

D568FLO1

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 6, 2013
10:00 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
18 Attorneys for Plaintiffs
18 BY: KASEY MARTINI
19 GRETCHEN HOFF VARNER
19 ERIC HELLERMAN
20 BRUCE COREY

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

D568FLO1

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

D568FLO1

1 (Trial resumed)

2 MS. COOKE: We are having some difficulty getting
3 ahold of Professor Purtell who is in town. So if we can start
4 with Professor Smith and then interrupt with Professor Fagan.

5 THE COURT: Then interrupt?

6 MS. COOKE: Professor Purtell is not present. I would
7 like him to be present to assist in the rebuttal. So if we can
8 start with Professor Smith.

9 THE COURT: You think it can be momentarily.

10 MS. COOKE: I would hope so. I expected him some time
11 ago.

12 MR. HELLERMAN: Can I just confer with Professor Fagan
13 to make sure he doesn't have any time limits today?

14 Your Honor, Professor Fagan advises me that he can be
15 here only for the morning session. So if Professor Purtell
16 doesn't show up too soon, I would ask that we get to Professor
17 Fagan.

18 THE COURT: How long do you expect Professor Fagan to
19 be?

20 MR. CHARNEY: Less than a half hour.

21 THE COURT: He will be out by the morning session.

22 So we will start with Dr. Smith. I hope we do see
23 Professor Purtell walk in. Do you have a call out to him?

24 MS. COOKE: He doesn't have a cell phone. We expected
25 him here. He has our numbers.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO1

1 THE COURT: How about e-mail him?

2 MS. COOKE: He doesn't have e-mail; he doesn't have a
3 BlackBerry.

4 THE COURT: How about e-mailing him anyway?

5 MS. COOKE: We will e-mail him.

6 DENNIS C. SMITH,

7 called as a witness by the defendants,

8 having been duly sworn, testified as follows:

9 THE COURT: State your full name, your first and last,
10 spelling both for the record.

11 THE WITNESS: Dennis C. Smith, D-E-N-N-I-S, C.,

12 S-M-I-T-H.

13 DIRECT EXAMINATION

14 BY MS. COOKE:

15 Q. Good morning, Professor Smith.

16 A. Good morning.

17 Q. Where are you currently employed?

18 A. New York University.

19 Q. What is your position at NYU?

20 A. I am on the faculty of the Robert F. Wagner Graduate School
21 of Public Service.

22 Q. What are your responsibilities as a professor at NYU?

23 A. I teach. I participate in committees. I advise master's
24 and doctoral students. I do research.

25 Q. What courses do you teach?

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO1 Smith - direct

1 A. I teach courses on public policy analysis, performance
2 measurement and management, program evaluation, and I regularly
3 direct something called a capstone course in which I supervise
4 teams of students doing projects in their areas of
5 specialization, particularly policy analysis and management
6 specialization students.

7 Q. Have you been retained as an expert in this case?

8 A. I have.

9 Q. What were you asked to do in connection with your
10 retention?

11 A. I have been asked to review the evidence, analysis,
12 conclusions of the work submitted by the plaintiffs' experts,
13 Dr. Fagan and Lou Reiter, and to write reports, consult with
14 you all, the lawyers, and apparently testify.

15 Q. I am handing you what has been marked as Defendants'
16 Exhibit H13B. Do you recognize that exhibit?

17 A. Yes, I do.

18 Q. What is it?

19 A. It is my curriculum vitae.

20 Q. Is it accurate and up-to-date?

21 A. In most respects. There is a forthcoming article in a peer
22 reviewed journal, Journal of Police Studies. There may be a
23 couple of boards where my role has changed.

24 MS. COOKE: We would offer Defendants' H13B into
25 evidence.

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

D568FLO1 Smith - direct

1 MR. CHARNEY: No objection.

2 THE COURT: Received.

3 (Defendants' Exhibit H13B received in evidence)

4 Q. Professor Smith, could you briefly describe your formal
5 education, areas of study?

6 A. Yes. I have BA in political science with honors from the
7 University of New Mexico. Actually, political science and
8 history. I have an MA and Ph.D. from Indiana University in
9 political science.

10 Q. How long have you been teaching?

11 A. I have been teaching in NYU since 1973. So that's going to
12 be 41 years.

13 Q. Have you been teaching as part of the Wagner School the
14 entire time?

15 A. It hasn't been called the Wagner School the entire time,
16 but yes, the same graduate school of public administration, now
17 Wagner School.

18 Q. Have you spent the majority of your academic teaching
19 career in the field of policy management studies?

20 A. Yes, I have.

21 Q. Have you conducted research involving policing, police
22 practices and management?

23 A. Yes, I have. Since my dissertation research at Indiana
24 University to the present.

25 Q. Is that more than 40 years?

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO1 Smith - direct

1 A. Yes, it is.

2 Q. Have you conducted research as a result of grants or other
3 studies?

4 A. Yes. I have had a role in studies that were funded by
5 federal agencies. I have had research grants of my own from
6 the Department of Justice. I have had funding from a police
7 foundation here in New York to do research on police.

8 Q. Do you present your research and studies at conferences or
9 other professional gatherings of academic studies?

10 A. Yes, I regularly do. I present often at the Association of
11 Public Policy Analysis and Management, which is a national
12 research organization.

13 Q. Can you identify some of your recent studies regarding NYPD
14 policies, practices and management?

15 A. Yes. I did a study at the training academy to see if it
16 changed its training program to accommodate the orientation to
17 community policing back in the 90s. I did a study in more
18 recent times of SATCOM. It's a management reform in Brooklyn
19 North. It was introduced by Commissioner Bratton and
20 Commissioner Kelly asked me to evaluate it. I did a study with
21 Bob Purtell of the crime statistics, the quality control of
22 crime statistics. I had done a study of Operation Impact, an
23 evaluation of Operation Impact, an evaluation of stop, question
24 and frisk. And I did a study that was related to NYPD of the
25 relationship between the Department of Environmental Protection

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO1 Smith - direct

1 Police, which protects our water supply, and NYPD.

2 Q. Have any of these studies been published?

3 A. Yes. There have been, for example, chapters in books that
4 have drawn upon all of this research, yes.

5 Q. Are some of those publications then peer reviewed?

6 A. I didn't mention the research I am doing on -- it's not
7 related to this case, but on NYPD related to the integration in
8 management of integrity concerns and effectiveness concerns.
9 That was a study of the Internal Affairs Bureau and that was
10 recently published in the Journal of Police Studies, which is a
11 peer reviewed journal.

12 Q. What other journals have published your research?

13 A. Over the course of my career, the Public Administration
14 Review, Journal of Social Issues, Urban Affairs Quarterly,
15 General Criminal Justice, the Journal of Policy Analysis and
16 Management, JPAM journal, all have published my work.

17 Q. Have you received any honors, recognitions or awards for
18 your research in publications?

19 A. My article on making management count in the Journal of
20 Policy Analysis and Management was selected as one of the
21 classics of public management in the 2011 issue of the
22 Association for Public Policy Analysis and Management. I was
23 honored by that.

