. Omitted variable bias?

11 THE COURT: Omitted variable bias.

12 MR. CHARNEY: Yes.

13 Q. Would you agree with me that omitted variable bias is when  
14 you leave out a predictor variable that is both correlated with  
15 the dependent variables and one or more of the other  
16 independent variables, right?

17 A. Correlated with the dependent variables. May or may not be  
18 correlated with the independent. High correlation there could  
19 be a problem.

20 Q. Well then let's stick with that. Correlated with the  
21 dependent variable?

22 A. It is related to the dependent variable.

23 Q. So this alternative regression analysis that you ran  
24 actually omits several of the predictor variables that  
25 Professor Fagan had found were highly correlated with the

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3 Purtell - cross

1 dependent variable, right?

2 A. That's correct. We did not have the data.

3 Q. Well, you had the patrol strength data, didn't you?

4 A. We -- yes. That's the only data we did have.

5 Actually -- no, we did not. We didn't have his data  
6 at that point nor did we have his code.

7 Q. Well you're aware that the patrol strength data he used for  
8 his first report which this analysis purports to replicate --  
9 in other words, the analysis at the precinct level, you're  
10 aware that the patrol strength data he used for that analysis  
11 was actually the NYPD's own patrol strength data?

12 A. That's correct.

13 Q. That was produced by the defendants in this litigation?

14 A. We did not have that data at that time.

15 Q. So your testimony is that defense counsel never gave you  
16 the patrol strength data that Professor Fagan used in this to  
17 do that analysis?

18 A. I don't remember receiving it.

19 Q. Okay. Would you agree, though, that you omitted a very  
20 important predictor variable from your analysis?

21 A. I will agree that I omitted a variable that he included.  
22 That's correct. And it is, in fact, part of -- yes, I would  
23 agree with that.

24 THE COURT: Which one was that?

25 THE WITNESS: Patrol strength, your Honor.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3 Purtell - cross

1 THE COURT: Right.

2 Q. But your testimony is that your alternative version of  
3 Professor Fagan's regression is actually a more reliable method  
4 for testing the hypothesis that he tested?

5 A. It's not what we said. What we said was by including the  
6 suspect data, the impact on the percent black in precinct  
7 variable went from strongly significant and positive to  
8 insignificant and negative.

9 Q. But are you concerned at all that the results that you  
10 found were in any way biased by the fact that you omitted a  
11 very significant predictor variable?

12 A. I wouldn't call it very significant. I would call it  
13 significant.

14 Q. You wouldn't call it very significant.

15 Can we turn back to Exhibit 411, the table 5 from  
16 Professor Fagan's first report.

17 Do you see there there's a coefficient for patrol  
18 strength under total stops?

19 A. Yes.

20 But that estimate was done without the race variables  
21 and without other omitted variables. So you can't make that  
22 statement about this regression anymore than you can about the  
23 one you just showed us.

24 Q. But you would agree with me that when Professor Fagan ran  
25 the analysis he found that patrol strength was a very

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3 Purtell - cross

1 significant predictor of the level of stop activity, right?

2 A. Within this specification of the model, that's true.

3 Q. And yet you don't think that the fact you omitted it from  
4 your analysis in any way undermines your finding that suspect  
5 description changes the significance of the percent black  
6 variable?

7 A. We made no absolute statement. We were simply saying that  
8 that demonstrated that that variable was also important in the  
9 regression. And should have been included.

10 Q. Are you concerned at all that your -- that the validity of  
11 your results were undermined by the fact you left out patrol  
12 strength?

13 A. To the extent that I am concerned about Professor Fagan's  
14 results also being undermined by leaving out --

15 Q. So the answer is yes?

16 A. The answer is a conditional yes.

17 Q. Also looking on here it looks like the SES factor also,  
18 although to a lesser extent, was also a significant predictor  
19 of the level of stops, right?

20 A. That's true.

21 Q. And you also omitted that from your regression?

22 A. We did not have the data.

23 Q. But you did omit it, correct?

24 A. Because we couldn't include it.

25 Q. The answer again is yes?

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3 Purtell - cross

1 A. A conditional yes.

2 Q. And so are you also concerned that the validity of your  
3 results were undermined by the fact you omitted an additional  
4 potentially --

5 A. Again, we were not trying to produce a perfect model. We  
6 were simply trying to show that those variables certainly had  
7 an impact on the target variables and should have been included  
8 in this model.

9 Q. So you would agree that the validity of your results could  
10 have been undermined by the fact that you omitted the SES  
11 variable as well?

12 A. Just as Professor Fagan's results could have been  
13 undermined by his missing variables, correct.

14 Q. So the answer is yes?

15 A. Again, conditional yes, yes.

16 Q. More generally, Professor Purtell, you make a lot of  
17 critiques of Professor Fagan in terms of things he could have  
18 done or should have done. But isn't it true that many of the  
19 things you propose that he should have done you never actually  
20 tested yourself to see if they would have made a difference?

21 A. We did not have the time.

22 Q. So the answer again is yes?

23 A. Correct.

24 Q. Okay. I want to turn back to Exhibit H13 which is yours  
25 and Professor Smith's second report. I want to turn to the

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3 Purtell - cross

1 section I think it's page 76. I want to ask you a question  
2 about time.

3 Do you recall this section of your report?

4 A. Yes.

5 THE COURT: Seventy-six of.

6 MR. CHARNEY: Of H13.

7 Q. So am I correct that this section of your report which is  
8 failure to include time series dynamics, this is part of your  
9 critique that Professor Fagan did not control for the passage  
10 of time in his analysis?

11 A. What we said is he didn't control for the possibility of a  
12 trend.

13 Q. I'm sorry?

14 A. Possibility of a trend.

15 Q. Okay.

16 A. It was a static, not a dynamic analysis.

17 Q. But you would agree that -- let's take crime, for example,  
18 first. We'll take the crime variable.

19 You would agree that in his analysis he was accounting  
20 each month for differing crime levels in each census tract,  
21 right?

22 A. Yes. But he was not interacting -- he wasn't relating that  
23 specifically to trend. He was looking for what's called a  
24 fixed effect or population averaged effect. It's not the same  
25 thing.

SOUTHERN DISTRICT REPORTERS, P.C.  
(212) 805-0300

D539flo3 Purtell - cross

1 Q. But you say here that his failure to control properly for  
2 time leaves the issue of serial autocorrelation within each  
3 unit of observation unresolved.

4 Now am I correct that serial autocorrelation is a  
5 problem that can arise when something happens in a time period  
6 immediately preceding the one you're studying, could have an  
7 influence on the events in the period you're studying and that  
8 needs to be controlled for, right?

9 A. It's actually an issue with the error terms, but yes.

10 Q. And another term that's commonly used is autoregression,  
11 right? That's another explanation for --

12 A. More or less equivalent.

13 Q. You're aware that Professor Fagan's regression models had  
14 an autoregressive control in them, right?

15 A. Yes. But we did not see any evidence that he tested for  
16 autoregression when he completed the model.

17 Q. So you're --

18 A. So a Wooldridge test would be the standard way of looking  
19 for that.

20 Q. So your testimony is he did have an autoregression  
21 component or control but you don't think he actually tested for  
22 autoregression?

23 A. Right. He assumed an AR1 structure and didn't provide  
24 evidence of an AR1 structure.

25 Q. Okay. Now, another -- I believe -- this I actually I think

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3 Purtell - cross

1 you testified to this yesterday. I don't know if it was  
2 stricken.

3 But you also mentioned that with respect to  
4 population, that a critique you had was that Professor Fagan  
5 did not account for the fact that population flows in  
6 particular census tracts change at various times during the  
7 day. Is that --

8 A. Actually, no, I did not testify to that.

9 THE COURT: During the day?

10 MR. CHARNEY: Well then I'll withdraw it. It's in the  
11 report but I'll ask Professor Smith about it.

12 Q. Now, you believe that Professor Fagan, to control for  
13 passage of time and trends he should have used what you call a  
14 time quadratic variable; is that right?

15 A. A time variable and a time quadratic variable to test for  
16 increasing and decreasing returns, yes.

17 Q. But isn't a time quadratic variable used in situations  
18 where there's what some people call a hump in the data, in  
19 other words, there's a rise over time and then a peak and then  
20 a decline?

21 A. Or the opposite. Could be a drop.

22 But that's why you include both time and the  
23 quadratic. You test for both. And then you make adjustments  
24 when you do the model selection.

25 Q. But you would agree that the trends that are at issue here,

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3 Purtell - cross

1 particularly stops and crime patterns, do not show over time  
2 that kind of hump or I don't know what you would call this or  
3 dip that you're --  
4 A. Convexity or concavity.  
5 Q. Yeah. The data that we're interested in in this case  
6 doesn't show that over time, right?  
7 A. But those are conditional variables dependent upon all of  
8 the other elements in the model. So you can't just graph  
9 something and talk about it. This has ten or eleven dimensions  
10 to it.  
11 Q. But the answer to my question is that you agree, right,  
12 that, for example, crime trends and stop trends do not show  
13 those concavity or convexity --  
14 A. What I would agree to is it is an empirical question that  
15 needed to be tested.  
16 Q. So your testimony is that based upon your review of the  
17 data, is that the number of stops in New York City over the  
18 past ten years have shown a steady increase to a peak and then  
19 a steady decline; or conversely, a steady decline to a low  
20 point and then a steady increase?  
21 THE COURT: Are you talking about just the number of  
22 stops?  
23 MR. CHARNEY: Yes.  
24 THE COURT: We know the number of stops.  
25 MR. CHARNEY: Exactly.

SOUTHERN DISTRICT REPORTERS, P.C.  
(212) 805-0300

D539flo3

Purtell - cross

1 THE COURT: We know the number of stops. That's a  
2 fixed number.

3 THE WITNESS: The idea of a quadratic is looking at  
4 the change in the rate of increase. The rate of increase could  
5 either be constant or speeding up or slowing down.

6 THE COURT: One doesn't need an equation to know this.  
7 We know the numbers. They are known figures. I can tell them  
8 to you and you can do the math.

9 THE WITNESS: You have to look at each observation,  
10 each census tract -- it becomes very complicated because  
11 there's just so much data. This isn't --

12 THE COURT: True. But there is no predicting going  
13 on. We know the number of stops, both total for the City of  
14 New York and by census tract.

15 THE WITNESS: But it is --

16 THE COURT: So we know whether it's going up or  
17 whether it's steady or whether it's going down.

18 THE WITNESS: But we don't know whether that --  
19 because he didn't include anything for trend. We don't know  
20 whether there might be a slight acceleration or a slight  
21 deceleration. And that's what the quadratic shows. It doesn't  
22 necessarily mean a hump.

23 THE COURT: Sorry. Unfortunately, I'm not trained in  
24 this. I don't understand it. All I know is I can plot the  
25 number, the raw number on a graph.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3 Purtell - cross

1 THE WITNESS: Right.

2 THE COURT: And I can look at that graph and I'll know  
3 whether the line is rising or is horizontal or down.

4 THE WITNESS: As you move along, suppose you look at  
5 one period of time, it was rising like this. And the period of  
6 time after, it might be rising a slight bit less or a slight  
7 bit more.

8 THE COURT: But I know it's rising.

9 THE WITNESS: You know it's rising. But you don't  
10 know if it's rising at an even rate.

11 THE COURT: That's helpful.

12 THE WITNESS: The idea is you're driving a car, you  
13 know the speed. But the question is: Are you accelerating or  
14 decelerating?

15 THE COURT: Oh, no. I know whether it's accelerating  
16 I may not know by how much. I said if I can plot the raw  
17 numbers, I know the line is going up.

18 THE WITNESS: This is really looking at the amount it  
19 might be speeding up or slowing down in some subset of periods.

20 THE COURT: If you want to get into months or weeks.  
21 But I know the annual trend, right?

22 THE WITNESS: Well but the assumption is then that  
23 that trend is exactly the same over the entire time period and  
24 it's not speeding up or slowing down in any way. And that's an  
25 empirical question that should be tested.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3

Purtell - cross

1 THE COURT: I'm not sure why if that happens that  
2 might be a problem. I know it's going up. I don't know if it  
3 matters whether it's going down one month a little bit and up a  
4 lot the next. But the bottomline is --

5 THE WITNESS: The trend itself is accelerating or  
6 decelerating. That impacts all the other estimates.

7 THE COURT: That we know just by looking at the graph  
8 of the raw numbers. It's not decelerating. It's going up.

9 THE WITNESS: It's going up. But whether the rate of  
10 increase --

11 THE COURT: I understand that point. That's helpful.  
12 The rate. But it's going up.

13 THE WITNESS: It's going up. And that would be the  
14 time trend.

15 And the question of whether it's accelerating or  
16 decelerating, whether it's going faster or slower -- whether  
17 the rate of acceleration -- the rate of change is increasing or  
18 decreasing, that's the quadratic.

19 THE COURT: Okay. I must tell you I can't understand  
20 why this is important to me, but okay.

21 MR. CHARNEY: I'm actually going to follow up on your  
22 Honor's question about whether it's important or not.  
23 Q. Are you aware of any study that tests racial disparities in  
24 policing or any other context that uses this kind of time  
25 quadratic control?

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3

Purtell - cross

1 A. As I said I'm not an expert in racial disparity and I don't  
2 really read the police literature. That's a question for  
3 Professor Smith.

4 Q. So the answer is no, you're not aware of any such studies?

5 A. I am, however, aware of broad use of this concept in --

6 THE COURT: It is helpful in the courtroom to answer  
7 the question asked.

8 MR. CHARNEY: And then you can explain.

9 Q. The answer is you're not aware?

10 A. I'm not aware in criminal justice.

11 Q. You're not aware of any such studies in policing or any  
12 other study that tests racial disparities, right?

13 A. Well I am aware of studies in policing.

14 You asked me about policing. I am aware of studies in  
15 policing because we, in fact, did that in several of our  
16 studies, as have other people.

17 Q. You're not aware of any studies that looks at racial  
18 disparities in policing or any other context that uses this  
19 kind of time quadratic control, right?

20 A. You said in any other context. Well, any other context --

21 Q. That tests racial disparities in policing or any other --

22 A. Racial disparity, no. As I said, I'm not familiar with  
23 that literature.

24 Q. Now, another question I had with respect to this is as her  
25 Honor pointed out, you have the stop data, you've had the stop

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3 Purtell - cross

1 data from the NYPD for a long time.

2 Did you ever run an analysis using the time quadratic  
3 to see if it would have made a difference?

4 A. We did in our performance measurement analysis.

5 Q. I'm asking in the context of Professor Fagan's analysis,  
6 you didn't include it in any of --

7 A. We only had time to do limited analysis and we had to  
8 prioritize.

9 Q. You had Professor Fagan's first report since October of  
10 2010, correct?

11 A. But we had significant criticisms about that report. We  
12 got the last one with the code -- and we didn't have the code  
13 for that report.

14 We got the last report. I think we had about three  
15 weeks to do everything. We had to set priorities.

16 Q. So, again, the answer here is you don't know because you've  
17 never tested it whether or not using the time quadratic would  
18 have made a difference in Professor Fagan's results?

19 A. That's correct.

20 Q. I wanted to ask you about your critique of Professor  
21 Fagan's patrol strength variable.

22 THE COURT: Say that again.

23 MR. CHARNEY: The patrol strength variable.

24 Q. Now you would agree with me that he used two different  
25 measures of patrol strength, depending upon which report we're

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3 Purtell - cross

1 talking about, right?

2 A. Yes.

3 Q. The first report, in other words the one he did in October  
4 of 2010, he actually used the police department's own  
5 precinct-by-precinct patrol strength data, right?

6 A. That's correct. But it was matched to quarterly lag crime  
7 data which could have created all matter of problems.

8 Q. I understand.

9 A. They're not comparable.

10 Q. You would agree it was data provided by the police  
11 department?

12 A. I would agree, yes.

13 Q. So you don't have any doubt that the numbers that are in  
14 that data, in other words, the number of officers assigned to  
15 each precinct in each quarter, you don't have any doubt that  
16 that's accurate information, right?

17 A. That's correct.

18 But I have no idea how that assignment may have  
19 changed with respect to the timing of the stops.

20 Q. I understand. But you don't have any doubts about the  
21 accuracy of the data?

22 A. No.

23 Q. Okay. And you're aware that when -- and then let's talk  
24 about the second -- the second patrol strength variable that he  
25 created. That was -- that one he did on his own, right?

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3

Purtell - cross

1 A. That's correct.

2 Q. But you're aware that the correlation between the patrol  
3 strength variable that he created and the patrol strength  
4 variable that was based on the NYPD's own data is very high,  
5 right?