24 Q. Professor Smith, do you know what a UF-250 form is?

25 A. Yes, I do.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO1 Smith - direct

1 Q. What is your understanding of a UF-250 form?

2 A. My understanding is Bob Purtell just came in.

3 My understanding of the UF-250 form, it is now a
4 two-sided form, completed by police officers, to document a
5 stop of a person in which they record information about the
6 location of the stop, the time of the stop, the reasons for the
7 stop, results of the stop, that kind of information.

8 MS. COOKE: We can break.

9 THE COURT: That will be great. Sorry to interrupt.

10 MR. HELLERMAN: Plaintiffs call Jeffrey Fagan.

11 JEFFREY FAGAN, recalled.

12 THE COURT: Professor Fagan, you have been placed
13 under oath before in this proceeding. You consider yourself
14 still under oath.

15 THE WITNESS: I do.

16 THE COURT: Thank you.

17 DIRECT EXAMINATION

18 BY MR. HELLERMAN:

19 Q. Good morning, Professor.

20 A. Good morning.

21 Q. Thank you for coming back.

22 Were you in court on Friday, May 3, when Professor
23 Purtell testified at this trial?

24 A. Yes, I was.

25 Q. Did you read any of the transcript of Professor Purtell's

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO1 Fagan - direct

1 testimony in the previous day, May 2?

2 A. Some of it, portions.

3 Q. Did you understand Professor Purtell to characterize the
4 disparate impact analysis you performed in this case, which
5 results you presented in the two table 5's in your expert
6 reports?

7 A. Yes, he did.

8 Q. Do you have any opinion as to the correctness of Professor
9 Purtell's characterization of your disparate treatment
10 analysis?

11 A. Well, some of it was correct, some of it was not correct.

12 Q. Which parts were not correct?

13 A. We didn't really make any claims as to the probabilities of
14 an individual being stopped or any questions about the process
15 generating stops or any of the details of that. I think he
16 accurately stated what our regression coefficients, what they
17 were. Somewhat mischaracterized what they said.

18 Q. How did he mischaracterize what they said?

19 A. Well, I think -- in two ways. One, he estimated a log odds
20 probability that our regression coefficients would estimate the
21 extent to which somebody might be stopped. I understand he
22 changed that testimony. But he also testified that there was
23 no practical significance to the estimates that we came up
24 with.

25 Q. Did you in fact measure the log odds probability of

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO1 Fagan - direct

1 somebody being stopped in table 5?

2 A. No, we did not.

3 Q. Can you tell us generally, and I will ask you more specific
4 questions in a little while, what your opinion is with respect
5 to what Professor Purtell had to say about the practical
6 significance of your findings as represented in table 5?

7 A. We think the practical significance is quite strong.
8 Professor Purtell produced an estimate of -- again, citing
9 perhaps the most recent material that was produced -- an
10 estimate of the likelihood of change in the count of stops
11 given a one unit change in the predictor variable, in this
12 case, for purposes of this case, the percent black population
13 in a particular census tract and precinct.

14 Q. Do you take issue with his comparison of that 1 percent
15 increase?

16 A. No. I think that's an accurate way to state how to
17 interpret a regression coefficient.

18 Q. I will ask you in a little bit to shed more light on the
19 practical significance issue.

20 First, just to clear up some confusion that may have
21 been caused, can you tell us again what table 5 is? And for
22 simplicity, so that we don't have to use both, let's use the
23 table 5 from your second supplemental report, which is Exhibit
24 417.

25 A. Table 5 is a generalized estimating equations analysis or
SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO1 Fagan - direct

1 regression, which is a subset of a negative binomial
2 regression, which shows the effects of a variety of different
3 predictor variables on the count of stops that are likely to
4 take place in a particular census tract during a particular
5 month.

6 Q. Are the predictor variables all set forth on the face of
7 table 5?

8 A. Yes, they are.

9 Q. What question did the analysis, whose results are shown in
10 table 5, set out to answer?

11 A. Whether or not there was an increase in the count of stops
12 in a particular area as a function of changes in the racial
13 composition of the area, controlling for crime, social
14 conditions, economic conditions in that area, and patrol
15 strength.

16 Q. When you say changes in racial composition, what do you
17 mean?

18 A. 1 percent change in the black population of a neighborhood,
19 1 percent change in the Hispanic population of a neighborhood,
20 or 1 percent change in the other race population.

21 THE COURT: Those changes could be increased or
22 decreased?

23 THE WITNESS: Yes. We measure them over time. If
24 they are decreasing, then that will show up in the observation.

25 THE COURT: Will either increase or decrease.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO1 Fagan - direct

1 Say again in plain terms what the table shows. It
2 would show the predicted increase or decrease in the total
3 number of stops in that census district?

4 THE WITNESS: The number of stops in that census
5 district.

6 THE COURT: The total number of stops?

7 THE WITNESS: Total number of stops, within a month,
8 controlling for the volume of crime, racial composition of the
9 neighborhood, economic conditions.

10 THE COURT: I understand the controlling for.
11 Basically, it would just show --

12 THE WITNESS: The count of the number of stops.

13 THE COURT: The increase or decrease in the total
14 number of stops per month per census district.

15 THE WITNESS: Correct.

16 BY MR. HELLERMAN:

17 Q. When you say increase or decrease, increase or decrease
18 compared to what?

19 A. We are comparing one census tract to the other. So it's
20 the difference between one census tract and the other.

21 THE COURT: Not between one month and another?

22 THE WITNESS: Both month and tract. Each observation
23 is a tract and a month.

24 THE COURT: OK.

25 Q. You're measuring census tracts against other census tracts?

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO1 Fagan - direct

1 A. Census tracts in particular months against census tracts in
2 particular months.

3 Q. So census tract months, if I may?

4 A. Yes.

5 Q. You're comparing census tract months to other census tract
6 months.

7 To remind the Court, could you tell us the opinion
8 that you expressed, both in your reports and on the stand
9 previously, that you came to on the basis of the results shown
10 in table 5?

11 MS. COOKE: I would object on grounds of cumulative to
12 the extent he is asking him to restate his opinion from
13 earlier. This is rebuttal testimony.

14 MR. HELLERMAN: I am just doing it for context. If
15 you don't want to hear it again, I will withdraw the question.

16 THE COURT: Ms. Cooke's objection is perfectly well
17 founded, but I would like to hear it again. It just makes it
18 simpler than looking back 200 pages. You're still right, but I
19 am going to allow it.

20 MS. COOKE: Thank you.

21 THE COURT: Go head.

22 A. The general conclusion was that after controlling for crime
23 and other social and economic conditions in a census tract, in
24 a particular month, that the racial composition of the
25 neighborhood, in particular, the percent black, the rate of

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO1 Fagan - direct

1 stops was a function of the percent black or percent Hispanic
2 population in the neighborhood. In other words, racial
3 composition in the neighborhood predicted changes or increases
4 in the number of stops in a neighborhood.

5 THE COURT: So if the black population increased, the
6 number of stops increased?

7 THE WITNESS: If it was higher in one neighborhood,
8 then the number of stops increased, after controlling for
9 crime.

10 Q. Did you draw any conclusions with respect to the rate of
11 increase of stops based on the racial population of a census
12 tract as opposed to the crime rate?

13 A. Yes. Our conclusions are after controlling for the crime
14 rate, we identified in effect the racial composition.

15 Q. Is that over and above the crime rate of a neighborhood?

16 A. Yes.

17 Q. Does table 5 address the likelihood of a member of any
18 particular race being stopped?

19 A. Table 5, no.

20 THE COURT: Did you hear all the criticisms of the
21 patrol strength figure, or read it?

22 THE WITNESS: Yes.

23 THE COURT: Can you sort of respond to that criticism
24 about the patrol strength figure?

25 THE WITNESS: Yes. We adopted a patrol strength

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO1 Fagan - direct

1 figure.

2 THE COURT: Before you do it, he used a term
3 endogenous.

4 THE WITNESS: Endogenous basically means grown from
5 within. So everything is coming out of the same pot.

6 Q. Professor, I am going to ask you to speak up a little bit.

7 A. We adopted a measure of patrol strength that we discussed
8 in our report about the way we derived the measure. It was
9 done for the period of time, in this report, 2010 through the
10 middle of 2012, based on necessity, and the necessity was
11 because the patrol strength figure that we would be able to
12 allocate to either a police precinct or to a census tract was
13 no longer available after I believe the middle of
14 2010 -- middle of 2011.

15 THE COURT: You couldn't get that figure from the
16 police department?

17 THE WITNESS: Correct.

18 Also, the police department reported the information
19 on a quarterly basis, so we weren't able to get it on a monthly
20 basis in the way that would be necessary for our analysis.

21 So we constructed an alternate measure. We described
22 the methodology that we used to do that measure. And in order
23 to check and see whether or not it was consistent with the
24 measure that we used in the first report, October 2010 report,
25 we looked at a one year period, I believe it was 2010, and we

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO1 Fagan - direct

1 compared the measure for 2010 using the old methodology with
2 quarters and precincts with the current methodology using
3 months and tracts, and then we aligned it using quarters and
4 precincts. We found it to be very highly correlated, roughly
5 about .95, in excess of .9.

6 So we felt comfortable with this decision that we made
7 out of necessity to proceed with the measure that we used in
8 this particular table here.

9 THE COURT: Thank you.

10 BY MR. HELLERMAN:

11 Q. Following up on Judge Scheindlin's question, do you have an
12 opinion with respect to what Professor Purtell said about
13 endogeneity in that analysis?

14 A. I think on very technical grounds it might be applicable.
15 But I think in practical grounds, and in terms of the adequacy
16 of the statistical insulation that we used around that to make
17 sure it was on solid ground, I think we were OK.

18 Q. Can you explain why?

19 A. Well, I think, as I explained to the judge, we checked
20 again to see if -- we were measuring patrol strength in a way
21 that was convergent with the measure of patrol strength that we
22 used in the first report, and we were able to establish what we
23 believed to be convergent validity of the two measures.

24 Q. I had asked you whether table 5 shows a count of members of
25 particular races, or addresses the likelihood of members of

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO1 Fagan - direct

1 particular races to being stopped, and I believe you said no?

2 A. No, it does not.

3 Q. Does any other part of your report address that question?

4 A. No.

5 Q. How about table 7?

6 A. We count -- in table 7 we count the number of stops of
7 individuals of particular races. We don't estimate the
8 likelihood of an individual in a neighborhood being stopped.
9 We just simply count the number of occurrences of stops by
10 race.

11 Q. And you concluded from that, did you not, that blacks and
12 Hispanics are stopped more frequently and are more likely to be
13 stopped than whites?

14 A. Yes. We concluded that, again after controlling for crime
15 and all the other conditions in the area.

16 Q. Does table 5 represent or measure the process of what an
17 officer does that leads to a stop?

18 A. No.

19 Q. Does table 5 measure the log likelihood of an outcome?

20 A. No.

21 Q. Have you reviewed Exhibit N14 that Professor Purtell
22 testified about?

23 A. The original one or the revised one?

24 Q. Either.

25 A. I looked at both.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO1 Fagan - direct

1 Q. The revised one is the one that was produced by the city
2 late yesterday afternoon?

3 A. Yes.

4 Q. Do you understand this -- I have just put revised N14 on
5 the elmo, on the screen.

6 Do you understand that this uses as its starting point
7 the coefficient for percent black that you reported in table 5
8 of your second supplemental report?

9 A. Yes.

10 Q. Assuming that, as this appears to state, the percent black
11 coefficient that you reported in table 5 of your second
12 supplemental report means that the odds of an increase in
13 stops -- I will withdraw that question.

14 Could you read for the record the lower left-hand box,
15 just the language in the lower left-hand box of N14 revised?

16 A. "Odds of an increase in stops given a 1 percent increase in
17 the proportion of the black population versus a 1 percent
18 increase in the white population."

19 Q. That is or is not what you were measuring in table 5?

20 A. Yes, pretty close.

21 Q. According to N14 revised, the odds of an increase in stops
22 given a 1 percent increase in the proportion of the black
23 population versus a 1 percent increase in the white population
24 is 50.22 percent?

25 A. Yes.

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

D568FLO1 Fagan - direct

1 Q. That's what it says?

2 A. Yes.

3 Q. Do you have any opinions about Professor Purtell's opinion
4 that those odds are 50.22 percent?

5 A. Well, I guess two. One, I still have a little trouble
6 understanding how to get to 50.22.

7 Q. A little trouble?

8 A. A little trouble.

9 Q. What does a little trouble mean?

10 A. Meaning I'm not quite sure I can follow the -- there
11 weren't any breadcrumbs or footprints left to figure out how to
12 get to that statement so I had a little trouble figuring it
13 out. I would have to make a lot of assumptions in order to do
14 that.

15 Q. Did you succeed in figuring it out?

16 A. No, I didn't. I can follow it up to the third line, which
17 was understandable.

18 But there are two issues -- one issue -- an additional
19 issue that I think is important with respect to explaining what
20 this table shows, which is that it shows that the odds of an
21 increase in -- how an increase of 1 percent in the black
22 population would influence an increase in the stop rate or the
23 stop count in another consensus tract, basically comparing one
24 tract to another based only on a 1 percent change. And I think
25 that's a bit artifactual in terms of how to express what really

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO1 Fagan - direct

1 happens, and in terms of the question of practical significance
2 that came up in that testimony.

3 Q. In what terms are the results in your table 5 expressed?

4 A. We show a regression coefficient. We show a standard
5 error. We show -- I don't believe we show the test statistic
6 in the table in the report, but we did show the standard error
7 and the regression coefficient and a measure of the statistical
8 significance of that relationship.

9 Q. Professor Purtell's 50.22 percent appears to be derived
10 from some conversion that he did with respect to -- withdrawn.