6 A. I am aware that he said that but he didn't provide any  
7 evidence to prove it, nor do we have any sense of how he  
8 collapsed the census tracts to match the NYPD data. So I can't  
9 opine on that.

10 Q. But if, in fact, it's true that there is a very high  
11 correlation, wouldn't that increase the reliability of that  
12 variable?

13 A. No. Because the question is what the accuracy is at each  
14 level -- being correlated does not necessarily mean it's the  
15 same thing or it's accurately measured. Lots of things are  
16 correlated and they're incorrect.

17 Q. I understand. But these are two variables that are trying  
18 to measure the same phenomenon, right?

19 A. It's not a phenomenon. It's a count.

20 Q. A count.

21 But they're trying to measure the count of the same  
22 thing, right, the number of officers in a particular area,  
23 right?

24 A. Well they're trying to do it. In one case they were a  
25 measure and the other case it was an estimate that we believe

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3 Purtell - cross

1 is completely endogenous.

2 Q. But you don't think that if, in fact, Professor Fagan's  
3 estimate was highly correlated with the actual data provided by  
4 the police department, that doesn't give you any confidence  
5 that his estimate was a good estimate?

6 A. No.

7 Q. Are you also aware that the regression coefficients that  
8 were the result of his analyses, both the one when he used the  
9 police department patrol strength variable and when he used his  
10 own, that those were very similar?

11 A. They were but the second variable was endogenously  
12 developed and you can't draw any conclusions from that.

13 Q. So even though both variables were purporting to measure  
14 the same thing, both were highly correlated and both -- the  
15 regression coefficients for both were very similar, that still  
16 doesn't give you any basis to think that his control strength  
17 variable was a reliable measure --

18 A. I have no measure of internal reliability.

19 THE COURT: But what he's saying is you do have one  
20 measure because it's so close in outcome to the one where  
21 you're using the statistics supplied by the police department.

22 THE WITNESS: Yes. But, your Honor, there were so  
23 many levels of bias in both models it's very difficult to draw  
24 a conclusion about whether that's meaningful or not.

25 And in this case, endogeneity -- if this had been

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3

Purtell - cross

1 submitted to me as a referee and I saw this level of  
2 endogeneity, I would have rejected it as a paper. And it's a  
3 standard reason for rejecting a paper because it introduces  
4 bias into everything. You can't tell whether that --

5 THE COURT: I was just separating on one factor of  
6 patrol strength similar to counsel's questions.

7 If the estimated patrol strength virtually mirrors the  
8 patrol strength coming from the department's statistics, I  
9 don't understand why that doesn't give you some comfort that  
10 the estimate is an accurate estimate.

11 THE WITNESS: Because that estimate is likely to be  
12 biased and biased upward, your Honor.

13 THE COURT: Why?

14 THE WITNESS: Because of endogeneity.

15 THE COURT: That's too simple an answer. It's not  
16 looking at what I'm asking you.

17 If it's so closely reflects the numbers provided by  
18 the police department, which were actual numbers, if it so  
19 closely mirrors those numbers, why doesn't that give you some  
20 comfort that the estimate of patrol strength is probably right?

21 THE WITNESS: Because I don't know if it is accurately  
22 measured for each of the census tracts.

23 I don't know if patrol strength -- that patrol  
24 strength measure -- in both cases is not matched exactly to the  
25 timing of the stops. There are the same sort of underlying

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3 Purtell - cross

1 errors in both models.

2 THE COURT: But you're taking it certainly several  
3 steps down the analysis. I'm backing up. I'm just saying if  
4 numbers of patrol strengths supplied by the police department  
5 are pretty much the same, mirrored by the estimated numbers in  
6 the second study.

7 THE WITNESS: You mean the impact measure, your Honor?

8 THE COURT: No. Just the numbers. The numbers of the  
9 patrol strength.

10 THE WITNESS: He didn't provide any evidence to that  
11 effect. He showed a correlation. But he did not show that  
12 they were related to the total. And he didn't provide us any  
13 evidence on the correlation. So I really -- I would like to be  
14 able to answer your question but I can't.

15 THE COURT: Okay.

16 Q. So I want to turn back to the declaration you were just  
17 looking at Exhibit O8. And -- actually no. We'll move on.  
18 Sorry. I know everybody wants to get this moving here.

19 Let's --

20 THE COURT: No. I just want you not to talk to  
21 yourself.

22 MR. CHARNEY: Sorry.

23 THE COURT: We try very hard to follow you.

24 MR. CHARNEY: I know. I'm an out loud figure. I'm  
25 sorry.

SOUTHERN DISTRICT REPORTERS, P.C.  
(212) 805-0300

D539flo3 Purtell - cross

1 Q. Let's turn to Exhibit H13, your most recent report. And I  
2 want to look at 72 through 75. And these are the scatter plot  
3 graphs, right?

4 A. Yes. Actually Professor Smith is going to testify about  
5 that.

6 Q. Okay. That helps. We'll move on then.

7 So I want to ask you about your critique of Professor  
8 Fagan's sampling method that he used to analyze the other text  
9 strings on the UF 250 forms.

10 A. Yes.

11 THE COURT: Did we do that yesterday? Is that the  
12 3700? Is that the 86,000? You're not going to repeat that?

13 MR. CHARNEY: I'm not going to go through the numbers.  
14 I just want to ask him about his particular critiques because  
15 he testified on direct about those.

16 Q. So one of the critiques you made that --

17 THE COURT: Didn't we do that on cross already too?

18 MR. CHARNEY: I don't think so.

19 THE COURT: Okay.

20 MR. CHARNEY: Sorry.

21 THE COURT: I thought we had.

22 MR. CHARNEY: Yeah.

23 THE WITNESS: I thought so too.

24 THE COURT: I'm sure we had because we talked about  
25 the size of the sample and I made some remark about --

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3 Purtell - cross

1 MR. CHARNEY: You had a lot of questions for him for  
2 sure which were good questions and I'm going to try not to  
3 repeat your questions.

4 THE COURT: Maybe I did. I don't remember.

5 THE WITNESS: At my age who remembers?

6 MR. CHARNEY: I wasn't going to repeat your questions  
7 hopefully.

8 Q. One of your critiques was he did not provide any  
9 information about the statistical power of the sample. Do you  
10 remember that?

11 A. That's correct.

12 Q. And the example you gave was that it was an election poll?

13 A. That's correct.

14 Q. You would agree that an election poll -- an election poll  
15 is trying to analyze, is trying to compare the mean values  
16 between two different things, right?

17 A. It is trying to draw an inference about a response to a  
18 sample -- to a survey.

19 Q. And it's actually -- you're conducting a statistical  
20 analysis to come up with that, right?

21 A. Yes.

22 Q. But the 3700 cases that Professor Fagan drew -- that form  
23 the sample that Professor Fagan used, he didn't use those 3700  
24 cases to conduct any statistical analysis, right?

25 A. He did because he drew inferences from them and then he

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3 Purtell - cross

1 tried to apply them to the full population. So those  
2 proportions that he drew, the -- apparently unjustified -- I  
3 can't remember the exact terminology -- they were, in fact, the  
4 same as an opinion.

5 Q. No. I understand.

6 But he wasn't -- he didn't actually analyze the data  
7 to then -- to measure the extent to which, for example, one  
8 variable was associated with another or one variable correlated  
9 with another, right, he didn't do that?

10 A. No. But nor would a survey do that.

11 Q. He also wasn't comparing anything, right?

12 A. He was trying to look at the population, determine its  
13 proportions and then apply it to the general population.  
14 That's the same as a survey.

15 Q. But he wasn't, for example, trying to tell you, you know,  
16 this many more people said this or this many more people wanted  
17 to vote for this person than wanted to vote for this person,  
18 right?

19 A. What he said is this many cases fit in this category and  
20 this many case cases fit in that category. It's the same  
21 thing.

22 Q. And he also didn't have a null hypothesis that he was  
23 attempting to accept or reject, right?

24 A. Not that he stated.

25 Q. Okay. But your testimony is that even though he didn't

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3 Purtell - cross

1 have a null hypothesis, even though he wasn't comparing the  
2 mean values between two different groups or two different  
3 things, that he still needed to provide the statistical power  
4 of his sample?

5 A. Yes.

6 MR. CHARNEY: One minute, your Honor.

7 (Pause)

8 Q. So now let's turn to your page 66 of your report. I want  
9 to talk about the zero count issue.

10 THE COURT: I'm sorry turn to?

11 MR. CHARNEY: 66 of Exhibit H13.

12 Q. You start the discussion of the zero count issue that you  
13 testified about yesterday.

14 A. I didn't see where it was on the page.

15 Q. So the first question I had about this was with respect to  
16 table 7. Do you see in table 7 there? It says -- it shows the  
17 frequency -- first of all, by zero count you mean a particular  
18 census tract in a particular month that had zero stops, right?

19 A. That's correct.

20 Q. And table 7 on the other hand is listing the number of  
21 census tracts in particular months that didn't have any of  
22 these reported crimes. Is that what that means?

23 A. No. They were stops for that particular crime.

24 Q. Stops for that particular crime?

25 A. Right.

SOUTHERN DISTRICT REPORTERS, P.C.  
(212) 805-0300

D539flo3

Purtell - cross

1 Q. But just because it says, for example, in the first row  
2 there violence, 20,307 just because that census tract in that  
3 month or there were 20,000 of those kinds of census tracts that  
4 didn't have any stops for violent crime, it doesn't mean that  
5 they didn't have any stops at all, right?

6 A. That's correct.

7 THE COURT: What is the percentage?

8 THE WITNESS: It's the percentage of the total number  
9 of --

10 THE COURT: Census?

11 THE WITNESS: Of census tract months.

12 THE COURT: So 30 percent of the total of census tract  
13 months there were --

14 THE WITNESS: No stops for violent crime.

15 THE COURT: Right.

16 Q. But you're aware that 99.96 percent of all the census tract  
17 months had at least some kind of stop in there? You're aware  
18 of that?

19 A. That's correct.

20 Q. Which means that there were only .04 percent of all the  
21 census tract months had no stops of any kind, right?

22 A. Correct.

23 Q. That's a pretty small number, isn't it?

24 A. Yes. But if you look at it on a -- the zero process is the  
25 decision whether a police officer will or will not stop

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3 Purtell - cross

1 somebody. And that is a very large number, the number of those  
2 incidents. Because the average is that a police officer will  
3 stop somebody two or three times a month. And Professor Smith  
4 will testify to the number of people a police officer is likely  
5 to see during the month. So that's the zero stop process.

6 THE COURT: I'm sorry. I'm quite lost. Some of these  
7 percentages are high. I don't think I understand. So, for  
8 example, trespass, you're saying 72 percent of the census tract  
9 months there were no stops for trespass?

10 THE WITNESS: Yes, your Honor. That's what the data  
11 said.

12 THE COURT: And yet that total half of a percentage  
13 point overall.

14 MR. CHARNEY: Because what I'm asking him is about  
15 any --

16 THE COURT: Any crime. I know, but.

17 MR. CHARNEY: Your Honor, I don't want to testify.  
18 But I guess what I would argue is that -- is that obviously  
19 stops are not -- you know, happen in certain parts of the city.

20 MS. COOKE: Your Honor, he can ask questions but --

21 THE COURT: This is a nonjury trial. I have a  
22 question. I can call it an argument. You're welcome to argue  
23 back.

24 But I don't understand how such big percentages end up  
25 shrinking to a quarter of one percent. I just need an

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3 Purtell - cross

1 explanation to understand how it gets as low as 99.9 percent of  
2 the census months have at least one stop when there's such high  
3 zeros.

4 MR. CHARNEY: I guess I would argue that --

5 MS. COOKE: Because there's several different kinds of  
6 crime, your Honor.

7 THE COURT: Sorry?

8 MS. COOKE: There's lots of little different  
9 categories of crime. So as long as a crime appeared in the  
10 census tract.

11 THE COURT: It wouldn't be a zero month.

12 MS. COOKE: Right.

13 THE COURT: It might have been a month that had just  
14 one, one of anything. I understand.

15 So you answered it in the end. I just needed to  
16 understand how that was possible. Okay. You don't need to  
17 answer because she did.

18 MR. CHARNEY: Okay. Great.

19 Q. Well then now the point you were making about the process  
20 for an officer deciding whether to stop or not stop somebody.

21 THE COURT: Then lets back up. Now that I sort of  
22 understand how you could have such high percentages and still  
23 have at least one stop in almost every census month, then could  
24 you frame your question again from the beginning now that I  
25 understand that.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3 Purtell - cross

1 MR. CHARNEY: You mean the one about the  
2 99.96 percent?

3 THE COURT: I guess so.

4 Q. So you're aware in 99.96 percent of all the census tract  
5 months, there was at least one stop that occurred, right?

6 A. One stop of some kind in an area, correct.

7 Q. Okay.

8 A. Which would mean one day out of 30 to 31 days in a month,  
9 which means 30 days of that month had no stops.

10 THE COURT: If it's as low as one.

11 THE WITNESS: If it's as low as one, yes, your Honor.

12 Q. You don't know how low it is?

13 THE COURT: No. He's just giving that as an example.  
14 In other words, if to join the group one is enough, it could  
15 be, in that census tract, that there were 30 days with none.

16 Now what's your point about this decision to stop or  
17 not stop.

18 Q. So I guess my question, because I am confused about this,  
19 is this process that you say officers go through when they  
20 decide whether or not to stop or not stop somebody, that really  
21 goes to the issue you were talking about yesterday of the  
22 likelihood of somebody to be stopped, right?

23 A. That's correct.

24 Q. But Professor Fagan's analysis in table 5 was not measuring  
25 the likelihood of individual people to be stopped or not,

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3

Purtell - cross

1 right?

2 A. It was measuring the process underlying the stop decision.

3 Q. But it was measuring --

4 A. If it's not, then it's not the right model.

5 Q. It was measuring the level, in other words, the number of  
6 stops that occurred in a particular area in a particular month,  
7 right?8 A. It was measuring the law of likelihood of an occurrence.  
9 That's what those models do.

10 Q. I understand.

11 But my question is he wasn't trying to analyze the  
12 likelihood of one individual over another to being stopped or  
13 not, right?14 A. Not the way he structured the model with population  
15 averages, no.16 THE COURT: So what do you think he was measuring in  
17 table 5?18 THE WITNESS: He's measuring the -- well, you'd have  
19 to look at each variable separately, your Honor.20 THE COURT: Well, no. He created a table with a  
21 result. And you think you understand what he was doing. What  
22 do you think he was measuring?23 THE WITNESS: I assume he was trying to measure the  
24 process behind the stop decision.

25 THE COURT: Process?

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3

Purtell - cross

1 THE WITNESS: Trying isolate those factors that  
2 contributed to the decision to stop, or the decision for a  
3 number of stops.

4 THE COURT: The decision to stop anyone?

5 THE WITNESS: Yes.

6 THE COURT: Make a stop?

7 THE WITNESS: To make a stop. Yes.

8 Q. That's what you think he was measuring through the analysis  
9 in table 5?

10 A. Well that's -- these types of models he uses are process  
11 models.

12 Q. Meaning a negative binomial regression, that's what that's  
13 for?

14 A. Or a Poisson regression. That's correct.

15 Q. Well the Poisson regression is table 7, which we can look  
16 at. Let's pull up table 7 from Exhibit 417, which is on page  
17 20, I believe, of Exhibit 417.

18 So you would agree that table 7 is the Poisson  
19 regression analysis results, right?

20 A. That's correct.

21 An as I -- you wouldn't let me testify to this  
22 yesterday but I have questions about why he was able to switch  
23 models.

24 Q. I don't think I get to decide what you get to testify  
25 about. So please don't tell me that I wouldn't let you

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3

Purtell - cross

1 testify.

2 THE COURT: I think what he means by that, you might  
3 have objected during the direct, and I might have sustained the  
4 objection.

5 Q. But my question is -- had nothing to do with police  
6 practice.

7 My question is: Isn't table 7 the regression analysis  
8 that measures the likelihood of various people of particular  
9 races being stopped or not?

10 A. It measures the law of likelihood. That's correct.

11 THE COURT: The what?

12 THE WITNESS: The law of likelihood. That was the  
13 whole thing we went through yesterday.

14 THE COURT: That was not his question.

15 Is this the one that tells us the likelihood of  
16 certain types of individuals being stopped as opposed to other  
17 types of individuals?