11 Is the .833 percent black coefficient shown on N14
12 revised, does that appear to be taken from your table 5?

13 A. Yes.

14 Q. Where in your table 5 is that?

15 A. The first coefficient in the upper left-hand corner.

16 Q. Is that percent black?

17 A. Yes. Sorry. Percent black. So if you look at percent
18 black line and look across, .83, that's it.

19 Q. Let's go back to N14, please.

20 Are negative binomial regression coefficients designed
21 to be converted into percentages of likelihood of an outcome?

22 A. They can be converted into something called an incident
23 ratio, which expresses the likely rate of events that's being
24 modeled.

25 Q. What is the difference between an odds ratio and an

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO1 Fagan - direct

1 incident ratio?

2 A. An odds ratio is an expression of the odds of a particular
3 event happening, whether you are struck by lightning or not,
4 versus an incident rate ratio, which would be a count or the
5 expected count of the number of events happening in a
6 particular unit of observation, in this case a tract month.

7 Q. Have you ever seen a published article that purports to
8 convert a coefficient from a negative binomial regression into
9 an odds ratio?

10 A. Into an odds ratio, no.

11 Q. Are you familiar with odds ratios?

12 A. Sure.

13 Q. Did you report any of your findings in this case in terms
14 of odds ratios?

15 A. We did. In table 16 and 17, in the first report, we
16 reported odds ratios of being somebody being arrested or given
17 a summons for contraband being seized, weapons being seized,
18 force being used.

19 Q. Doing this from memory so I may not have the figures exact.
20 Those are the analyses that led you to conclude that in the
21 great majority of cases -- in the great majority of stops,
22 there was neither an arrest nor a summons, is that correct?

23 A. Well, we went a little further in those tables. We showed
24 that the odds of being arrested rather than being given a
25 summons was significantly greater for black persons compared to

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO1 Fagan - direct

1 white persons.

2 Q. You also concluded, I believe, that somewhere north of 88
3 percent of all stops result in neither an arrest nor a
4 sanction?

5 A. We did that. That was a different table. We concluded
6 that.

7 Q. Is the table in which you used odds ratios also the one
8 that reports that the gun seizure rate from stops is somewhere
9 between 12 percent --

10 THE COURT: Between what?

11 MR. HELLERMAN: I will start again.

12 Q. Is that the table in which you also show the likelihood of
13 a gun being seized in a stop is approximately 0.12 percent?

14 A. That was in one of the preceding tables. In the odds
15 ratio, we tried to show the odds of a gun being seized given a
16 black population neighborhood.

17 THE COURT: But he asked you for a number.

18 THE WITNESS: The number was .12?

19 THE COURT: That's what he asked you.

20 THE WITNESS: Twelve one-hundredths of 1 percent.

21 THE COURT: That's what he asked you.

22 Q. So you're familiar with odds ratios?

23 A. Yes. We report them quite often. They are a helpful way
24 of expressing the outcomes of binary events, an event where
25 there is only one or two outcomes.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO1 Fagan - direct

1 THE COURT: I just want to make sure I understand. Do
2 you agree with this chart on the screen of this 50.22 percent
3 figure?

4 THE WITNESS: I don't understand it completely. I
5 don't agree or disagree. I understand the preceding lines, the
6 three rows above it.

7 THE COURT: But you did hear Professor Purtell say or
8 you read, he says the fourth line is just a different way of
9 expressing the same thing. That's why I asked you if you
10 agree.

11 THE WITNESS: I would agree if I could see the math
12 that he used.

13 Q. Assuming that the math plays out and that the conversion
14 shown here from odds ratios to percentage is right, do you have
15 an opinion with respect to Professor Purtell's view that that
16 shows that there is little practical significance, your
17 findings in table 5?

18 A. No, quite the opposite. We think actually it can
19 demonstrate a quite strong practical significance. You want me
20 to explain?

21 THE COURT: I do.

22 A. Well, what Professor Purtell has shown is -- let's focus on
23 the number, the 1 percent odds ratio impact. I would use
24 different terminology, but I understand the number, and I
25 accept the number. So let's say that's 1.00887. We can round

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO1 Fagan - direct

1 it up to 1.009. So that's the increase. That's the odds of an
2 increase in the stop count in one tract given a 1 percent
3 increase in the black population, more or less.

4 Q. As compared to another tract?

5 A. As compared to another tract.

6 In the real world, let's assume that we are comparing
7 tracts that are quite different. So let's assume we are
8 comparing a tract with say a 15 percent black population, and
9 we want to compare that with a tract with say a 55 percent
10 black population. That would be an increase of 40 percent.

11 So for each one of those units, if we know there is a
12 1.009 odds of an increase in the stop count, or one unit
13 increase in the stop count, then if you take 1.009 and multiply
14 that by itself 40 times to account for the 40 percent increase,
15 then over a large set of census tracts with big differences,
16 you're going to wind up with a fairly large increase. The math
17 on that example works out to about 43 percent. So we would
18 assume that the practical significance is quite strong.

19 Q. Can you explain how the math leads to 43 percent?

20 A. If you multiple 1.009 times by 1.009 times 1.009, you do
21 that 40 times, you get 43 percent, or 1.431.

22 Q. Which is the equivalent of a 43 percent increase in the
23 number of stops?

24 A. We think so.

25 Q. I'm sorry?

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

D568FLO1 Fagan - direct

1 A. We think so, yes. I think so.

2 Q. How does that show practical significance?

3 A. Well, if you consider the way that the census tracts in the
4 City of New York are composed with respect to racial
5 composition, there is a fairly large number of tracts that
6 actually have a very high percentage of black population of
7 roughly that 55 percent or more figure. We can show that in a
8 map that we have produced.

9 MR. HELLERMAN: I would like to put up that map.

10 MS. COOKE: I am going to raise an objection to this
11 demonstrative and this line of questioning that is coming.
12 It's regarding comparing high and low census tracts, minority
13 census tracts, that is nowhere present in Professor Fagan's
14 prior reports and it was not offered as an opinion to be
15 rebutted by Professor Purtell.

16 THE COURT: I am not sure of that. I thought he has
17 always said he is comparing one census tract to another. He
18 talked about the 1 percent increase in population between
19 census tracts. He carefully explained census tract months, and
20 he said today very clearly comparing one census tract to
21 another. So theoretically you have always understood that.

22 MS. COOKE: Professor Purtell's testimony is that
23 these are population average effects, and so in fact they are
24 not comparisons of census tracts.

25 THE COURT: He can't use the 1.008 this way?

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO1 Fagan - direct

1 MS. COOKE: Correct.

2 THE COURT: Do you understand what the lawyer just
3 said? She is saying it's a misuse of the 1.008 because he was
4 averaging.

5 MS. COOKE: This model is resulting in population
6 average.

7 THE COURT: Averaging rather than comparing one census
8 tract to another.

9 THE WITNESS: It's population average as well. This
10 is going to get into a pretty technical conversation, your
11 Honor.

12 MR. HELLERMAN: Perhaps I can clear this up by putting
13 the map up.

14 MS. COOKE: I object to the map and the line of
15 questioning with respect to this point because it's not an
16 opinion that was previously offered. In fact, Professor
17 Purtell's testimony explicitly stated that he couldn't do this
18 type of analysis because this model is population average
19 effects.