18 THE WITNESS: Yes. But it's not a likelihood. It's  
19 the law of likelihood. I'm just trying to be precise.

20 THE COURT: That's true.

21 But the bottomline is it tells the likelihood of one  
22 type of person --

23 THE WITNESS: At the top, it does, yes.

24 THE COURT: -- as opposed to another type of person by  
25 race?

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3 Purtell - cross

1 THE WITNESS: Exactly.

2 THE COURT: And table 5 doesn't do that.

3 THE WITNESS: Table 5 -- in fact, I misspoke yesterday  
4 when I -- when we went through that whole question of the  
5 probabilities, I for some reason I had table 7 in my mind  
6 instead of table 5 and that is -- that probability at the  
7 bottom -- that 50 percent number is the probability of an  
8 additional stop for a change in the black population with  
9 respect to the white population. I misspoke on that.

10 THE COURT: Oh.

11 Q. If we can -- I actually want to follow up on that because  
12 that's an important question I had.

13 This is the demonstrative that your attorney showed  
14 you yesterday, right?

15 A. That's correct.

16 Q. And this is the demonstrative that you say demonstrates  
17 that there is no practical significance to the results --

18 A. That's right. And it's mistitled at the bottom. I wrote  
19 that the night before and --

20 THE COURT: So what should it be?

21 THE WITNESS: It should say it is the relative odds of  
22 an increase in the number of stops with a one percent increase  
23 in black people compared to white people. So if the black  
24 population goes up by one percent, the chances of a stop  
25 occurring are .22 percent higher than if they went up by the

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3 Purtell - cross

1 same amount for the white population.

2 Q. Let me see if I can clear this up because I'm confused now.

3 Is it your testimony that this demonstrative is  
4 directed at the results in table 7?

5 A. No. No. It's in table 5.

6 I just -- I was thinking about table 7 when I wrote  
7 the title on this. And I just misspoke. I didn't -- I was  
8 inaccurate during my testimony.

9 Q. But aren't the results of table 5 -- and I think you  
10 testified to this yesterday and I can -- the results of table 5  
11 are measuring -- and I'll even use your words -- the likelihood  
12 of the number of stops in a particular location going up if the  
13 percent black population goes up. And when I say number of  
14 stops, it's number of stops of anybody in that area?

15 A. That's right. And that's what this table should have said  
16 too. It's just a conversion of that.

17 (Continued on next page)

18  
19  
20  
21  
22  
23  
24  
25

D538FLO2

Purtell - cross

1 Q. So the odds of a black person being stopped, that's not  
2 what you --

3 THE COURT: He said that's the wrong title.

4 And the right title, tell us again.

5 THE WITNESS: It would have been the chances of an  
6 increase in stops for a black person versus the white  
7 population. So if the white population had gone up, it would  
8 have been 49.78 percent chance that stops would increase. If  
9 the black population goes up, it's 50.22 percent chance that  
10 stops would increase.

11 THE COURT: It doesn't matter who gets stopped, but  
12 the chances of being stopped increase slightly if the  
13 population increases in blacks as opposed to the population  
14 increases in whites.

15 THE WITNESS: Right. It's a random event.

16 Q. I just want to make sure I understand. You're saying  
17 that -- you're not measuring the chances of a black --

18 THE COURT: He didn't say that. If the black  
19 population increases, there is a slightly increased chance of  
20 another stop occurring.

21 MR. CHARNEY: To anybody, regardless of race.

22 THE COURT: Right. If the white population increases,  
23 there is a slightly less chance of an additional stop being  
24 made. But they are both so close to the 50, he says it's  
25 random anyway.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO2 Purtell - cross

1 Q. I think you said that if the black population went up,  
2 increased -- the percentage of the black population went up by  
3 1 percent, you're saying that the likelihood of an extra stop  
4 occurring would be 50.22 percent?

5 A. Yes.

6 Q. Now, what if the black population went up 20 percent?

7 A. You can't draw any inferences from the model. These are  
8 what are called main or marginal effects. And the assumption  
9 is, if all other things are held equal, a 20 percent increase  
10 in the black population would mean that the entire mix of  
11 population in the city has changed. So you can't draw the  
12 inference.

13 THE COURT: Well, he is not asking about the city. He  
14 is giving you a hypothetical census tract. Take that one  
15 census tract. Here you have a 1 percent increase.

16 Excuse me. That's what you do to him and it makes  
17 it's hard to make the record.

18 If a hypothetical census tract were in that tract, the  
19 population of blacks does not increase by 1 percent, but it  
20 increases by 20 percent, since you found a slight difference if  
21 there was a 1 percent increase in black population, if there  
22 was a 20 percent increase in black population, would that  
23 indicate there would be more stops made? I am not saying of  
24 whom, but there would be more stops made?

25 The same way you found a slight increase in stops if

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO2 Purtell - cross

1 the black population increased by 1 percent, as compared to the  
2 white population increasing by one 1 percent, all I am asking  
3 you is, if that increase was dramatic, 20 percent, would you  
4 therefore expect a more dramatic increase in the number of  
5 stops in that census tract?

6 THE WITNESS: I wouldn't be able to draw the inference  
7 from this model.

8 THE COURT: Then you can stop talking.

9 THE WITNESS: I'm Irish.

10 THE COURT: There is an excuse I haven't heard before.  
11 Q. Let me ask you this question.

12 You would agree with me that what Professor Fagan was  
13 doing in -- what he was trying to assess in his negative  
14 binomial regression in table 5 was the extent to which the  
15 increase in the percent black population would either increase  
16 or decrease the number of stops that took place in a particular  
17 month in a particular census tract, right?

18 A. Yes. And we agreed that his coefficient showed that, but  
19 we questioned whether they were practically significant.

20 Q. I guess my question is, wouldn't the way to figure out  
21 practical significance would be to try to assess or to do a  
22 conversion of the regression coefficient to the number, in  
23 other words, the counts of stops to try to figure out how that  
24 increase would work?

25 A. That would be extraordinarily difficult to do. What you

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO2 Purtell - cross

1 need to do is change to a count model.

2 Q. Isn't that what this negative binomial regression is?

3 A. No. It's a model that measures the log likelihood of an  
4 outcome. You can't directly relate this to counts.

5 Q. And the outcome that you're looking at is an increase in  
6 the number, an increase in the count?

7 A. An increase, but not a specific number. It's an increase  
8 in the number of stops. But it's a likelihood measurement.  
9 You can't just relate that to counts.

10 Q. The reason I am confused, Professor, is I thought you  
11 testified earlier that table 7 is the analysis that is  
12 assessing likelihoods?

13 A. They are both doing -- both the poisson and negative  
14 binomial models produce log odds ratios as outcomes. They  
15 produce the same type of output. They are interpreted the same  
16 way.

17 Q. Is it your testimony that, based on the numbers in this  
18 demonstrative, that a 1 percent increase in the black  
19 population would increase the likelihood of a stop occurring by  
20 .22 percent, is that what that means?

21 A. .22 percent -- it's .22 percent more than even money.  
22 Again, that's an estimate. So there are margins.

23 Q. If you then went from --

24 THE COURT: You don't think that is significant?

25 THE WITNESS: No. As we said yesterday, I think it's

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO2 Purtell - cross

1 just a result of a very large data set.

2 THE COURT: Not significant number?

3 THE WITNESS: Not practically.

4 Q. If you went from a census tract that was 15 percent black,  
5 and then you compared it to a census tract that was 55 percent  
6 black, you would actually have a 40 percent increase there,  
7 right?

8 THE COURT: Sorry?

9 Q. If the percent black population went up 40 percent,  
10 wouldn't this --

11 THE COURT: We just discussed that. I just asked that  
12 in my 20 percent hypothetical, and he said he could not draw  
13 that inference. Remember that answer?

14 Q. So you can't draw that inference based on these numbers at  
15 all?

16 A. No. Because these population average responses. In fact,  
17 in Professor Fagan's code, he was very specific to state that.  
18 He has the PA option selected in this data code.

19 Q. Anyway, back to the zero counts then because we were  
20 talking about that and I got a little sidetracked.

21 THE COURT: I would like to understand that.

22 Q. Now that we know that only a really small percentage of  
23 census tract months had no stops in them in the period that you  
24 studied, the 30 month period, 2010 to 2012, how is it that in  
25 table 8 of Exhibit H13 on page 68, how is it that the number of

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO2 Purtell - cross

1 observations, the last row there --

2 A. Which page is this?

3 Q. Page 68.

4 A. 44,000? Those are the number of census tracts with  
5 positive counts.

6 THE COURT: I need to get back to this. Where is this  
7 from?

8 MR. CHARNEY: This is Exhibit H13, page 68.

9 THE COURT: Then?

10 MR. CHARNEY: The last row, the one that says "N".

11 THE COURT: OK. 44,000. What were you asking?

12 Q. So my question, the part I am confused about is, you  
13 testified earlier that only about .04 percent of all the census  
14 tract months had no stops in them?

15 A. Well, I never calculated the percentage, but I was assuming  
16 you had.

17 Q. If that's the case, then I don't understand why so many of  
18 the -- the overall number of census tract months, which is  
19 something around 63,000, right?

20 A. I guess -- let's see. Then I misspoke before. It's a  
21 larger percentage, your Honor.

22 THE COURT: I am totally lost. What is this 44,000  
23 supposed to represent?

24 THE WITNESS: It is the number of census tracts  
25 between 2010 and 2012 that had positive counts for stops during

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO2 Purtell - cross

1 that period.

2 THE COURT: He is saying, if it was a total of 60  
3 something, it should be 60 something, it should be almost the  
4 same.

5 THE WITNESS: Except that wasn't -- I should not have  
6 answered so quickly on that other question. I didn't know the  
7 actual percentage. I never thought about that.

8 THE COURT: You mean the 99.5?

9 THE WITNESS: Yes.

10 THE COURT: What is it?

11 THE WITNESS: It is something substantially lower than  
12 that based upon what we -- we used the software package --

13 THE COURT: Is it in your report, do you know what it  
14 is?

15 THE WITNESS: It would be 44,686 out of the 63,000.  
16 So it is about 20 percent that are zero count.

17 MR. CHARNEY: We just disagree with that number.

18 THE COURT: I need to know. How do I find out which  
19 is which? Is this a real statistical disagreement or something  
20 that can just be run the numbers? I don't think this is an  
21 analytical question. This sounds like just a math question.

22 MS. COOKE: I think it sounds like a math question.

23 THE COURT: I think so too. You can probably redo the  
24 math. It's X number of census tract months. There's X number  
25 of real total zeros in there.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO2 Purtell - cross

1 MS. COOKE: I might suggest that Professor Fagan run  
2 it and provide it, and we would run it and provide it, and we  
3 can compare and see where maybe --

4 THE COURT: That's a big difference between a half of  
5 1 percent and 20 percent. Somebody is just wrong. Because we  
6 have the counts of census tract months, and we have the count  
7 of stops. There can't be such a big disagreement on how many  
8 of those were zeros.

9 Let me ask this question. If it were 99.5, if it  
10 turns out the plaintiffs' side is right on the count, would  
11 that change your table 8?

12 THE WITNESS: It would certainly change the "N," your  
13 Honor.

14 THE COURT: No. That wasn't my question. Would it  
15 change the outcome in table 8? I know it would change the "N."

16 THE WITNESS: I couldn't tell you without running the  
17 analysis.

18 THE COURT: You can. Would it change? I didn't ask  
19 you how much it would change it. Would it change the outcome  
20 if you changed the "N" significantly?

21 THE WITNESS: It could.

22 THE COURT: That's the best you could say? Not it  
23 would?

24 THE WITNESS: It depends if in fact there are missing  
25 census tracts.

SOUTHERN DISTRICT REPORTERS, P.C.  
(212) 805-0300

D538FLO2

Purtell - cross

1 THE COURT: Hold on. You're making this harder than  
2 it has to be. I will try again in a hypothetical question.

3 If "N" were 65,000, not 44,000, would it change the  
4 outcome in this chart?

5 THE WITNESS: It might.

6 THE COURT: Not it would?

7 THE WITNESS: No. Because we have to know whether the  
8 ones that were not included looked the same as the ones that  
9 were included. If they looked the same, it wouldn't make any  
10 difference. If they were very different, it would make a  
11 difference. So I would like to be able to answer all of these  
12 questions affirmatively, but they are empirical questions that  
13 require analysis.

14 THE COURT: It just strikes me that if the "N" changes  
15 by another 50 percent, from 44 to 66, it has to change the  
16 outcome somewhat. But maybe I just don't understand the  
17 numbers.

18 THE WITNESS: It depends on a number of factors.

19 MR. CHARNEY: I am going to operate as if Professor  
20 Purtell is right on the 44,000 because I still have questions.  
21 Even if it's 44,000, we still take issue with the analysis.

22 THE COURT: I would like to give a homework assignment  
23 on this one, as we have many times. Can you run that again?

24 MS. COOKE: I don't run it.

25 THE COURT: You know what I mean. You do and you

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO2 Purtell - cross

1 don't, actually. You have the number of stops per census  
2 tract. This doesn't take, frankly, a statistical expert. This  
3 is just looking at the data. I would have thought a paralegal  
4 could do it. How many census tract months have zero out of all  
5 the census tract months? It doesn't sound like it would take a  
6 scientist to do it.

7 MS. COOKE: I don't know the data, but I will have  
8 Professor Purtell run that and provide it to me.

9 THE COURT: You keep saying that, but I don't think  
10 it's a matter of running anything.

11 MS. COOKE: I know that we have the stop data.  
12 Myself, I am not familiar with the format. I can't open that  
13 material on my computer. And I am not sure if there is field  
14 that indicates the census tract or a GAS coordinate.

15 THE COURT: You would be able to do it if it was  
16 precincts, for example?

17 MS. COOKE: Exactly. I will have Professor Purtell  
18 work with me to provide that as quickly as we can get it.

19 THE COURT: OK.

20 Anyway, let's assume for the moment now that it is  
21 44,000.

22 BY MR. CHARNEY:

23 Q. My question about that is, did you in running this analysis  
24 do any assessment of the characteristics of those census tracts  
25 that did have zero counts, in other words, their population

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO2 Purtell - cross

1 demographics, their crime levels, their socioeconomic variable  
2 levels, did you look at any of that?

3 A. The SES factors are in this model.

4 Q. My question is, this model excludes the zero counts, right?

5 A. That's right. Did we look at the zero count data?

6 Q. Did you look at the characteristics of those zero count  
7 census tract months to see if there were any common traits in  
8 those that were being excluded?

9 A. We did not because it wasn't our purpose to model either  
10 the count or the no count process, but merely to demonstrate  
11 that they appeared to be different and needed to be tested  
12 empirically.

13 Q. Are you concerned at all that you were inserting sample  
14 selection bias into your analysis because those census tracts  
15 that were excluded could have been, for example, all  
16 overwhelmingly white census tracts?

17 A. That is certainly a valid question, but it's again an  
18 empirical question.

19 Q. And you never looked at that empirical question?

20 A. No. What we are suggesting here is the zero process should  
21 have been modeled before modeling the count process.

22 Q. So then the results that you get here, that percent black  
23 and percent Hispanic are now not statistically significant,  
24 that might not be a valid result, right?

25 A. In your last hypothetical, you're suggesting these are all

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO2 Purtell - cross

1 either black or minority. I don't know. I can't tell you  
2 that. Given this data set, given a population average result,  
3 those are what they are.

4 Q. Another question I have is, you would agree with me --  
5 well, first of all, table 8 is supposed to be replicating  
6 Professor Fagan's table 5 analysis but with the zero counts  
7 taken out, right?

8 A. Correct.

9 Q. You would agree that the purpose of the analysis in table 5  
10 was to assess the extent to which the percent black or percent  
11 Hispanic of a census tract impacted the level of stop  
12 activity -- impacts the level of stop activity?

13 A. The likelihood of stop activity, correct.

14 Q. Are you concerned at all that by taking out -- withdrawn.

15 So in doing that analysis, isn't it important to  
16 include those census tracts that don't have any stops because  
17 that's relevant to this question of the number of stops in a  
18 census tract?

19 A. The purpose of this model was to see whether the ones with  
20 stops were different from the ones without stops. So for this  
21 model, it would have been counterproductive to include them.

22 Q. Isn't table 5 measuring that --

23 A. You're back to table 5?

24 Q. Isn't Professor Fagan already measuring the fact that  
25 census tracts are different, in that their differences are

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO2 Purtell - cross

1 causing the different stop rates, right? Isn't that what he is  
2 accounting for in all of his predictor variables?

3 A. If you assume that the zero process is exactly the same as  
4 the count process, that could be correct. And if you take into  
5 account all of the missing variables issues and the bias  
6 issues.