20 THE COURT: His model.

21 MS. COOKE: Professor Fagan's model.

22 THE COURT: Professor Fagan can disagree and defend
23 his own model. He is saying his model is not population
24 averaging.

25 THE WITNESS: It is population averaging. This

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO1 Fagan - direct

1 particular model, the one we used in table 5, is population
2 average model. So the report here is an average across all of
3 the census tracts adjusted for the populations. We are arguing
4 that's true for a particular census tract on average, and we
5 are decomposing the average across census tracts in different
6 populations, the different characteristics.

7 THE COURT: Now I am lost. If it's an average, then
8 how do you do the hypothetical you just gave, where you said
9 one tract is 55 percent black, the difference is 40 units, and
10 therefore I can multiply this number by 40 and talk about
11 practical effect. You can't do that if you weren't looking
12 at the actual calculation of each census but rather the
13 average.

14 THE WITNESS: The estimate that we produced is for the
15 average census tract. But that can be decomposed and look at
16 how the average applies from one census tract to the next to
17 the next. It's an average. It's an average across all -- the
18 census tracts may vary, and we are trying to capture what that
19 real variation would be by looking at tracts across a range.

20 THE COURT: Is it fair to deconstruct the average and
21 return now to the precise and say one census is 15 percent
22 black, one census is 55 percent black, that's a 40 unit
23 difference, and I can multiply that odds ratio impact number?
24 Isn't that comparing apples and oranges when you were using
25 average for the census tracts?

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

D568FLO1 Fagan - direct

1 THE WITNESS: I think we can do it, your Honor. It's
2 a disagreement.

3 MS. COOKE: Respectfully, it's a population average
4 effect across all census tracts and to deconstruct that and
5 therefore say you can draw conclusions about each particular
6 characteristics of each census tract is not what Professor
7 Purtell testified was his type of model.

8 THE COURT: I am not worried about that so much
9 because experts can disagree as to what can be done. I was
10 trying to take the other part of your objection. You say he
11 never before deconstructed the average to analyze two precise
12 census tract populations and compare them. My only issue is
13 whether I should allow that as rebuttal.

14 MR. HELLERMAN: Professor Purtell's opinion, as stated
15 in N14 revised, what he did here is he expressed an opinion as
16 to the odds of an increase given a 1 percent increase in the
17 number of stops.

18 THE COURT: In the number of stops?

19 MS. COOKE: A 1 percent increase in the proportion of
20 the population across the census tract.

21 MR. HELLERMAN: Professor Purtell expressed the
22 opinion that on the basis of a 1 percent increase in the
23 proportion of the black population, there is a 50.22 percent
24 chance of somebody being stopped. So what Professor Fagan is
25 saying --

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

D568FLO1 Fagan - direct

1 THE COURT: I understand he is applying that concept
2 to two census tracts in a hypothetical with the 40 units
3 difference and simply using Professor Purtell's number showing
4 how it would multiply out.

5 I think it is fair rebuttal because now I can try and
6 understand the real world impact of the 1.00887 figure and how
7 it could be applied. Otherwise it looks like it makes no
8 difference, it's such a tiny number, but he is trying to
9 explain how it could apply.

10 MS. COOKE: I will restate my objection that this is a
11 new opinion.

12 THE COURT: It's a rebuttal, which doesn't have to
13 be -- if you look at the federal rules, it does not have to be
14 explained in advance as an opinion because this is the first
15 time he has seen it expressed this way. Obviously, it's the
16 first time because we all saw it expressed this way because the
17 left-hand text is a correction.

18 So now that we all understand what it means, he is
19 simply saying I am applying that figure to a hypothetical
20 comparison of two census tracts. He agrees he didn't do that
21 in his own analysis. His own analysis was an average. But now
22 he is applying it to a hypothetical spread between two census
23 tracts and showing the practical implication.

24 MS. COOKE: I would just state my objection to that as
25 is not what the table 5 regression as a population average

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO1 Fagan - direct

1 reports. It's citywide across the census tracts.

2 THE COURT: I understand. But he is saying there is a
3 1.00887 odds of an impact. All he is doing is the math.

4 I understand. It's across the whole city. He is
5 deconstructing it. You are going to get a chance to ask him.

6 MS. COOKE: Will Professor Purtell be allowed to rebut
7 that you cannot deconstruct a population average.

8 THE COURT: You can also do it in your cross of
9 Professor Fagan.

10 MS. COOKE: I believe he stated he disagrees with
11 that.

12 THE COURT: You can do it both ways. You can do it on
13 cross and you can recall briefly, and we will be done with this
14 point.

15 THE WITNESS: Would you push it up a little bit
16 because I want to make a point about the footnote.

17 THE COURT: There is a footnote?

18 THE WITNESS: There is a little explanation on the
19 bottom.

20 MS. COOKE: There was no explanation provided to me on
21 the bottom.

22 MR. HELLERMAN: This may be a little difficult to read
23 on the screen.

24 THE COURT: It's very clear on the screen.

25 THE WITNESS: Can I explain what got chopped off on
SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO1 Fagan - direct

1 the bottom?

2 THE COURT: It's not there. It's not been given to
3 the defense. It doesn't exist.

4 Anyway, this shows the percent black population in
5 various census tracts, is that right?

6 THE WITNESS: Yes. It is the percent black population
7 of various census tracts divided into what we call 20 percent
8 blocks. So the yellow ones are all of the census tracts with
9 black population below 20 percent, etc. And darkest one are 80
10 to 100 percent. It's based, by the way, on the 2006 census
11 data that we used in our October 2010 report. That's what the
12 footnote said that got chopped off.

13 So our point is if you look at the areas with the --
14 in our scale, the middle ground, the orange tracts, those would
15 be kind of a minimum estimate, and you compare those with, say,
16 the yellow tracts, which are the ones that are zero to 20, our
17 example falls between in those two blocks.

18 THE COURT: What do you mean our example?

19 THE WITNESS: 15 to 55.

20 THE COURT: That you just did.

21 THE WITNESS: So we think the differences that we are
22 citing apply very widely, across a very large number of census
23 tracts in the city. And they would apply equally, if not with
24 greater force, to the tracts that are in the brown and dark
25 brown area, shaded brown and dark brown as well.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO1 Fagan - direct

1 BY MR. HELLERMAN:

2 Q. Some of those tracts shaded in brown and dark brown have
3 black populations considerably higher than 55 percent?

4 A. Yes. The numbers show they are upwards of 60 percent and
5 in some cases close to above 80 percent.

6 MS. COOKE: For the record, can we mark this
7 demonstrative with an exhibit number?

8 THE COURT: Thank you for pointing that out. I
9 usually say that.

10 MR. HELLERMAN: I just marked it.

11 THE COURT: 566.

12 MR. HELLERMAN: I move it in evidence.

13 THE COURT: OK. It's received.

14 (Plaintiffs' Exhibit 566 received in evidence)

15 Q. Also, some of the census tracts according to 566 have black
16 populations of considerably less than 15 percent, is that
17 correct?

18 A. Yes. They do have considerably less.

19 Q. The 43 percent figure that you testified to, if you took a
20 55 percent black tract and compared it to a 15 percent black
21 tract, would that percentage affect a change if you used a
22 census tract that was greater than 55 percent black?

23 A. Yes. The same logic would apply.

24 Q. Would it go up or down?

25 A. It would go up.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO1 Fagan - direct

1 THE COURT: I gather the purpose of showing the math
2 is to say there are a lot of census tracts in the entire city
3 that are zero to 19, there are a lot of census tracts in the
4 city that are 20 to 40 percent.

5 THE WITNESS: Correct.

6 THE COURT: This is an answer to the averaging issue
7 because you're saying it's not one outlier isolated census
8 tract because under 20 percent there's lots of them.

9 THE WITNESS: That's correct. Population average is
10 skewed toward the bulk of the areas, but there are a small
11 number of areas or roughly about. I think by our estimate
12 about 22 percent of the census tracts had a black population of
13 55 percent or more. And so that's a pretty big portion of the
14 city.

15 THE COURT: Say that figure one more time.

16 THE WITNESS: 22 percent of the tracts had a
17 population, a black population of 55 percent or more.

18 THE COURT: How many census tracts are there?

19 THE WITNESS: In this analysis, 2194.

20 THE COURT: They are all on that map?

21 THE WITNESS: Yes.

22 THE COURT: If I were able to count every little
23 square I would get to that.

24 THE WITNESS: Yes.

25 Q. In your example, you're not comparing a tract with a 55

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO1 Fagan - direct

1 percent minority population to a tract with a 54 percent
2 minority population?

3 A. No. We are looking across the areas of great contrast.

4 Can I add one other thing to this?

5 Q. You wish to elaborate?

6 A. I do wish to elaborate.

7 I think these estimates that we are talking about are
8 somewhat conservative as well, because among the tracts with 15
9 percent or less black population, many of those tracts also had
10 significant numbers of Latino population. They averaged about
11 25 percent Latino population. So the yellow tracts include
12 both places that are almost exclusively white as well as places
13 that are somewhat heterogenous with respect to Latinos and
14 whites. And so we suggest that this is in fact a somewhat --
15 our estimates around the 40 percent hypothetical are somewhat
16 conservative given the fact that there is some evidence, at
17 least in our regressions, of bias in stop rates in places that
18 have Latino populations as well.

19 (Continued on next page)

20

21

22

23

24

25

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

D569FLO2

Fagan - direct

1 BY MR. HELLERMAN:

2 Q. And those differences are -- have practical significance?

3 A. Yes. All of this is designed to show that, in fact, this
4 has pretty strong practical significance.

5 Q. "All of this" being?

6 A. The analysis, the exercise, the display of the map and so
7 on.8 Q. When you say "all of this," you include your findings as
9 expressed in table 5?

10 A. Correct.

11 Q. Professor, there was some question on -- during Friday's
12 testimony about the number of census tract months that were
13 excluded from the analysis done by Professor Purtell.

14 Do you recall that?

15 A. Yes, I do.

16 Q. Did you then determine the number of census tract months
17 that were excluded from that analysis?18 A. Well, we know it was excluded for the analysis and we know
19 also the number of census tracts with zeros.20 Q. Do you recall the numbers or should I put something up
21 to --22 A. Well I can tell you that by both our calculations and from
23 what I understand to be the city's calculations that there were
24 in the period covered by the November 2012 report, the second
25 supplemental report, there were 3,474 census tracts that had no

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2

Fagan - direct

1 stops whatsoever.

2 MS. COOKE: Just note that's that's not an agreed-upon
3 number.

4 The city's number was actually 3,772.

5 MR. HELLERMAN: I think the professor misspoke.

6 I think he transposed a digit, which is why --

7 THE COURT: So maybe there is agreement.

8 MS. COOKE: There's not agreement on the number.
9 Relatively close. But our number is 3,772.

10 THE COURT: Okay.

11 MS. COOKE: For the entire period.

12 Q. Professor is this -- I'm going to mark this for
13 identification as 567.

14 A. Yeah. The right-hand -- the header on the right-hand
15 column should be 2010 and 2011.

16 THE COURT: The right-hand column should be 2010 to
17 2011?

18 MR. HELLERMAN: I'm going to change that in the --

19 THE COURT: That should be 2010 to 2011?

20 THE WITNESS: Yes.

21 I thought my penmanship was bad. Wow. Okay.

22 Q. And so how many zero stop tract months were there?

23 A. For -- in which period?

24 Q. 2010 to 2012?

25 A. By our estimate 3,734.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2 Fagan - direct

1 Q. And in 2010 to 2011?

2 A. 3,041.

3 Q. Which for the record, because my handwriting is so bad,
4 that's the right-hand column?

5 A. Correct.

6 Q. Is this something that was prepared under your supervision?

7 A. Yes. I did it myself.

8 THE COURT: When?

9 THE WITNESS: Sometime -- late afternoon on Friday
10 after we had the discussion in court, I went back and looked at
11 the data.

12 THE COURT: You gave this what exhibit number?

13 MR. HELLERMAN: 567 which I offer into evidence.

14 THE COURT: Okay. 567 received.

15 (Plaintiffs' Exhibit 567 received in evidence)

16 THE COURT: Ms. Cooke, for 2010 to 2012 your number is
17 3734?

18 MS. COOKE: Yes, your Honor. We provided our math --

19 THE COURT: I just want to make sure what your number
20 is again.

21 MS. COOKE: 3772.

22 THE COURT: For the 2010 to 2012.

23 MS. COOKE: Correct. We provided by unique census

24 tract IDs --

25 THE COURT: True. But it's only 30 off.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2

Fagan - direct

1 MS. COOKE: Correct. But I would note that on --

2 THE COURT: One percent difference.

3 MS. COOKE: -- on Friday Mr. Charney represented it
4 was the number of census tracts omitted were less than one
5 percent which clearly that was an erroneous statement by
6 Mr. Charney.

7 MR. CHARNEY: That was, your Honor. And Professor
8 Fagan can explain. But I'll also note that defendants
9 represented the number was about 16,000 in their report so --

10 MS. COOKE: We represented nothing of the sort with
11 respect --

12 MR. CHARNEY: Have you seen table eight, Ms. Cooke?

13 MS. COOKE: Mr. Charney, if you would please direct
14 your comments to the court and not me.

15 We represented with respect to our regression analysis
16 in table eight that the number of observations included in that
17 regression was the number of 44,000 and change.

18 There are answers, which have been provided to the
19 plaintiffs, including the Stata code and the Stata code output
20 for that regression analysis as to why certain observations, in
21 addition to the 3,772 were dropped by the model when running
22 that analysis.

23 THE COURT: Was that because they were zero?

24 MS. COOKE: Professor Purtell can explain further.

25 THE COURT: They were lumped in with the zero

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2 Fagan - direct

1 category? They weren't really zero?