7 Q. By zero process, you mean the process by which a police  
8 officer is deciding to stop or not stop someone?

9 A. Actually, the Court ruled yesterday that I am not allowed  
10 to testify about that, Professor Smith will.

11 Q. I don't understand, but I don't know what the zero process  
12 means. Can you at least tell me what it means?

13 A. Not without talking about what a police officer sees  
14 because it is a decision process by a police officer, and I was  
15 barred from testifying.

16 Q. But you can agree that what you mean by zero process is it  
17 is a decision process of a police officer?

18 A. That's correct.

19 Q. And your testimony is that that process is significant to  
20 the analysis in table 5 of Professor Fagan's report?

21 A. What we are saying is this analysis suggests that it is.

22 Q. You're not talking about table 7 when you talk about the  
23 zero process?

24 A. Table 7 has exactly the same issue.

25 Q. Just so we are clear, table 7 you would agree is the

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO2 Purtell - cross

1 analysis that is measuring the likelihood of a black person  
2 versus a white person to be stopped, right?

3 A. It measures, yes, the log likelihood, correct.

4 Q. Table 5 measures the log likelihood of the number of stops  
5 in an area -- of anybody in that area, whether or not it would  
6 go up if you increase the percent black population, right?

7 A. Well, it doesn't measure in an area. It measures across  
8 the city on average. All of these are population average  
9 models.

10 THE COURT: Otherwise his question as worded is  
11 correct?

12 THE WITNESS: If you're talking about the city, yes,  
13 but not for a specific area.

14 Q. Table 5 is not measuring the likelihood of a black person  
15 versus a white person to be stopped?

16 A. That's correct.

17 Q. So I guess my last question on this zero counts point is  
18 that you don't agree that, given what Professor Fagan was  
19 trying to measure in table 5, you don't agree that it would be  
20 important to include those census tracts that had no stops in  
21 that analysis?

22 A. We are not suggesting you exclude them. We are suggesting  
23 the way the models that account for zeros work, the zero  
24 process works, is they first separate the population into the  
25 no count, no stop population, and then they retain all of those

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO2 Purtell - cross

- 1 precincts and they run the additional analysis with adjustments  
2 to the findings. We never said that you should drop them.  
3 Q. Now, in your table 8, your testimony is that these  
4 coefficients here show that once you take out the zeros, the  
5 percent black and percent Hispanic variables are no longer  
6 statistically significant, right?  
7 A. Yes.  
8 Q. But this analysis that is reflected in table 8, that was  
9 not a negative binomial regression that you ran, right?  
10 A. It is a negative binomial regression. We use the same  
11 title that Professor Fagan did.  
12 Q. What about table 9, which is on the next page, page 69?  
13 A. OK.  
14 Q. Now, am I correct that this analysis -- first of all, two  
15 things. This analysis only looks at the 2010 and 2011 data,  
16 right?  
17 A. That's correct, because that's the only period we had the  
18 merged file data for.  
19 Q. In other words, the data on the crime suspect race?  
20 A. Correct.  
21 Q. So excluded from this table are the first six months of  
22 2012?  
23 A. Correct.  
24 Q. And this analysis includes the zero counts, right?  
25 A. It does.

SOUTHERN DISTRICT REPORTERS, P.C.  
(212) 805-0300

D538FLO2 Purtell - cross

1 Q. Your testimony is that, again, these coefficients show that  
2 when you include the suspect race variable, the percent black  
3 and percent Hispanic variables are no longer statistically  
4 significant, is that your testimony?

5 A. That's correct. In this case, we are looking at a count  
6 model because this is a panel data model, not a negative  
7 binomial model.

8 Q. So even though this is not a negative binomial model,  
9 you're comfortable comparing the regression coefficients in  
10 this model with the regression coefficients in a negative  
11 binomial model?

12 A. I am comfortable in comparing their relative statistical  
13 significance. That's all it's meant to do.

14 Q. Even though the underlying math of the two analyses is not  
15 the same?

16 A. Correct. We are checking robustness to estimation  
17 technique.

18 Q. You're also aware that when Professor Fagan ran his  
19 analysis, he did have an autoregressive component to control  
20 for the serial auto correlation problem we talked about, right?

21 A. He did have an AR-1 correction in there.

22 Q. But you didn't use that in your analysis, right?

23 A. We did not in this model.

24 Q. Are you concerned at all that your results were impacted by  
25 serial auto correlation?

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO2 Purtell - cross

1 A. No, because we ran what are called ACF and PACF tests at  
2 the end, which we did not report, and so I really can't testify  
3 on that.

4 Q. Are you aware that if you ran your analysis and you  
5 included Professor Fagan's autoregressive control, that the  
6 percent black variable would actually be statistically  
7 significant?

8 A. We didn't run that analysis so I can't provide any opinion  
9 on that.

10 Q. Lastly, I want to look at, at least on this topic, I want  
11 to look at table 10, which is on page 70.

12 MR. HELLERMAN: Can I have a moment?

13 THE COURT: Sure.

14 Q. Before I look at table 10, I want to look at Professor  
15 Fagan's table 5 in Exhibit 417.

16 Now, yesterday when you testified, you noted that, of  
17 course, there is no percent white variable, right?

18 A. That's correct.

19 Q. That's because that's the control group here?

20 A. It's a control group, and he is using percentages, so he  
21 would have overspecified the model.

22 Q. He would have overspecified the model if he put percent  
23 white in there, right?

24 A. Right, because those are inclusive categories.

25 Q. Now, let's go back to table 9 in your report, page 69.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO2

Purtell - cross

1           You have white suspects for 10,000 as a variable,  
2 right?

3 A. Right. This is not an inclusive measure so it's not  
4 overspecified. It's not a percentage.

5 Q. So you're not concerned at all that, because you don't have  
6 a reference group for your suspect race variable, you're not  
7 concerned at all that your results are biased in any way?

8 A. No. It can't be compared to anything. It's just the  
9 impact of white suspects on the number of stops. This is a  
10 panel data model.

11 Q. Even though you don't have a percent white variable?

12 A. No. We are not concerned.

13 Q. So then let's --

14           THE COURT: What is the percent other race? What  
15 races are those?

16           THE WITNESS: I guess anything that is not black,  
17 Hispanic or white.

18           THE COURT: I just wanted to be sure.

19 Q. Let's look at table 10 on page 70.

20           Actually, before I go there, on table 9, again, you  
21 did not include in table 9 a patrol strength variable?

22 A. That's correct, because we believe it's endogenous.

23 Q. I understand why. I just want to make sure I am correct  
24 that you didn't include it.

25 A. That is correct.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO2 Purtell - cross

1 Q. So you never actually ran your model with patrol strength  
2 to see if the results for percent black and percent Hispanic  
3 would have been significant or not?

4 A. We did not because the variable was endogenous and it would  
5 have biased the model.

6 THE COURT: Would you refresh my recollection, what  
7 does that mean again?

8 THE WITNESS: Circular logic.

9 THE COURT: In what way?

10 THE WITNESS: He used stops to determine policing, and  
11 then he tried to use policing to analyze stops. It's perfectly  
12 circular logic. It creates very significant statistical  
13 problems.

14 MR. CHARNEY: I don't want to keep going over the same  
15 ground.

16 THE COURT: I just wanted my recollection refreshed  
17 because today is today and yesterday was yesterday.

18 MR. CHARNEY: Exactly.

19 Q. Also, earlier this morning you did testify that you agreed  
20 that Professor Fagan's patrol strength variable, which you take  
21 issue with, is highly correlated with the NYPD's own patrol  
22 strength data that he used in his first analysis, right?

23 A. I would agree that he said it was, but he didn't provide  
24 evidence that it was.

25 Q. If it was, then would you still have this concern about

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO2

Purtell - cross

1 endogeneity?

2 A. I would still have concerns because of the way it was  
3 measured and it would not necessarily be consistently the same  
4 for each area. Just because the totals are somehow correlated  
5 does not mean the individual measures at specific points in  
6 time are correctly measured.

7 Q. But you agree that the measures that were used in the first  
8 report for patrol strength data were for certain points in  
9 time, every three months, right?

10 A. That's correct.

11 Q. If Professor Fagan is correct that his measure of patrol  
12 strength is highly correlated with those time specific  
13 measures, you would still not have faith in the reliability of  
14 his patrol strength?

15 A. I would not have faith in his internal reliability, no.

16 Q. Let's turn to table 10 then.

17 Here you did include patrol strength?

18 A. We did, yes.

19 THE COURT: What did you use?

20 THE WITNESS: We used Professor Fagan's estimate, even  
21 though we believe it's the wrong estimate.

22 THE COURT: But you used his?

23 THE WITNESS: Yes, we did, your Honor.

24 Q. In this particular result -- and this is also a negative  
25 binomial model, right?

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO2

Purtell - cross

1 A. It is.

2 Q. And in these results, the percent black and percent  
3 Hispanic are statistically significant, correct?

4 A. Yes. But smaller than they were in table 5.

5 Q. Smaller than in table 5. However, if you do the T test  
6 again, you divide the coefficient by the standard error, which  
7 I notice is not in your table, isn't it true that the results  
8 you get show that the percent black and percent Hispanic  
9 variables are more statistically significant than your black,  
10 white and Hispanic suspect variables?

11 A. Actually, with the exception of percent foreign and other  
12 suspects logged and lagged, they are all significant to three  
13 decimal points.

14 Q. My question is the level of statistical significance. You  
15 testified yesterday and today that if you did that math, the  
16 coefficient divided by the standard error, those results will  
17 tell you the levels of statistical significance?

18 A. We actually report that in the last column. That P value  
19 is the level of statistical significance.

20 Q. I am asking you about the T value. In other words, the  
21 actual number, where you divide coefficient by standard error.  
22 It's one number divided by another number and you get a ratio,  
23 right?

24 A. I get a number that relates to the underlying distribution,  
25 correct.

SOUTHERN DISTRICT REPORTERS, P.C.  
(212) 805-0300

D538FLO2

Purtell - cross

1 Q. My question is, those numbers, a higher number means more  
2 significance, right?

3 A. A higher number -- yes, it means it's more significant.

4 Q. So my question to you is, are you aware that when you come  
5 up with those numbers, you do that division for each of these  
6 variables, that the numbers for percent black and percent  
7 Hispanic are higher than they are for black suspect and white  
8 suspect and Hispanic suspect?

9 A. They are all significant to the fourth decimal place.

10 THE COURT: You are answering his question.

11 He said, whether or not they are all to the three  
12 decimals, is it true that the percent black Hispanic are higher  
13 than the percent of black Hispanic suspects?

14 THE WITNESS: I couldn't tell from what we have on  
15 this table, but they all have the same level of statistical  
16 significance.

17 THE COURT: That wasn't his question. He asked  
18 whether the T values would be higher.

19 THE WITNESS: I don't have those.

20 THE COURT: Is that hard to do?

21 THE WITNESS: I can't do it from these numbers.

22 THE COURT: What would you need to do it? It's simple  
23 division.

24 THE WITNESS: I would have to have the standard  
25 errors.

SOUTHERN DISTRICT REPORTERS, P.C.  
(212) 805-0300

D538FLO2

Purtell - cross

1 THE COURT: Once you have that, it's simple division  
2 for six categories: Percent black, Hispanic, other, and black  
3 suspect, white suspect, Hispanic suspect. And then you would  
4 know the answer to his question. It's six pieces of division.

5 THE WITNESS: I am not sure the question is relevant.

6 THE COURT: That's an argument for counsel, that after  
7 you do all that it makes no difference, but you could answer  
8 his question.

9 THE WITNESS: I could if I went back. I don't even  
10 know if we saved those results.

11 THE COURT: You have these results. You simply divide  
12 by the standard error.

13 THE WITNESS: I am not sure we kept all of the  
14 standard error data for all these runs. I might have to go  
15 back and check on it.

16 THE COURT: How hard is it to find standard error?

17 MR. CHARNEY: If we go back to table 5, they are in  
18 Professor Fagan's table.

19 THE COURT: Let's look at that for a minute. Let's  
20 see if you agree if that's the standard error. Then it's just  
21 a matter of division. One can do it over the morning recess to  
22 get the T value.

23 MS. COOKE: Looking at table 10, because they were  
24 including suspect description as a variable, the time period is  
25 only 2010 to 2011 instead of the additional periods.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO2

Purtell - cross

1 THE COURT: That may not matter for the moment. Let's  
2 take a look at that. Where is the standard error?

3 MR. CHARNEY: The ones in parentheses underneath each  
4 coefficient, those are the standard errors.

5 So if you divide the coefficient, which is the number  
6 on top, by the number in the parentheses, you get a, I guess  
7 they call it a T score.

8 THE COURT: Would these be the standard errors you  
9 would need?

10 THE WITNESS: No, your Honor. They are specific to  
11 each model.

12 MR. CHARNEY: His model, he probably came up with  
13 different standard errors. I guess the point is you could take  
14 your standard errors and do the division.

15 THE COURT: But he said he doesn't know if he saved  
16 his standard errors.

17 MR. CHARNEY: They gave us the code that they used.  
18 We ran the numbers. It seems to me, if they gave it to us,  
19 they should have it.

20 THE COURT: Do you have it somewhere?

21 THE WITNESS: We have the code. I just don't have  
22 those numbers in hand.

23 THE COURT: I know you don't have them in hand, but  
24 you also weren't sure you could find them back at your office.  
25 You said, I am not sure I saved those standard deviations.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO2 Purtell - cross

1 THE WITNESS: I had one of my doctoral students do  
2 this. He saves everything. I would have to call him and see  
3 if he can lay his hands on it.

4 But the P values are the equivalent of that division.  
5 So they all have essentially the same significance. I don't  
6 see what the relevance of this is.

7 THE COURT: I do.

8 BY MR. CHARNEY:

9 Q. Professor, isn't the relevance that you claim that the  
10 suspect race variables are stronger predictors of stops than  
11 the percent black and the percent Hispanic?

12 A. No. We are saying that by including them -- if you go back  
13 to the other table --

14 THE COURT: Which table?

15 THE WITNESS: The one he is talking about.

16 THE COURT: Table 10.

17 THE WITNESS: Table 10.

18 THE COURT: Page 70 of your report.

19 A. I am not sure what you mean by stronger.

20 Q. Isn't it your position in your reports that you have done  
21 in this case that suspect description -- race of suspects is a  
22 stronger predictor of the stop patterns of the NYPD than is the  
23 percent black population of a census tract?

24 A. We have never made that claim. What we have said is  
25 including it reduces the practical significance of the percent

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO2 Purtell - cross

1 black, percent Hispanic, percent other race.

2 Q. Table 10 doesn't tell you anything about practical  
3 significance, does it?

4 A. It doesn't. But those numbers compared to Professor  
5 Fagan's table 5, if I remember correctly, his coefficient for  
6 percent black was .883, here it's .763. It's an even smaller  
7 number.

8 Q. But you don't know what the standard error is. Suppose the  
9 standard error was also smaller. You don't know what the  
10 ratios are, do you?

11 A. They are significant to exactly the same degree as  
12 statistical significance.

13 Q. My question is, do you know whether the T scores in his  
14 table 5 for his variables, the percent black, are any different  
15 than the T scores for his variables when you run your model?

16 A. I don't think that's relevant. They have the same level of  
17 statistical significance.

18 Q. And they have the same level of statistical significance in  
19 both table 5 and here in table 10, right?

20 A. That's correct.

21 Q. So then doesn't that mean that adding suspect race doesn't  
22 impact the significance of his variables?

23 A. No. Remember, we talked about both statistical  
24 significance and practical significance. We are arguing here  
25 that by including those variables, the already small practical

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO2 Purtell - cross

1 significance gets even smaller.

2 Q. How does this table tell you that?

3 A. Because the coefficient for percent black here is .763 and  
4 on the other table, if I remember it correctly, it is .883 or  
5 something.

6 Q. So your testimony is you can determine practical  
7 significance by looking at these coefficients?

8 A. That's correct.

9 Q. So you can say that a .763 coefficient, without knowing  
10 what the standard error is, you can tell that that's less  
11 practically significant than a .883 coefficient when you don't  
12 know the standard error?

13 A. Sure. They are different concepts.

14 Q. Your testimony is the magnitude of the coefficient is going  
15 to tell you the practical significance of that variable?

16 A. Yes. That's exactly right.

17 Q. Professor, you are, as you testified yesterday, and I  
18 believe you, you're very well versed in statistical literature,  
19 correct?

20 A. Yes.

21 Q. Are you aware of any statistical literature that states  
22 that based on a regression coefficient alone, without looking  
23 at the standard error, you can determine the practical  
24 significance of the variable?

25 A. I didn't say that. I said that there are both necessary

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO2 Purtell - cross

1 and sufficient conditions for using this data in the real  
2 world. If the variable is not statistically significant, it  
3 doesn't matter what the practical significance is. But the  
4 practical significance is a function of the size of the  
5 coefficient.

6 Q. Without looking at the standard error, you can determine  
7 the practical significance of something?

8 A. Once I know the variable is statistically significant, the  
9 standard error has nothing to do with practical significance.

10 Q. Your testimony is the magnitude of the coefficient alone  
11 allows you to determine the practical significance of that  
12 variable?

13 A. Assuming they both have the same level of statistical  
14 significance, yes.

15 Q. And that's in statistical literature that you have reviewed  
16 in your career?

17 A. It is.

18 Q. Can we turn to page 75 of your report?

19 You have a discussion there of a particular census  
20 tract in New York City?

21 A. Yes. Professor Smith is going to testify to that.

22 Q. All right. I will move on then.

23 Now, yesterday you criticized Professor Fagan's  
24 exposure variable in this case, what you call the adjusted  
25 census benchmark?

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO2

Purtell - cross

1 A. Right.

2 Q. Did you rerun any of his models using a different exposure  
3 variable?4 A. No. The correct exposure variable would have to be  
5 something that looked like the DOJ standard, and I am  
6 prohibited from testifying about that.7 Q. But you did testify at your deposition, right, that the  
8 suspect race variable is also not an adequate exposure  
9 variable?10 A. Correct. But again, you have prohibited me from testifying  
11 in that area.12 THE WITNESS: I'm sorry. The Court has directed me  
13 not to.14 Q. My only question was, you agree that you did testify at  
15 your deposition that crime suspect race is not a good exposure  
16 variable either? It's a yes or no question.

17 A. Alone, no.

18 MR. CHARNEY: One moment, your Honor.

19 THE COURT: We are so close to the recess, do you want  
20 to confer? That way you will have 12 whole minutes to decide  
21 whether you have more questions or don't have more questions.  
22 Then you can confer with your expert.23 Please, this time we are going to stick to a 20 of 12  
24 because it's a shorter day.

25 (Recess)

SOUTHERN DISTRICT REPORTERS, P.C.  
(212) 805-0300

D539flo3

Purtell - cross

1 Q. Professor, I just have a couple more questions.

2 Now, I think you testified earlier that what Professor  
3 Fagan was trying to do with this analysis was to try to come up  
4 with a way of generalizing for the entire city an explanation  
5 for the pattern of stop activity, right?

6 A. He was trying to build a process model in a population  
7 average context. That's correct.

8 Q. Now if that's the case, even if those census tract months  
9 with zeros are different in some way, you want to -- you want  
10 to include in your model some kind of way of analyzing those  
11 zero counts, right?

12 A. We'd agree on that. We just disagree on how to do it.

13 Q. Are you aware of any statistical model that accounts for  
14 these differences between the zero and nonzero counts in a  
15 model?

16 A. Sure. There's the zero inflated negative binomial model  
17 and hurdle rate models.

18 Q. But you didn't use either of those models, did you, when  
19 you performed your alternative version of Professor Fagan's  
20 models?

21 A. No. We simply looked to see -- we did a quick test to see  
22 if the process appeared to be different. That's a typical sort  
23 of thing you would do in advance of using that technique.

24 Q. Did you report that in your report, the results of that?

25 A. Sure. You were just looking at it.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3

Purtell - cross

1 Q. Which one?

2 A. Table --

3 Q. Table 8?

4 A. Yes. Table 8.

5 Q. Well table 8 doesn't -- that excludes the zeros, right?

6 A. That's right. But it doesn't matter which side you model.

7 If one is different from the other, it suggests you should  
8 model both processes, or at least test the impact of modeling  
9 both processes.

10 Q. Again you know that the zeros are different, but you don't  
11 know in what way they're different, right?

12 A. No. That's an empirical question.

13 Q. And you never looked at that empirical question?

14 A. No. We simply argued that the processes were sufficiently  
15 different to require that modeling to be included.

16 MR. CHARNEY: At this point, your Honor, I don't have  
17 any more questions.

18 I did want to go back to raise an issue related to  
19 this demonstrative that was admitted into evidence yesterday.

20 THE COURT: The one where he would like to change the  
21 title on the left. You should because it's in evidence.

22 So the city should resubmit it with the title he now  
23 wants to give it.

24 MS. COOKE: Yes, your Honor.

25 THE COURT: So the incorrect one is not in the record.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3 Purtell - cross

1 MS. COOKE: Correct.

2 MR. CHARNEY: Beyond that, though, his testimony about  
3 what these numbers represent, his testimony today was different  
4 than his testimony yesterday. And also --

5 THE COURT: And the record will reflect that, of  
6 course.

7 MR. CHARNEY: That's -- we understand. But his  
8 testimony about this on both days is nowhere in his report.  
9 We're not asking that it be excluded.

10 THE COURT: But it is in his report. I recall the  
11 only addition was the last line.

12 MS. COOKE: Correct --

13 THE COURT: -- are right in the report. He says the  
14 last line sort of explains --

15 MR. CHARNEY: But the conclusion --

16 THE COURT: -- in more colloquial language what's  
17 there in the three lines.

18 MR. CHARNEY: The conclusion that he's testified to  
19 and what these numbers mean.

20 THE COURT: Page 80 what?

21 MR. CHARNEY: I think it's 85 and 86. It's not in the  
22 report. We're not asking that it be excluded.

23 We're just asking that because there is now a huge  
24 amount of confusion.

25 THE COURT: There is no huge amount of confusion.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3 Purtell - cross

1 There's today's correction of what he said yesterday. He said  
2 he spoke erroneously and the record clearly said what his view  
3 is today.

4 MR. CHARNEY: There's that confusion.

5 But there's also I think a lot of confusion about what  
6 Professor Fagan's coefficients in table 5 are supposed to  
7 represent. In other words, there has been testimony about it's  
8 the likelihood of a person being stopped; then it was no, it's  
9 the likelihood of there being more stops.

10 I guess the problem we have --

11 THE COURT: That's same.

12 MR. CHARNEY: No. Those are two different things.  
13 Very different. And that's why there's a table 7 and a table  
14 5. And there was confusion today about --

15 THE COURT: No. Seven included race.

16 MR. CHARNEY: But it's also the likelihood of  
17 particular people being stopped.

18 THE COURT: That's right.

19 MR. CHARNEY: As opposed to table 5 which is just  
20 whether or not there are going to be more stops if you increase  
21 the --

22 THE COURT: Correct. I understand that.

23 MR. CHARNEY: But the problem we have is that --  
24 either way you do the last row, whether it's you change the  
25 title on the left to what Professor Purtell says it would be

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3 Purtell - cross

1 now or the other way, it's really created a lot of confusion as  
2 to what is meant by these coefficients. And it's something  
3 that is not explained in this report. And I -- we would like  
4 Professor Fagan to have the opportunity to --

5 THE COURT: You want to call a rebuttal witness?

6 MR. CHARNEY: Yes. Just on this issue.

7 THE COURT: I understand. After the defense rests or  
8 finishes with Doctors Purtell and Smith, either way, you'd like  
9 to call him on rebuttal.

10 MR. CHARNEY: On this issue.

11 THE COURT: Very limited.

12 MR. CHARNEY: Yes.

13 THE COURT: All right.

14 MS. COOKE: I just would add, first to respond to the  
15 confusion. I actually reviewed the transcript this morning of  
16 yesterday's testimony. And I believe with respect to table 5  
17 and what table 5 is purporting to demonstrate that it's the  
18 increase of a percentage of the percent race would result in an  
19 increase or decrease of stops, period. It's not a number.  
20 It's not who would be stopped. That's consistent throughout  
21 the transcript of the testimony.

22 So to that point I don't believe that there's been  
23 confusion on that.

24 To this -- my understanding of Professor Purtell's  
25 testimony, regardless of the title, is that that last row is,

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3

Purtell - cross

1 in fact, just a different way of stating what was already in  
2 table 12 which was, in fact, already in the report so that's to  
3 that.

4 THE COURT: I'm going to allow the last line to  
5 remain. He's going to change the title. Whether there's  
6 confusion or not is a question I'll have to eventually answer  
7 like so many other questions here.

8 But whether I'll allow a rebuttal witness on a very  
9 narrow point, yes, we do allow rebuttal witnesses from time to  
10 time in any civil case. And this seems like a good area to do  
11 it because even the witness said he misspoke yesterday, he's  
12 speaking correctly now. So there's some level of concern as to  
13 what chart 5 is all about. He should -- I have no problem  
14 allowing rebuttal. The only question is he's here today. Does  
15 he have to wait until Dr. Smith finishes or --

16 MR. CHARNEY: I don't think he has to.

17 THE COURT: Good. Because it would be more efficient  
18 for his time not to have to wait.

19 MR. CHARNEY: He could do it Monday morning, if  
20 that's --

21 THE COURT: Okay. I thought you were going to try to  
22 squeeze him in today. Okay.

23 MR. CHARNEY: I think he needs to -- I mean he --

24 THE COURT: Okay. You don't want to. Fine.

25 Anybody ready for redirect?

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3

Purtell - cross

1 MS. COOKE: I have one more question or point.

2 With respect -- just with respect to this. Again, I  
3 repeat this. This report was provided on February 1, 2013.  
4 Professor Purtell was deposed on March 1, 2013.

5 THE COURT: I know. But he added that line. And it  
6 caused a lot of questions and a lot of answers about table 5  
7 and about what the result meant. I can see the need for a  
8 rebuttal witness.

9 MS. COOKE: Sure.

10 My request would be if I could have some type of  
11 proffer from Mr. Charney with respect to Professor Fagan's  
12 position on this so I can prepare myself for examination on  
13 Monday.

14 MR. CHARNEY: That's fine, your Honor.

15 But we would also ask, because neither the report nor  
16 this table provides any of the underlying math that was used to  
17 come up with these results, we would like that produced as well  
18 because that will assist Professor Fagan in interpreting what  
19 Professor Purtell did. Just come up with the numbers in this  
20 table and in table 12 in the report. That math and the  
21 underlying work. In other words, where you show your work.

22 THE COURT: I'm sorry. Maybe people understand what  
23 you're saying but I don't.

24 MR. CHARNEY: So table --

25 THE COURT: I don't know how much math is hidden in  
SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3 Purtell - cross

1 these four lines.

2 Is there any math in there? I'm asking the witness.

3 THE WITNESS: It's arithmetic, your Honor. And we  
4 actually outline exactly how it's calculated in the document.

5 THE COURT: Where?

6 THE WITNESS: On pages 84 and 85 and ending on 86 with  
7 the table. So we went through the math with the exception of  
8 the last line which is simple arithmetic.

9 THE COURT: If he did, let Dr. Fagan read pages 84,  
10 85, and 86 before he leaves today.

11 MR. CHARNEY: He's read them.

12 THE COURT: Read them again.

13 If you don't need any further math, don't ask for any  
14 further math. Because you've stated, We don't understand the  
15 math. You're just a lawyer -- although pretty darn good at all  
16 this statistical stuff -- but you're just a lawyer. Let's see  
17 what the experts can make of these three pages. That's all.  
18 Maybe they don't need more math. They understand each other.

19 MR. CHARNEY: That's perfectly reasonable and we will  
20 provide --

21 THE COURT: As is Ms. Cooke, I should add. Both of  
22 you.

23 MR. CHARNEY: Thank you.

24 THE COURT: Advanced statistical experts or something.

25 MR. CHARNEY: Yes.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3 Purtell - cross

1 And we will provide a proffer of Professor Fagan's  
2 rebuttal testimony on this.

3 THE COURT: Now are we ready for redirect?

4 MS. COOKE: Yes. When, the proffer, when will I  
5 receive it? Prior to Monday, I mean I would hope.

6 MR. CHARNEY: Yeah, we will.

7 Your Honor, I apologize. My cocounsel wanted me to  
8 ask another question about scheduling with respect to when he  
9 would testify.

10 THE COURT: Okay.

11 MS. COOKE: Your Honor, with respect to Monday's  
12 schedule -- maybe counsel will hear me -- we are going to be  
13 beginning Professor Smith today, but we will need to finish  
14 Professor Smith on Monday because Professor Smith has some time  
15 constraints and so -- we had a shorter day today.

16 So Professor Fagan would necessarily probably have to  
17 be after Professor Smith on Monday.

18 THE COURT: I don't know about that. It may not be  
19 taking all that long. I assume Professor Smith is saying I  
20 have to finish Monday. He didn't say I have to finish Monday  
21 at 1:00 or Monday at 12:00.

22 MR. CHARNEY: He's not available Tuesday.

23 THE COURT: So I think we'll get them both done.

24 MS. COOKE: So when will I receive the proffer, a date  
25 certain?

D539flo3

Purtell - cross

1 MR. MOORE: Judge we're also waiting for some proffers  
2 too.  
3 MS. COOKE: Can we finish with one issue.  
4 MR. CHARNEY: And ours have been pending for longer.  
5 THE COURT: This is more immediate. This is more  
6 immediate because he's going to testify Monday morning.  
7 MR. MOORE: Some of those witnesses are going to  
8 testify next week.  
9 THE COURT: Yes. I know. Next week is not Monday  
10 morning.  
11 MR. CHARNEY: We'll get it to them by tomorrow, your  
12 Honor.  
13 THE COURT: All right.  
14 MR. CHARNEY: I don't want to belabor this point about  
15 the math. I think -- what I will say is having consulted with  
16 Professor Fagan we don't need the underlying math for the first  
17 three rows, all the decimals.  
18 Professor Fagan is not clear how you get from the  
19 decimal to the percentage. It may be a very basic --  
20 THE COURT: Maybe you can answer it, without doing any  
21 math.  
22 THE WITNESS: Yes, since it's --  
23 THE COURT: Just explain.  
24 THE WITNESS: Since it's comparative odds, the odds of  
25 a black person generating additional stops would be some

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3

Purtell - cross

1 number. And the odds of a white person generating additional  
2 stops would be one minus that number. Because they have to add  
3 to a hundred percent.

4 MR. CHARNEY: Your Honor, this goes back to the  
5 confusion which is that table 5 doesn't measure the likelihood  
6 of a person of one race versus a person of another --

7 THE WITNESS: Nor are we saying that.

8 THE COURT: No.

9 You're saying that the increase in the black  
10 population of one percent will cause a very small differential  
11 in the number of stops going on, whoever is stopped, but the  
12 number of stops go up.

13 THE WITNESS: The likelihood of increasing stops.

14 THE COURT: Correct. We went over and over that.

15 It's not a matter of who is going to get stopped. It's just  
16 that as the black population increases, there's a very small  
17 likelihood that there will be an increase in stops versus a  
18 rise in white population causing an increase in stops. It  
19 doesn't matter who is stopped. Now is that clear?

20 MR. CHARNEY: I'm checking with my --

21 THE COURT: Anyway, how did you calculate those  
22 percentages? How did you get that 50.2?

23 THE WITNESS: I just solved for that percentage that  
24 would make the odds ratio the equivalent of the percentage  
25 black as the numerator and one minus the percentage black as

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3

Purtell - cross

1 the denominator. And you can do that algebraically but I  
2 simply let the spreadsheet --

3 MR. CHARNEY: That might have cleared it up.

4 THE COURT: So you don't have to do any arithmetic.

5 THE WITNESS: Thank you.

6 THE COURT: That, you don't. I would like you to  
7 figure out those zeros.

8 MS. COOKE: We will do that.

9 THE COURT: You know what I want.

10 MS. COOKE: The zero counts for the census tract.

11 THE COURT: Why is it --

12 THE WITNESS: Oh, yeah, yeah.

13 THE COURT: -- and not 60,000.

14 MR. CHARNEY: Your honor, the last point, I guess,  
15 another -- I don't know if this is a homework assignment. But  
16 the question I asked about the standard errors in Professor  
17 Purtell's table 10 and the division and it wasn't done.

18 THE COURT: No.

19 MR. CHARNEY: We've run those numbers. I know we're  
20 not permitted to put that in evidence.

21 THE COURT: You want to know if he can find those  
22 standard errors.

23 MR. CHARNEY: And provide them to us and maybe we  
24 can --

25 MS. COOKE: Well, your Honor, to the extent that

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3 Purtell - cross

1 they've run numbers and have an opinion about what those  
2 results are and they're asking for Professor Purtell to provide  
3 something that's not in the report that was provided months  
4 ago, I think there should be an exchange of that information.