2 MS. COOKE: They were like one or two as opposed to
3 zero. But it's stability of the model, your Honor.

4 THE COURT: They weren't really zero but they were
5 lumped in with the zero which is why it showed 16,000.
6 Everybody now agrees it's somewhere in the range of 3700.

7 MS. COOKE: To be clear, Professor Purtell's testimony
8 was never that that end number represented the census tracts
9 without the zero counts. It was that was the regression -- the
10 number represented in the regression model to which we've
11 provided the answers to plaintiffs in support of underlying
12 data. So just correct the record with respect to the
13 .5 percent Mr. Charney represented on Friday.

14 MR. CHARNEY: Your Honor, if I could just correct the
15 record.

16 Table 8 in Professor Purtell's report states that the
17 analysis excludes the zero count observation.

18 THE COURT: Right.

19 MR. CHARNEY: So that's why we originally thought that
20 they were including over 16,000 census tracts that were --

21 THE COURT: What are you showing me?

22 MR. CHARNEY: This is table eight of the most recent
23 Smith/Purtell report.

24 MS. COOKE: Exhibit --

25 THE COURT: Could he just finish. He's showing me

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2 Fagan - direct

1 eight of the Smith report --

2 MR. CHARNEY: According to the title of the table
3 purports to be excluding those census tract months with zero
4 counts.

5 THE COURT: He used the words excluding zero count
6 observations, okay.

7 MR. CHARNEY: That's why my statement -- and, again,
8 our understanding when we read this report was that there were,
9 according to the defendants, more than 16,000 census tract
10 months that had no stops in them. So.

11 MS. COOKE: To be clear --

12 THE COURT: Because it says 44,000.

13 MR. CHARNEY: And there were --

14 THE COURT: About 65 or something thousand.

15 MS. COOKE: To be clear, your Honor, when we provided
16 this report on February 1, 2013, we provided the underlying
17 data and the code to rerun these regressions for table eight,
18 nine and ten to the plaintiffs.

19 And in those data, the Stata code to rerun those
20 regressions -- first of all, we did provide, in fact, the
21 standard errors. Those were already provided. The plaintiffs
22 represented on Friday they were not in possession of. And we
23 also rerun -- in rerunning those regressions you would identify
24 by the code, the manner in which it was determining the number,
25 that end number with respect to the regression.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2

Fagan - direct

1 THE COURT: But the title does say excluding zero
2 count observations.
3 MS. COOKE: Correct, your Honor.
4 THE COURT: So it's perfectly normal to assume that it
5 meant what it says.
6 MS. COOKE: But that the underlying data was all
7 provided.
8 THE COURT: It could have been tested.
9 MS. COOKE: It could have been, yes.
10 THE COURT: But if one didn't have time to test it, or
11 resources to test it, one would go with the title, which does
12 exclude zero count observations.
13 So anyway now I understand it.
14 MR. CHARNEY: Anyway it looks like we're close.
15 THE COURT: Now we agree looks like it's five percent
16 or five-and-a-half percent.
17 MR. HELLERMAN: May I take a moment to consult, your
18 Honor?
19 THE COURT: All right.
20 (Pause).
21 MR. HELLERMAN: So, with -- for argument's sake we'll
22 take the average of what Ms. Cooke just said that the number of
23 census tract months excluded in 2010, 2012 and the number shown
24 on Exhibit 567, we'll say is about 3750.
25 Does that sound about right?

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2

Fagan - direct

1 THE COURT: That sounds good to me. So I take it.

2 Okay.

3 Q. And Professor, if you could just repeat it -- I know you've
4 testified to it already -- so we'll have it all in one place.

5 Why does excluding zeros matter?

6 A. Well, the zeroes are places where there were no stops.

7 These are places that are part of the city.

8 But more important, zero in our estimate is a value on
9 a continuum of a measure of the number of stops in a place in a
10 month. It is -- if you actually look at the distribution of
11 stops by frequencies, there are roughly -- as you can see here,
12 for example, 3734 tract months where there were no stops, about
13 an equal number of tract months where there was one stop, an
14 equal number of tract months where there were two stops, and so
15 on. And so this appears to take on the characteristic of a
16 continuous variable where zero matters.

17 And zero matters practically in the sense that
18 officers are in those areas and they are patrolling and
19 presumably observing locations and individuals and situations
20 and making decisions not to stop people. And I think comparing
21 those decisions made in those places with decisions made in
22 places where there are a small number of stops or a high number
23 of stops is practically a very important thing to do.

24 So I would think that the correct position would be to
25 include the zeros in those regressions.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2 Fagan - direct

1 Q. And so are you saying that -- you referred to a continuum.
2 What did you mean by that?

3 A. A continuum meaning from zero, one, two, three, to four.

4 Q. And why does it start with zero?

5 A. Because zero places that are -- these are places in the
6 city. It's part of the universe to which we're trying to
7 generalize the phenomenon that we're talking about.

8 Q. Is zero an amount?

9 A. Yes.

10 Q. Any more or less than one or two, is it an amount?

11 A. Well it's less than one. Greater than minus one.

12 Q. But you're saying zero is a number just like one?

13 A. Right. Zero is an end point in a continuum.

14 Q. Now have you -- by the way, your Honor, the information as
15 to the number of counts per census tract that Ms. Cooke
16 referred to as having been produced, that was produced late
17 yesterday afternoon. Professor Fagan was unable to review it
18 for personal reasons. And he hasn't seen it.

19 THE COURT: But that's the one that shows 3770
20 something. It's trivial difference.

21 MR. HELLERMAN: But it's broken down by census tract
22 and Professor Fagan just hasn't seen it.

23 Q. Is that correct, Professor?

24 A. Yes.

25 Q. Now, have you determined the effect of the removal of the

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2 Fagan - direct

1 exclusion of the zero count census tracts on your analysis?

2 A. Yes. I've had a chance to do that.

3 Q. And what did you find?

4 MS. COOKE: Your Honor, I'm going to object. To the
5 extent he's referring to new analysis that hasn't been provided
6 to the defendants, is a new opinion, and certainly not one I'm
7 on notice.

8 MR. HELLERMAN: Your Honor, given that as of Friday
9 there was such wide divergence of opinion from the two sides
10 with respect to how many zero counts there were with one side
11 saying there were about 16,000 the other side saying there were
12 almost none, we think this is based on new information.

13 MS. COOKE: Where --

14 THE COURT: You think it's based on what?

15 MR. HELLERMAN: New information.

16 THE COURT: New information?

17 MR. HELLERMAN: Yes.

18 THE COURT: It is based on new information but
19 Ms. Cooke is still right that she hasn't had a chance to see
20 this new analysis and is hearing it right now for the first
21 time.

22 Does he have that written out, that new analysis?

23 MR. HELLERMAN: There is a chart.

24 THE COURT: Has she seen that?

25 MS. COOKE: No.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2

Fagan - direct

1 MR. HELLERMAN: I can show it to her right now.

2 MS. COOKE: No.

3 Your Honor, I would object. That's not enough notice
4 or opportunity to inform ourselves of that analysis, the
5 underlying -- the steps that were taken to underlie that
6 analysis. This is entirely unfair prejudice at this point to
7 be handed a chart.