5 MR. CHARNEY: That's fine.

6 I guess would Professor Fagan be permitted, since he  
7 didn't do a rebuttal report, to testify to those numbers when  
8 he ran the math on Professor Purtell's --

9 MS. COOKE: I would object to that, your Honor.

10 MR. CHARNEY: Okay. I mean I don't know why they want  
11 our numbers if we're not going to put them in evidence anyway.

12 MS. COOKE: If you're asking for Professor Purtell to  
13 provide you something in response to your request just now.

14 THE COURT: Because his standard deviation -- his  
15 standard error numbers are in his table 5. Anybody can divide  
16 to get the T number. Here we don't know the standard error  
17 number so we can't divide to get the T number. That's the  
18 difference. So we want his standard error number so anybody  
19 can do the math.

20 MS. COOKE: Okay. The standard error number. But  
21 with respect to Professor Fagan providing an additional opinion  
22 or testimony outside the bounds of his --

23 THE COURT: Well, I don't know. When that standard  
24 error number is known, when the T number is therefore  
25 calculated, if he has an opinion based on that new T number,

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3 Purtell - cross

1 how it affects the outcome, I would allow it. Because that's  
2 what Dr. Purtell didn't do. He said it can be done very  
3 easily. He says it has no impact anyway. He said the P value  
4 column essentially does that.

5 Remember that? You said I don't need to do that  
6 division because it's in the P number, in the right-hand  
7 column.

8 THE WITNESS: Typically a scholar would show one or  
9 the other of those things.

10 THE COURT: I remember your testimony.

11 MS. COOKE: I would request, your Honor, that  
12 Professor Purtell be permitted to explain those T numbers for  
13 his own report.

14 THE COURT: There is no explaining. It's dividing.

15 MS. COOKE: To the extent --

16 THE COURT: One number over another number. The  
17 second number, the denominator is standard error. And he just  
18 needs to find the standard error he used.

19 MS. COOKE: I guess to the extent -- I mean I am  
20 anticipating that the plaintiffs believe that either the T  
21 numbers are incorrect based on some --

22 THE COURT: No. They're not even calculated in his  
23 chart. That's the problem. They want to calculate the T  
24 number using his standard error number and see what they can  
25 draw from that once they see it.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3

Purtell - cross

1 MS. COOKE: Maybe I'm mistaken. I understood  
2 Mr. Charney to say that they've already done that.

3 THE COURT: Well, he did. But he may have used the  
4 standard error figures in Dr. Fagan's report.

5 MR. CHARNEY: We don't know if ours are the same.

6 MS. COOKE: That's where I didn't understand.

7 THE COURT: Okay. We had a little disconnect.

8 Now do you want to do redirect?

9 MS. COOKE: One more point.

10 With respect to the zero count in the census tracts,  
11 because, again, the difference that Mr. Charney has represented  
12 that it's something close to 90 percent.

13 THE COURT: 99.5.

14 MS. COOKE: We'll just trade the lists there as to how  
15 he arrives at which ones he's excluded. Because these census  
16 tracts, as I understand, have a unique identifying number of  
17 some kind. So we'll be able to see who's excluded which ones  
18 and where.

19 THE COURT: It seems to me one is one and zero is  
20 zero. It's not that hard. Either there's one stop in that  
21 census tract month or there isn't.

22 Don't do that. I was talking. You were mumbling. I  
23 was talking.

24 You can find out which months and which census  
25 districts had no stops.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3 Purtell - cross

1 MS. COOKE: Yes.  
2 THE COURT: Now do you want to do redirect?  
3 MS. COOKE: Yes.  
4 MR. CHARNEY: No further questions at this time.  
5 THE COURT: All right.

6 REDIRECT EXAMINATION

7 BY MS. COOKE:

8 Q. Just briefly, Professor Purtell. Thank you.  
9 Directing your attention to table 5 from Plaintiffs'  
10 Exhibit 417.

11 I guess we could put the ELMO on and I'll use this  
12 exhibit first while you figure out the computer.

13 Professor Purtell, with respect to Defendants' Exhibit  
14 N14, your demonstrative from table 12 in your report. You took  
15 the percent black coefficient line from Professor Fagan's table  
16 5 in Exhibit 417, correct?

17 A. Correct.

18 Q. And you could have also taken the percent Hispanic  
19 coefficient line or the percent other race coefficient lines  
20 from table 5 as well, correct?

21 A. Or any of the other tables, correct.

22 Q. And you could have then taken those percent race  
23 coefficients and done a similar interpretation of the log odds  
24 ratio as you've done here?

25 A. Correct.

SOUTHERN DISTRICT REPORTERS, P.C.  
(212) 805-0300

D539flo3

Purtell - redirect

1 Q. So looking at table 5 from Plaintiffs' Exhibit 417.

2 Looking at the percent Hispanic and the percent other  
3 race coefficients contained in table 5.

4 A. Yes.

5 Q. Do you have a reason to think that the odds ratios  
6 represented in Defendants' Exhibit N14 for the percent black  
7 would be significantly different if you calculated them for  
8 Hispanic or other race?

9 A. No. They're all within the same range as the percent black  
10 in terms of the size of the coefficient.

11 Q. Is my understanding correct that you would anticipate they  
12 all would be close to a coin toss as you represented --  
13 described the 50.22 percent?

14 A. Yes.

15 MS. COOKE: No further questions, your Honor.

16 THE COURT: Okay.

17 MR. CHARNEY: Nothing further.

18 THE COURT: All right.

19 They seem to be done with you.

20 THE WITNESS: I'm a free man?

21 THE COURT: Looks that way.

22 THE WITNESS: Thank you, your Honor.

23 (Witness excused)

24 MS. GROSSMAN: We're going to call Commissioner

25 McGuire.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3

Purtell - redirect

1 THE COURT: Recalling him.

2 MS. GROSSMAN: Recalling him.

3 THE COURT: You understand, Commissioner McGuire, that  
4 you are previously under oath in this matter.

5 THE WITNESS: Yes.

6 THE COURT: And I consider you still under oath.

7 Is that okay?

8 THE WITNESS: Yes.

9 THE COURT: You're under oath. Okay.

10 PHILIP MCGUIRE, recalled.

11 DIRECT EXAMINATION

12 BY MS. GROSSMAN:

13 Q. Good afternoon.

14 Now when you previously testified, Commissioner  
15 McGuire, Mr. Charney asked you some questions about Plaintiffs'  
16 Exhibit 321 which included a set of two spreadsheets containing  
17 statistical data for the years 2005 and 2006.

18 Do you recall that?

19 A. Yes.

20 Q. And these spreadsheets were provided to Dr. Ridgeway in  
21 connection with the RAND study, right?

22 A. Yes.

23 Q. And included in these spreadsheets was statistical data of  
24 known violent crime suspects for the years 2005 and 2006 broken  
25 down by race, right?

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3

McGuire - direct

1 A. Yes.

2 Q. Now, referring to Plaintiffs' Exhibit 321, the race  
3 categories reflected in the 2005 and 2006 tables are --

4 A. Can I see a copy.

5 Q. Let me show you. We're looking at NYC\_2\_0000340 and 342.

6 THE COURT: You're going to blow that up, right?

7 MS. GROSSMAN: Let's look at 2005 first.

8 Q. So you see, referring to Exhibit 321, you see the race  
9 categories reflected, Asian, White, Black, Hispanic and other  
10 on the very top of the table?

11 A. Yes.

12 Q. Then you see the second table you see the same is reflected  
13 on the left-hand side?

14 A. Yes.

15 Q. And do you see that the category "other" is listed right  
16 there and it reflects --

17 A. Yes.

18 Q. What does it reflect? What suspects does this describe in  
19 the category other?20 A. It's essentially the American Indians plus all of the  
21 unknowns.

22 Q. Also suspects with unknown race or ethnicity?

23 A. Yes. Essentially it's not the four that are listed.

24 Q. So then moving onto the next table which is 2006. The same  
25 categories -- it's the same chart except for the year 2006,

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3 McGuire - direct

1 right?

2 A. Yes.

3 Q. And during your previous testimony Mr. Charney asked you to  
4 explain why the data in the other category in 2006 was so  
5 different from the data in the other category in 2005, right?

6 A. Yes.

7 Q. So why don't we go to 2005 and let's blow that up. We're  
8 looking at the second table, I believe.

9 A. Well, you could look at either one.

10 Q. I'm sorry.

11 Looking at 2005, violent crime suspects?

12 A. Yes.

13 Q. And you see that under violent crime suspects if you go to  
14 other you see 42 percent?

15 A. Yes.

16 THE COURT: No. Wait. I didn't see that. Suspects.

17 MS. GROSSMAN: Under violent crime suspects.

18 THE COURT: Yes. I see it.

19 Q. That's 42 percent.

20 Now when you move on to the next table, 2006. And you  
21 go to the second table, 2006 violent crime suspects and you  
22 look under the category other you see 0.1 percent, right?

23 A. Yes.

24 Q. So Mr. Charney asked you about that, is that an error. And  
25 I wanted you to explain to the court what your findings were.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3 McGuire - direct

1 A. Well initially when we discussed this it became apparent  
2 that, no, this was wrong. It had to be an error.

3 So as a result of that, I went back and we looked at  
4 the database that this data was originally generated from and  
5 we recompiled the data as of today.

6 THE COURT: What do you mean, "as of today"? You  
7 looked back from 2005 and 2006 data?

8 THE WITNESS: Yes. We recompiled it as it's in the  
9 database today in 2013.

10 THE COURT: For those years?

11 THE WITNESS: Yes.

12 Q. You assembled that information in a chart?

13 A. Yes.

14 Q. I'm going to show you what's been marked as P --  
15 Defendants' Exhibit P14.

16 I'm going to need the ELMO for that.

17 Can you explain to the Court how it is that you  
18 prepared this chart?

19 A. Essentially we tabulated the database, the complaint  
20 database, in the same manner as we had in 2007 in 2013.

21 If you look at the top table you will see that it has  
22 the same race groups, plus the other category. And it's  
23 labeled original 2005.

24 MR. CHARNEY: Your Honor, this has not been admitted  
25 into evidence.

D539flo3

McGuire - direct

1 MS. GROSSMAN: I can move to admit.

2 MR. CHARNEY: We're going to object.

3 THE COURT: For one thing I thought I was going to get  
4 a correction of that column, was it violent crime suspect?

5 THE WITNESS: Yes, you are. It's part of the table.

6 THE COURT: I don't see violent crime suspect.

7 Where do you see violent crime suspect? Five percent?  
8 Remember that difference was 42 percent in one year then .1 in  
9 other year. Where is that here?

10 THE WITNESS: The identical numbers, if you look at  
11 column 5.

12 Maybe you can put up both. If you can squeeze it on.

13 The numbers that are in that first original 2005  
14 column are identical to the counts that are in the --

15 THE COURT: No. They're not. Not for violent crime  
16 suspects.

17 MS. GROSSMAN: Yes, your Honor. That's what -- when  
18 you look at the original, if you look over here, it says  
19 original 2005.

20 Commissioner McGuire --

21 THE COURT: Just show me the other one because I got  
22 this in my hand.

23 No. That's okay. She's going to put it on the  
24 screen. 2005 I guess on the screen for a minute. The one we  
25 just looked at, 2005. Let's do five first.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3

McGuire - direct

1 MS. GROSSMAN: So looking at --

2 THE COURT: Wait, please. Just let me look for one  
3 minute. Nobody ask any questions for one minute.

4 (Pause)

5 Can you scroll up a little bit so I can see the third.  
6 That's fine. Just stop there for a minute.

7 (Pause)

8 MS. GROSSMAN: Your Honor, the --

9 THE COURT: I'm sorry. I'm having trouble.

10 MS. GROSSMAN: Let me explain.

11 THE COURT: You can explain but it is not what I  
12 expected. It is not a mere correction of the error. It's new  
13 material.

14 MR. CHARNEY: Exactly.

15 THE COURT: I agree without even hearing your  
16 objection. I didn't hear from the plaintiff and I know it's  
17 wrong.

18 This is not what I would like to see. I would like to  
19 see a revised -- what is this exhibit called that's on the  
20 screen here?

21 MR. CHARNEY: 321.

22 THE COURT: I'd like to see a revised 321 that simply  
23 makes the correction in the same format so I don't have new  
24 information, new calculations, a chart that doesn't look like  
25 the old chart.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3

McGuire - direct

1           Couldn't he just fix 321?

2           I'd like to see a revised 321.

3           MS. GROSSMAN: We can do that, your Honor.

4           What we're trying to explain is that this chart  
5 illustrates that the violent crime suspects for Black and  
6 Hispanic are not incorrect.

7           MR. CHARNEY: She's testifying, your Honor.

8           MS. GROSSMAN: It's correct. But that the other  
9 category was incorrect.

10          THE COURT: Correct. There's an error --

11          MS. GROSSMAN: Yes.

12          THE COURT: -- in 321. The error should be corrected.

13          MS. GROSSMAN: Sure. We can provide an updated chart  
14 that is just mirroring that.

15          THE COURT: He can testify, but I'm not taking this  
16 chart. This is new information. That's not a fair thing.

17          MS. GROSSMAN: Okay.

18          THE COURT: If he wants to correct an error --

19          MS. GROSSMAN: We can do that.

20          THE COURT: -- in the other column, do it.

21          If you want to tell me it has no impact, go right  
22 ahead and tell me. But I want to see the change. So where's  
23 the error? I'm looking at 321.

24          THE WITNESS: The error is in the other category. It  
25 was mistabulated in both 2005 and 2006.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3

McGuire - direct

1 THE COURT: What's the correct figure for 2005?  
2 Instead of being 42 percent other, what should it be roughly?  
3 THE WITNESS: I can give you the count. Instead of  
4 being 24,000 --  
5 THE COURT: I saw it was ten thousand.  
6 THE WITNESS: It's ten thousand, yes.  
7 THE COURT: I saw that. But I don't know what change.  
8 THE WITNESS: It's about 23 percent.  
9 THE COURT: Okay. And so then after you do that, when  
10 you calculate the bottom chart, what difference does it make?  
11 THE WITNESS: The bottom chart is about ten  
12 thousand -- oh, you mean --  
13 THE COURT: That chart.  
14 THE WITNESS: In the percentages?  
15 THE COURT: Yes.  
16 THE WITNESS: Of the knowns. It makes no change at  
17 all.  
18 THE COURT: Okay. All right.  
19 MR. CHARNEY: Here's my --  
20 THE COURT: Wait. Wait I'd like to hear the  
21 testimony -- let me just look at the testimony for 2006.  
22 Now we're over in 2006 where it said -- up a little  
23 bit, the other way, thank you. The other said --  
24 THE WITNESS: 39.  
25 THE COURT: 39. What's the right number?

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3

McGuire - direct

1 THE WITNESS: 10,557.

2 THE COURT: So the percentage instead of .1, what's  
3 the correct?

4 THE WITNESS: It would be again around 22, 23 percent.

5 THE COURT: Much similar to 2005?

6 THE WITNESS: Yes.

7 THE COURT: And in the bottom chart?

8 THE WITNESS: It would not make any difference.

9 THE COURT: That's his testimony.

10 I would like to, for the record, have a revised 321.

11 MS. GROSSMAN: Yes.

12 THE COURT: Now what's your problem?

13 MR. CHARNEY: My concern is, your Honor, when you had  
14 directed him to correct the error, you wanted him to go back  
15 and determine what was the data that was actually given to  
16 RAND. What he's testified today is that in 2013 they reran the  
17 numbers on -- I don't know if the data has been revised since  
18 it was given to him. Apparently it has.

19 THE COURT: I don't think that's right. But we'll  
20 find out.

21 Was it the same data and just corrected an error in  
22 the reporting or has the data been corrected so to speak, the  
23 underlying data?

24 THE WITNESS: The original counts that are in the  
25 table from 2005 and 2006 are correct. They were correct as

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3 McGuire - direct

1 given to RAND, as far as I can determine.

2 Because it's in a dynamic system in which those crime  
3 complaints have -- received further investigation after they  
4 were given, when I rerun them, I get slightly different  
5 numbers.

6 THE COURT: No. No. No. No. No. Please. Don't  
7 insult me. Slightly different numbers. These aren't slight.  
8 We're going from .1 percent to 23 percent.

9 THE WITNESS: No. No. No. The counts themselves.

10 THE COURT: But the counts went from 24,000 to 10,000  
11 or from 39 to 10,000. That's not slight. So I want to know --

12 THE WITNESS: No. No. That's where the error was.  
13 The error was large.

14 THE COURT: Good. So I want to understand the error.  
15 So tell me the error in the first place.

16 Was it an error in reporting the data that was in the  
17 database or was the error in the database?

18 THE WITNESS: No. I think the error was in compiling  
19 the data into the spreadsheets.

20 THE COURT: Right. Just a transcription error?

21 THE WITNESS: Just a transcription error.

22 THE COURT: Does that answer your question?

23 It's not new information. It's not updated  
24 information that found it's way to the database. It was a  
25 transcription error.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3

McGuire - direct

1 THE WITNESS: No. No. No.

2 MR. CHARNEY: Can I ask a couple clarifying questions?

3 THE COURT: I think that would be fair. I think I  
4 understand and accept the explanation.

5 MS. GROSSMAN: Before he asks the clarifying questions  
6 I just want to be clear, it's only "other" that was the mistake  
7 and the others were correct.

8 THE COURT: I see that. And that's the only one that  
9 was ever noticed. The difference between one year being .1 and  
10 one year being 42 percent told everybody there was an error.  
11 It was obvious. He knew. He went back and checked, found that  
12 both years were about 23 percent. Some were at the midpoint of  
13 44.1. No surprise. It was a transcription error.

14 MR. CHARNEY: My clarifying questions are -- I think  
15 the judge is quicker than I am with this stuff.

16 So you're saying that in 2006 the underlying data,  
17 what was actually in the crime complaint database, is what's  
18 now in 2013 in the crime complaint database? It's the same?

19 THE COURT: It's the same data?

20 THE WITNESS: Yes.

21 MR. CHARNEY: So, in other words, if in 2013 there  
22 were ten thousand other violent suspects, you're saying back in  
23 2006 the database said the same thing?

24 THE WITNESS: Yes.

25 MR. CHARNEY: Or is this saying that --

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3

McGuire - direct

1 THE COURT: He's saying yes to that.

2 THE WITNESS: I'm saying that the number that should  
3 have been in the box in 2006, as near as I can estimate it,  
4 should have been ten thousand. I'm running it today.

5 MR. CHARNEY: Okay.

6 THE WITNESS: And there is no easy way for me to go  
7 back.

8 MR. CHARNEY: I understand.

9 THE WITNESS: To where the cases are. How I can tell  
10 you why I think that's so.

11 MR. CHARNEY: Okay.

12 THE WITNESS: Because in the interim, some of these  
13 cases have received further investigation.

14 MR. CHARNEY: And then a suspect race was added.

15 THE WITNESS: And some of the suspect information has  
16 changed. And there's been very modest changes. And that's  
17 what was reported in the other table that we were trying to  
18 introduce. And the size of those changes is entirely  
19 consistent with somebody investigating a cold case and making  
20 changes because now this database is dynamic. So if somebody  
21 goes back or you get a tip or you find somebody gives somebody  
22 else up we open case and you make changes.

23 THE COURT: You're saying those changes are very tiny.

24 THE WITNESS: Those changes are less than two percent.  
25 They're 1.4 percent.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3

McGuire - direct

1 THE COURT: It doesn't account for the transcription.

2 MR. CHARNEY: I have questions for cross, but we'll  
3 leave it until then.

4 THE COURT: So I'm not accepting this chart. But the  
5 testimony I'm accepting. And I'm asking him to prepare just a  
6 revised 321 for the record so we don't have the wrong one in  
7 the record.

8 THE WITNESS: Yes.

9 MS. GROSSMAN: So, your Honor, is it possible to just  
10 stipulate with counsel once we revise the chart that we can  
11 just offer it as an exhibit without calling the witness back.

12 THE COURT: Just call it 321R, revised. So the record  
13 is clear.

14 MS. GROSSMAN: Okay.

15 Q. Now does -- this is information that -- the original chart  
16 was provided to Dr. Ridgeway?

17 A. Yes.

18 Q. And that was so that Ridgeway could do an analysis that  
19 ended up being reported in the RAND report, correct?

20 A. Yes.

21 Q. And is it your understanding that -- what is your  
22 understanding of what Dr. Ridgeway relied on when he rendered  
23 his opinion in the RAND report?

24 A. He essentially relied on the counts of known suspects.

25 Q. Did he rely on the counts of the other unknown suspects?

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3

McGuire - direct

1 A. No.

2 Q. So Dr. Ridgeway's analysis was in no way impacted by this  
3 error?

4 A. No.

5 Q. Now, I'm going to move on to Defendants' Exhibit B14.

6 We talked about the reasonable suspicion stops report  
7 for 2011 when you previously testified and that was admitted as  
8 an exhibit. Do you remember that?

9 A. Yes.

10 Q. And did you also prepare one for 2012?

11 A. Yes.

12 Q. I'm going to show you what's been marked as Defendants'  
13 Exhibit B14.

14 THE COURT: Is this a new exhibit?

15 MS. GROSSMAN: Right. This is the exhibit that we  
16 wanted to offer last time but the plaintiffs had not had an  
17 opportunity to analyze it and you wanted to give the  
18 plaintiffs' counsel an opportunity to review it and we're now  
19 seeking admission of Defendants' Exhibit B14.

20 MR. CHARNEY: No objection.

21 THE COURT: Okay.

22 MR. CHARNEY: I'm sorry. We maintain the objection we  
23 had to the last one which was Y8. It's the same objection. I  
24 know you overruled the objection. But we maintain our  
25 objection to the --

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3

McGuire - direct

1 THE COURT: I don't recall the argument but it looks  
2 familiar.

3 MR. CHARNEY: It was hearsay and we didn't think it  
4 was a public document and we didn't think it should come in  
5 but.

6 THE COURT: In any event B14 is received.  
7 (Defendants' Exhibit B14 received in evidence)

8 THE COURT: And we worked with one of these. A  
9 particular precinct. Somebody from the precinct was there. We  
10 kept looking at it.

11 MS. GROSSMAN: Yes.

12 MR. CHARNEY: We looked at the 2011 version.

13 THE COURT: For one precinct.

14 MR. CHARNEY: Yes.

15 THE COURT: The last fellow, the deputy inspector.

16 MR. CHARNEY: Yes. Cirabisi.

17 THE COURT: Yes.

18 Q. Now I just have a few questions. Let's look hat NYC\_2 --

19 THE COURT: We don't need all that. Give me the last  
20 four.

21 MS. GROSSMAN: Sure. It's 891. Look at the citywide.  
22 It's the third page.

23 THE COURT: Okay.

24 Q. So for the known violent crime suspects, can you zoom in to  
25 known violent crime suspects.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D539flo3 McGuire - direct

1 You see where it says known violent crime suspects?

2 A. Yes.

3 Q. For purposes of the report, the violent crime suspects,  
4 what crimes do they include?

5 A. All crime.

6 Q. Murder?

7 A. The violent?

8 Q. The known violent crimes.

9 A. Murder, rape, robbery, and felonious assault.

10 Q. Does it include criminal possession of a weapon type  
11 crimes?

12 A. No.

13 MS. GROSSMAN: I have no further questions.

14 MR. CHARNEY: Just a couple.

15 You can leave Exhibit 321 up on the screen.

16 CROSS-EXAMINATION

17 BY MR. CHARNEY:

18 Q. Good afternoon, Commissioner.

19 A. Good afternoon.

20 Q. You just answered some questions about the Exhibit 321, the  
21 data that you gave to Dr. Ridgeway.

22 I just want to confirm that Exhibit 321, sitting here  
23 today, it's your recollection that is, in fact, the data that  
24 you gave to Dr. Ridgeway, right?

25 A. Yes.

SOUTHERN DISTRICT REPORTERS, P.C.  
(212) 805-0300

D539flo3

McGuire - cross

1 Q. Now, you testified that Dr. Ridgeway excluded the other  
2 violent suspects from his analysis; is that right?

3 A. Yes.

4 Q. Was that at the direction of the police department?

5 A. No.

6 Q. Did you discuss that with him?

7 A. I think at some point he probably discussed the modeling  
8 that he was likely to be doing.

9 (Continued on next page)

10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

D538FLO4

McGuire - cross

1 Q. Did you at any point express to him that you thought he  
2 should exclude the others or distribute them proportionately to  
3 the known race categories?

4 A. No.

5 Q. Now, you're aware that in the final RAND report Professor  
6 Ridgeway found that black pedestrians were stopped at a rate  
7 that was about 18 percent lower than their representation in  
8 the violent crime suspect category. Do you remember that?

9 THE COURT: I have got to hear that again.

10 Q. That black pedestrians were stopped at a rate that was  
11 about 18 to 20 percent lower than their representation in the  
12 violent crime suspect?

13 A. I have to see the report, but it sounds like something that  
14 was said. He tried several different models and that may have  
15 been the results of one of them.

16 Q. So, for example, blacks were about 50 percent of people  
17 stopped, right, in the city, about 50 percent of the people  
18 stopped are black, right, in 2006?

19 A. I believe so, yes.

20 Q. And he found that about 68 percent of the violent crime  
21 suspects in 2006 were black?

22 A. Yes.

23 Q. But that 68 percent is based on this data, right?

24 A. I believe so.

25 Q. And this data says that there was only .1 percent of

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO4 McGuire - cross

1 unknown race suspects, right?

2 It's a yes or no question.

3 A. This data shows .1.

4 Q. This is the data you gave to Professor Ridgeway?

5 A. Yes.

6 Q. So even if he had wanted to use other violent suspects, the  
7 number he would have had would have been .1 percent, right?

8 MS. GROSSMAN: Objection. That's a hypothetical.

9 THE COURT: No. That's what he had.

10 MS. GROSSMAN: But you're saying if Dr. Ridgeway  
11 wanted to use it. We know he didn't use it. And we know what  
12 the results of his report were.

13 THE COURT: It's a perfectly fair question. He is  
14 saying, had he used it, he would have used .1 percent for the  
15 other category. That is true.

16 You would agree with that, right?

17 THE WITNESS: Actually, he would have used 39, because  
18 the models he was doing were count models, they were not  
19 percentage models.

20 THE COURT: But 39 would come to .1 percent. So it's  
21 the same thing. So that's right.

22 Q. So no matter what, given the data that you gave him, no  
23 matter what, he was going to come out with 68 percent for black  
24 violent suspects, right?

25 THE COURT: In violent crime, that's right.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO4

McGuire - cross

1 A. Yes.

2 Q. So sitting here today, 2013, you would agree that for the  
3 last six years, the police department of New York City has been  
4 claiming that the RAND report shows that it doesn't racially  
5 profile, correct?

6 A. Yes.

7 Q. Sitting here today, we know that the analysis that RAND did  
8 was based on erroneous data, correct?

9 A. No.

10 Q. We don't know that?

11 A. No.

12 Q. So you're saying that this data that they used for the  
13 analysis was not erroneous?

14 A. No. The data that was actually used in the analysis were  
15 the counts in each of those cells --

16 THE COURT: But the count in the violent suspect  
17 category was wrong. It said 39 instead of 10,000.

18 THE WITNESS: No. The only counts, if you refer to  
19 appendix A and the discussion that's in the RAND report, the  
20 only counts Dr. Ridgeway used in his model were the counts of  
21 each of the racial violent crimes versus the stops. So he  
22 used -- the number for Asian, he used 534, for white he used  
23 1714, for black he used 22,482, and for Hispanic he used 843.  
24 Those numbers are correct and they were correct as given to  
25 them. Those are the only numbers that were used.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO4

McGuire - cross

1 THE COURT: But the total to get a percentage --

2 THE WITNESS: The total of the others were not used in  
3 the analysis at all.

4 THE COURT: How do you get 68 percent out of all the  
5 stops of violent crime?

6 THE WITNESS: 68 percent also, coincidentally, happens  
7 to be the percent of the knowns. Because in 2006 --

8 THE COURT: If Mr. Charney added up those four  
9 numbers, they would find that 68 percent of suspects of violent  
10 crime -- of the known race, suspects of violent crime is 68  
11 percent?

12 THE WITNESS: Yes. The error that was made --

13 THE COURT: That still wouldn't give us the proper  
14 percentage of all violent crime suspects being black.

15 THE WITNESS: That particular fact had no role in the  
16 analysis that Dr. Ridgeway did.

17 THE COURT: I guess this discussion is it should have.

18 THE WITNESS: No. Because his model was essentially  
19 comparing known stops to known violent suspect races. So his  
20 model compared whatever the stop counts were for Asian by  
21 precinct with what the violent crime suspects were by precinct.

22 So the 534 broken down by all 76 precincts were  
23 compared against whatever the stops were for Asians in each one  
24 of those 76 precincts. It was a count model and he was  
25 comparing counts. And those count numbers are correct.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO4

McGuire - cross

1 THE COURT: But he converted the counts to  
2 percentages.

3 THE WITNESS: No.

4 THE COURT: You're saying RAND didn't use percentages?

5 THE WITNESS: After he did his analysis, he converted  
6 the results of his analysis to percent.

7 MR. CHARNEY: I am going to move to strike that as  
8 hearsay. This is not Professor Ridgeway. I don't believe he  
9 worked on Professor Ridgeway's team.

10 MS. GROSSMAN: It's in the report.

11 MR. CHARNEY: You know what, we can pull up  
12 Defendants' Exhibit K6.

13 BY MR. CHARNEY:

14 Q. So your testimony is in the report he explains that he took  
15 the counts and then he came up with percentages, that's what  
16 you're testifying?

17 A. I am testifying in fact that in appendix A it's a count  
18 model. So to get to the point where he recorded percentages in  
19 the text, after he had done his analysis, he had to convert the  
20 results of his analysis back to percentages to make them  
21 consumable by people who were not statisticians.

22 Q. This is based on your interpretation of appendix A of the  
23 RAND report and the text?

24 A. Yes.

25 Q. There is no explanation in the text of how he got there,

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300



D538FLO4

McGuire - cross

1 MS. GROSSMAN: The raw numbers in the known suspect  
2 description data was correct.

3 THE COURT: There's no changes in the known.

4 MS. GROSSMAN: Correct.

5 THE COURT: The question is what numerator and what  
6 denominator did he use. I am still concerned. This witness is  
7 not concerned. I am. The denominator is the question did he  
8 use all violent crime suspects or just the four categories?  
9 And I don't know why one would just use the four categories  
10 when there is a total number of violent crime suspects.

11 So he is trying to say Ridgeway used only the four  
12 known categories, added them up, and did the math. I don't  
13 know that. I am still concerned.

14 MR. CHARNEY: If that's his testimony, that's pure  
15 hearsay because that's not anywhere in the report.

16 THE COURT: It's not. And it's not in this fancy  
17 formula. And he is not here, and so I don't know. There is an  
18 error in the other. There is no error in the black, white,  
19 Asian, Hispanic. I understand that. No error. No change.  
20 Appendix A only reports black, white, Hispanic, Asian. I  
21 understand that too. I am worried about the percentage number.  
22 I don't know, and unless Ridgeway were here, I am not going to  
23 know.

24 Let's move on. We are having a debate that we  
25 shouldn't be having. He is not here. What more is there to

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO4

McGuire - cross

1 say?

2 MS. GROSSMAN: Because I want to know from a notice  
3 standpoint from the police department's perspective, in relying  
4 on the Ridgeway report, aside from the truth of the matter  
5 asserted, I want Commissioner McGuire's opinion about whether  
6 this report is still reliable, given what he understands about  
7 this model.

8 THE COURT: He has given his opinion. The plaintiffs  
9 question it. I am concerned too. That's the whole point.  
10 They may have relied on something faulty when they assessed the  
11 percentage compared to the percentage of stops. That may have  
12 all been a faulty comparison. We don't know. Without Ridgeway  
13 here I can't take any more evidence on that question.

14 MS. GROSSMAN: I understand that. But in terms of  
15 what the opinion is of Commissioner McGuire --

16 THE COURT: He is not here as an expert. He has  
17 already told us anyway. He is convinced from a notice  
18 perspective it was all accurate and he relied accurately.

19 Can we move on?

20 MR. CHARNEY: Yes.

21 BY MR. CHARNEY:

22 Q. I am going to move on to that Exhibit B14. I just want to  
23 turn to the second page.

24 THE COURT: Would that be?

25 MR. CHARNEY: It's actually going to be NYC --

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO4

McGuire - cross

1 THE COURT: We decided to skip all that. The last  
2 three digits, please. 889, 888?

3 MR. CHARNEY: 891.

4 THE COURT: Thank you. We are all there.

5 Q. This is the citywide totals for 2012, right?

6 A. Yes.

7 Q. And according to this, the percentage of stops of black  
8 pedestrians is higher than the percentage of known crime  
9 suspects who are black, correct?

10 A. Yes.

11 THE COURT: Wait. I don't see that. Known is the  
12 green.

13 MR. CHARNEY: No. Known is the --

14 THE COURT: Known is green.

15 MR. CHARNEY: No. It's red. Green is violent.

16 THE COURT: OK. All known crime suspects. You were  
17 asking to compare the red and the purple.

18 MR. CHARNEY: The red and the dark blue.

19 THE COURT: Got it.

20 Q. With respect to whites, the percentage of stops of white  
21 pedestrians is lower than the percentage of known crime  
22 suspects who are white, correct?

23 A. Yes.

24 Q. Does the police department have any concerns that these  
25 numbers may suggest over-stopping of black people in the City

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO4 McGuire - cross

1 of New York in 2012?

2 A. No.

3 MR. CHARNEY: I don't have any other questions. I  
4 want to just make sure. I think there were things in Exhibit  
5 Y8, which is the 2011 version of this, that had to be redacted,  
6 and I would ask that the same portions be redacted from this,  
7 and that's it.

8 MS. GROSSMAN: That's fine.

9 THE COURT: Make sure the final B14 that goes into  
10 evidence in the record is redacted.

11 MS. GROSSMAN: Your Honor, just for efficiency, I do  
12 think that the explanation of the data and the statistical  
13 notes, which is only a couple of pages, is relevant and helpful  
14 to the Court in understanding what the chart means. For  
15 example, of known violent crime suspects, what kind of violent  
16 crime suspect is included. I think it's helpful to the Court.  
17 We will redact it if you want.

18 THE COURT: I just want you to redact it the same way  
19 you redacted Y8. They should be the same at this point.

20 MS. GROSSMAN: I am actually asking your Honor if you  
21 might be able to revisit your ruling on those two pages.

22 THE COURT: What two pages are you talking about?

23 MS. GROSSMAN: It's the two pages that explain the  
24 data and statistical notes in the report.

25 THE COURT: What numbers?

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO4

McGuire - cross

1 MS. GROSSMAN: It's 889.  
2 MR. CHARNEY: It's an entire method of how --  
3 MS. GROSSMAN: It's not a method. It's just  
4 explaining what the information in this whole report is.  
5 THE COURT: Why did I order it redacted?  
6 MS. GROSSMAN: I am not really 100 percent sure.  
7 THE COURT: Was this admitted for all purposes?  
8 MS. GROSSMAN: Yes, it was.  
9 MR. CHARNEY: The charts were admitted. You said,  
10 these are numbers, they are tallies.  
11 MS. GROSSMAN: It's just very helpful.  
12 MR. CHARNEY: This explains, similar to that merged  
13 process, it explains the way that they came up with known  
14 criminal suspects and there is a process that's described  
15 there.  
16 THE COURT: So what is the problem with it?  
17 MR. CHARNEY: It's hearsay.  
18 THE COURT: But they could call a witness.  
19 MS. GROSSMAN: Right.  
20 THE COURT: It's an out-of-court statement because  
21 it's an out-of-an-court statement but --  
22 MR. CHARNEY: We think the whole document is an  
23 out-of-court statement.  
24 MS. GROSSMAN: I wanted to save the Court time.  
25 Because if you don't want to accept it, I want to have the

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO4 McGuire - cross

1 witness read it in.

2 THE COURT: Somebody has to explain the methodology.

3 That person could come in and do that, right?

4 MS. GROSSMAN: He is right here.

5 THE COURT: You mean --

6 MS. GROSSMAN: It's basically reiterating and

7 regurgitating what is in the first two pages.

8 THE COURT: It would be this witness?

9 MS. GROSSMAN: Yes.

10 THE COURT: That would sort of take care of the

11 hearsay problem if he simply just said I did all this.

12 MR. CHARNEY: I guess it is a prejudice problem  
13 because we don't really have the details of how the process  
14 works. We obviously take issue with the way that the police  
15 department has come up with their known criminal suspect  
16 numbers.

17 THE COURT: But you would be able to cross-examine  
18 him.

19 MR. CHARNEY: We don't know if what he is saying is  
20 actually how they did it.

21 THE COURT: He is going to say so under oath.

22 MR. CHARNEY: All right. That's fine with me. I  
23 would like to maybe ask him questions about it.

24 THE COURT: How did you prepare these statistics that  
25 are at page 891 for example? Could you say in your own words

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO4 McGuire - cross

1 the methodology you used?

2 MS. GROSSMAN: He doesn't even have to say it in his  
3 own words because it's written right here.

4 THE COURT: That's my point. I don't know that he  
5 wrote these. I would like to hear his own words and not take  
6 this in evidence. Since I said it was hearsay, I should stick  
7 with my ruling. But he is here and he can tell us.

8 Tell us how you, or people under your supervision,  
9 calculated known violent crime or known crime suspects in  
10 general. How did you do it?

11 THE WITNESS: This was the merged method, which we  
12 described in some of our earlier testimony. I will walk you  
13 through it again.

14 There are the crime complaint reports prepared, and on  
15 those crime report records there is an indication, at the time  
16 that the officer prepares them, unarrested suspects are  
17 recorded on those records. At the time the complaint is  
18 reported, there are also arrests made. Those arrested suspects  
19 are not described within that complaint record; they are  
20 described within an arrest record.

21 So in order to get the most comprehensive view of all  
22 of the suspects that officers were dealing with at the time  
23 they came and took the initial report, you have to merge those  
24 two sets of data. You merge them, because at the time they are  
25 created, there are cross-reference numbers entered on each one

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO4

McGuire - cross

1 of them and the computer system essentially keeps track of  
2 which ones are connected to which other ones.

3 THE COURT: So which complaints are connected with  
4 which arrests.

5 THE WITNESS: So to get a complete picture of all of  
6 the suspects, you essentially merge the known unarrested  
7 suspects with the arrested suspects.

8 In some cases, there may be no arrests so all you have  
9 are two unarrested suspects. In other cases, you may have made  
10 one arrest, and you may still have one unarrested suspect.  
11 When you put all of that together, you end up with some number  
12 of total suspects for that particular year.

13 THE COURT: I understand. So the total number of  
14 suspects for that particular year is not just arrested suspects  
15 that you can actually view the person standing in front of you.  
16 Some of them are based on complaints only.

17 THE WITNESS: Right.

18 THE COURT: Do you know the percentages that remain  
19 complaints only versus arrests?

20 THE WITNESS: It actually adds differently to  
21 different types of crime. Certain types of crime that are  
22 proactive, almost all of the suspects that are known globally  
23 are arrestees. In others, it's a mix depending on how  
24 fortuitous the officer's response is. So robbery, which is a  
25 high priority crime, you dispatch quickly to. You have a

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO4

McGuire - cross

1 higher arrest rate for that. You may have a higher arrest rate  
2 for assault also because a significant number of the domestics  
3 the people are there, they don't leave, they are still arguing.  
4 It's those kind of nuances that are throughout this.

5 THE COURT: So you can't say across the board it's 80  
6 percent arrests and 20 percent complaints?

7 THE WITNESS: It varies for different ones.

8 THE COURT: You don't know for the total.

9 THE WITNESS: I think in some of the statistics, we  
10 indicated the total suspects. I think we may have also -- no.  
11 Let me back off from. I don't think we have actually  
12 explicitly tabulated that, but we can get the number for you if  
13 you would like.

14 THE COURT: I was just curious. I wonder if the  
15 argument would be that it's more accurate on the arrests than  
16 the complaints. Obviously, you see the person.

17 THE WITNESS: It's from two different sources.

18 THE COURT: But you're seeing a person in front of  
19 you. It's more accurate once the arrest is made. A complaint  
20 may be inaccurate.

21 So now you know the methodology. Any questions about  
22 it?

23 MS. GROSSMAN: Subject to cross-examination, I would  
24 just ask that we move to admit those two pages because it just,  
25 in a simple way --

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO4

McGuire - cross

1 THE COURT: This was simple. I understood it just  
2 fine. He testified here in court and he can be cross-examined  
3 here in court. I am going to leave it at that. There is no  
4 reason to revisit the ruling.

5 What is your question?

6 BY MR. CHARNEY:

7 Q. I just wanted to understand the criteria you used to match  
8 an arrest report to a crime complaint. Other than the fact  
9 that they happen at the same point in time, or very close  
10 proximity in time, do you use any other criteria to match --

11 A. The criteria that we use to match is the cross-reference  
12 numbers that are entered into the records management system at  
13 the time the records are created.

14 Q. So, in other words, if a crime complaint does not already  
15 have a reference to an arrest report in it, you wouldn't try to  
16 merge it with an arrest report?

17 A. That's where the time came in. In other words, we looked  
18 at only those records that came in within 24 hours of one  
19 another. Because the arrests are processed very quickly, and  
20 sometimes the complaints are added a day, maybe even two days  
21 later. But at the time when they come in, the links are made  
22 within the records management system.

23 The links are also made after the fact. But what we  
24 did was we excluded follow-up arrests made by investigators  
25 that may have included weeks or months later, which essentially

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO4

McGuire - cross

1 would have involved double counting. Because you had an  
2 unarrested suspect and now two months later a detective makes  
3 an arrest of that person. I didn't want to count them twice.  
4 So we restricted the merging process to only 24 hours.

5 Q. My question is, other than time -- let's say by example, if  
6 you had a complaint report and it was filed in the Bronx on  
7 March 2, and there was an arrest made within 24 hours in  
8 Bensonhurst, Brooklyn, could those still be merged because they  
9 are so close in time?

10 A. Yes.

11 Q. And you didn't have any concerns that that arrestee may not  
12 actually be the unknown suspect in that crime complaint?

13 A. No. He may have been another person. He may have been a  
14 person identified by the complainant. If the complainant said,  
15 I was robbed by Hal, and he happens to know who Hal is and  
16 where Hal lives, they will go and get Hal and make an arrest.  
17 If he happens no live in Bensonhurst as opposed to where the  
18 robbery occurred in the Bronx, it's entirely possible.

19 Q. What if the complainant didn't have a suspect description,  
20 but then they arrested somebody in Bensonhurst 24 hours later,  
21 you're saying those could still be merged?

22 A. As long as the system has linked those together, I am  
23 accepting that as the proper arrest was linked to the proper  
24 complaint.

25 Q. I guess I am unclear, how does the system link them

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO4 McGuire - cross

1 together? You said this is not just situations where a  
2 complaint report will have a number that references an arrest  
3 report. In a situation where a complaint report doesn't have a  
4 reference to an arrest report, are you saying that the computer  
5 could still match an arrest in Bensonhurst with a complaint in  
6 the Bronx?

7 A. If the arrest were made after the fact --

8 THE COURT: Within 24 hours.

9 THE WITNESS: Within the 24-hour window.

10 A. If an arrest -- probably 90 to 95 percent of the situations  
11 we are talking about, because we have imposed this 24-hour  
12 window on them, are things that happened at the time of the  
13 complaint.

14 THE COURT: I understand.

15 A. So you were using knowledge that you either got from a  
16 complainant or from maybe a responding officer or a witness to  
17 make an arrest. Some of those arrests might very well have  
18 been made at locations other than the initial complaint, even  
19 in that circumstance. But probably most of them were made in  
20 and around the area of the first complaint. But we all know  
21 that officers drive complainants around after a robbery so you  
22 can make an arrest ten blocks away.

23 THE COURT: All he is asking is, if 23 hours later you  
24 arrest somebody, can you still link it to the complaint?

25 THE WITNESS: If you have processed a complaint report  
SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO4

McGuire - cross

1 and completely signed off, and there is no arrest on it, when I  
2 come in to make an arrest the next day, the person making the  
3 arrest is usually an investigator and they know what complaint  
4 they are investigating. So they are responsible for making  
5 that linkage when they add the arrest.

6 THE COURT: And that linkage finds its way into the  
7 computer.

8 THE WITNESS: Yes. The computer records it and says  
9 arrest of John Smith, arrest number whatever is connected to  
10 complaint number whatever in whatever precinct it was in.

11 Q. Then what would happen if subsequent to that, it turned out  
12 that they are, oh, I got the wrong guy, or the DA said we are  
13 going to decline to prosecute, this was a bad arrest, what  
14 happens to that linkage at that point?

15 A. You have to remember, we did this as a snapshot in time.  
16 So we ignored voided arrests. They are recorded in our system.  
17 We didn't include them.

18 Q. They are not included in the merged --

19 A. In the arrests that were merged. Even if you were within  
20 the 24-hour window, and even if you were linked, we just didn't  
21 include them. We didn't count them because they are not valid  
22 arrests.

23 Q. Last question on this. Are you concerned at all that by  
24 doing this merged process you're risking inserting police  
25 officer bias, in other words, officers who may make biased

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO4 McGuire - cross

1 arrests, that you're inserting that into the process of trying  
2 to figure out the identity of crime suspects?

3 A. Yes. That's possible.

4 MR. CHARNEY: I am fine, your Honor.

5 MS. GROSSMAN: Just one last question.

6 REDIRECT EXAMINATION

7 BY MS. GROSSMAN:

8 Q. I asked you about the violent crime that's included in the  
9 known violent crime suspects?

10 A. Yes.

11 Q. Can you define all the violent crime?

12 MR. CHARNEY: I think that was asked and answered.

13 Q. There is a schedule of violent crime that is not included  
14 in the no violent crime suspects.

15 A. There would be other violent crimes like simple assault,  
16 other sex crimes other than rape, weapons offenses would be  
17 considered -- we consider it for operational purposes violent  
18 crime.

19 Q. But it's not included in the no violent crime suspect  
20 category?

21 A. No. We only included the seven major felony subset of  
22 murder, rape, robbery, and felonious assault.

23 MS. GROSSMAN: Thank you. I have no further  
24 questions.

25 MR. CHARNEY: Nothing further.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO4

McGuire - redirect

1

THE COURT: Thank you.

2

Would you make sure you prepare the revised --

3

THE WITNESS: Yes.

4

THE COURT: I assume you intended now to call Dr. Smith, but it's 10 of 1. We could spend eight minutes, but I'd rather have the eight minutes, if that's OK with you.

7

So don't forget to check with Judge Pitman's chambers.

8

MR. CHARNEY: In terms of scheduling, do you want Professor Fagan to testify before Professor Smith?

10

MS. COOKE: I totally agree.

11

THE COURT: I thought so.

12

MR. CHARNEY: That's fine.

13

THE COURT: Thank you.

14

MR. MOORE: I am sorry to press this. One of the witnesses we were expecting a proffer is supposed to testify Tuesday.

17

MS. GROSSMAN: That witness is not going to be testifying Tuesday. We have to revise our whole schedule in light of all these adjustments right now.

20

THE COURT: When are they going to get the revised schedule?

22

MS. GROSSMAN: We are going to go back today.

23

THE COURT: They will get it tonight?

24

MS. GROSSMAN: Yes.

25

THE COURT: You have got to get these proffers within SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D538FLO4

1 48 hours before the witness.

2 MS. GROSSMAN: I understand.

3 THE COURT: Yesterday I asked if there were any  
4 letters. Everybody said, no, they thought I had covered all  
5 the letters. I hadn't covered a letter about an amicus brief.  
6 I was trying to say the plural. I have a letter from the city  
7 opposing the submission of amici briefs. I am going to take  
8 them. I don't see any harm.

9 MS. DONAHUE: It was a substantive argument, your  
10 Honor. You had originally said, when these briefs came up,  
11 that you were probably going to take them. Then we were  
12 entitled to substantively oppose them. That's what it is.

13 THE COURT: I read the letter and my view is they are  
14 putting in their so-called two cents about their view of  
15 remedies.

16 MS. DONAHUE: We were just responding to what their  
17 view of the remedies was.

18 THE COURT: But you opposed their right to submit the  
19 briefs, and I am saying I will take them.

20 MS. DONAHUE: This was really meant to be a  
21 substantive opposition to them.

22 THE COURT: I didn't realize that. Fine. Then that  
23 letter is done.

24 (Adjourned to May 6, 2013, at 10:00 a.m.)

25

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

INDEX OF EXAMINATION

Examination of:	Page
ROBERT PURTELL	
Cross By Mr. Charney . . . . .	.5870
Redirect By Ms. Cooke . . . . .	.5949
PHILIP McGUIRE	
Direct By Ms. Grossman . . . . .	.5951
Cross By Mr. Charney . . . . .	.5966
Redirect By Ms. Grossman . . . . .	.5987

DEFENDANT EXHIBITS

Exhibit No.	Received
B14 . . . . .	.5965