8 THE COURT: Well, I was going to say this battle of
9 the experts can't go on forever, but maybe it can go on
10 forever.

11 I agree with you, that you haven't had notice now. So
12 they'll give you the chart now and if a week from now we have
13 to recall these two, we'll do it yet again for hopefully a
14 half-hour each. But we do have to get to the bottom of it.
15 It's an important case.

16 I'm not going to allow it now. Please give her the
17 analysis now.

18 If you feel the need to go into it, we can do it some
19 other date down the road unless these two experts decide wisely
20 to go on safari and not come back for a long, long time.

21 THE WITNESS: That was last summer, your Honor.

22 MR. HELLERMAN: I will give Ms. Cooke the chart.

23 THE COURT: So we're just going to put this off. It
24 may be that they will drop the need to add this to the record
25 or feel very strongly about it. But it shouldn't be now. You

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2 Fagan - direct

1 need time to look at this thing. But I need to get to the
2 bottom of it because it's so important and there was a wide
3 divergence last week. And now the parties have come to
4 together on the number of zero stops. So it may have an impact
5 on the analysis that's worth talking about. It may not. But
6 it's not fair to do it today. I'm not going to rule it out
7 because I've still got ten days in this case. So, see what
8 happens.

9 There's always the 16th, right? The 16th is not
10 yet in use, or the 17th.

11 MR. HELLERMAN: So I thank you, your Honor, for
12 permission to bring Professor Fagan back.

13 THE COURT: If need be. If need be.

14 MR. HELLERMAN: May I just consult, your Honor?

15 THE COURT: Sure.

16 (Pause)

17 MR. HELLERMAN: Your Honor I also note for the record
18 that on Friday you directed the city to provide us with
19 standard errors. They did so late yesterday. Professor Fagan,
20 because of personal reasons, wasn't able to review that
21 information. So we reserve the right to have him testify with
22 respect to that.

23 THE COURT: If needed. If needed. If it's something
24 that really makes a difference.

25 MR. HELLERMAN: Thank you, your Honor. I have nothing

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2 Fagan - direct

1 further.

2 THE COURT: Now cross-examination.

3 MS. COOKE: Your Honor, might I ask that we take our
4 morning break early just to get my thoughts together with
5 Professor Purtell to make it much more efficient on my cross.

6 THE COURT: We'll reconvene at 11:25. We'll try to
7 take ten minutes.

8 (Recess)

9 CROSS-EXAMINATION

10 BY MS. COOKE:

11 Q. Professor Fagan, you did not provide an estimate of the
12 size of the practical effects of your results in table five in
13 your second supplemental report, did you?

14 A. No.

15 Q. You testified here -- is it your testimony that your
16 percent Black coefficient in table five can be used to do
17 comparisons across census tracts?

18 MR. HELLERMAN: Object. I don't think that that's
19 what he testified.

20 THE COURT: Pardon me.

21 MR. HELLERMAN: Object. I think there was a
22 misstatement in the question.

23 MS. COOKE: I asked if that was his testimony.

24 Q. Is that your testimony, that you can use your percent Black
25 coefficient in table five to draw comparisons across individual

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2 Fagan - cross

1 census tracts?

2 A. No. Not the coefficient.

3 Q. Put on the screen Defendants' Exhibit N14 revised.

4 Is your testimony that you can use the percent odds
5 ratio impact and draw conclusions across census tracts?

6 A. We can use it to estimate -- well as I said, we can use it
7 to estimate the increase, what would happen with an increase of
8 one percent change in population.

9 Q. And you agree with the first three lines of Defendants'
10 Exhibit N14, correct?

11 A. Yeah.

12 Q. And this third line is derived from the second which is
13 derived directly from table five, correct?

14 A. Yeah, I believe so.

15 Q. By performing a simple one percent -- mathematical
16 calculations, correct?

17 A. Yes.

18 Q. With respect to the final line in Defendants' N14, you
19 agree with the statement describing what's presented in the
20 final line, correct? The odds of an increase in stops given a
21 one percent increase in the proportion of the black population
22 versus a one percent increase in the white population?

23 A. I think the statement is correct. I still have a question
24 about the number.

25 Q. I understand. But you agree with the statement

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2 Fagan - cross

- 1 representing table five's results, correct?
2 A. Yeah.
3 Q. With respect to the third line in the table, the one
4 percent odds ratio impact number.
5 A. Yes.
6 Q. A number above one represents an increase, correct, a
7 directional increase; and a number below one would represent a
8 decrease?
9 A. Yes.
10 Q. And so something at one would be zero or nothing?
11 A. 1.0 is even odds, yes.
12 Q. And the number represented in total stops in the final line
13 of this chart is 50.22 percent, correct?
14 A. Yes.
15 Q. 50 percent would be even odds?
16 A. Well, you -- that's right. In the real world 50 percent is
17 even odds.
18 Q. You testified that zero counts should not be dropped from
19 your regression analysis; is that correct?
20 A. Yes.
21 Q. But Professor Purtell and Professor Smith never opined that
22 zero counts should be removed entirely from the regression
23 analyses, did they?
24 A. I don't recall.
25 Q. In fact, their opinion was that the zero counts should be

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2 Fagan - cross

1 modeled separately to see their impact on the regression
2 analyses; isn't that correct?

3 A. Yes. That was their statement.

4 Q. With respect to patrol strength. You testified this
5 morning that you have a convergent validity where you see
6 convergent validity between how you measured patrol strength in
7 your second supplemental report compared to your measure of
8 patrol strength in your first report; is that correct?

9 A. Yes. The two are highly correlated. They seem to be
10 getting at the same construct.

11 Q. For your first report your measure of patrol strength was
12 based on quarterly staffing data provided by the NYPD; is that
13 correct?

14 A. Yes.

15 Q. And that was the number of personnel assigned to each
16 precinct each quarter, correct?

17 A. Yes.

18 Q. That wasn't necessarily the number of officers patrolling a
19 precinct each quarter; isn't that correct?

20 A. We only included in our estimates of patrol strength in the
21 first report those officers who are on some kind of patrol
22 assignment. We didn't include the people working in the
23 stables, for example.

24 Q. Excuse me?

25 A. In the stables, in the horse patrols, the mounted patrols.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2 Fagan - cross

1 We didn't include -- only people who are on patrol.

2 Q. You included the number of officers who were assigned to a
3 patrol precinct; is that correct?

4 A. We included the number of officers on patrol commands in
5 each precinct.

6 Q. And those --

7 A. Which are stated -- I mean we gave the logic quite
8 explicitly in the appendix to our report, so.

9 It's there. We were very careful about identifying
10 patrol commands.

11 Q. You didn't differentiate between which officers were
12 working which platoons in those precincts during those quarters
13 for patrol strength, did you?

14 A. That information wasn't available to us.

15 Q. And you didn't differentiate between supervisors or
16 partners --

17 MR. HELLERMAN: Your Honor, I think this is going now
18 way beyond the scope.

19 THE COURT: No. I don't think it is. I asked about
20 patrol strength, and she's clarifying how it was calculated.
21 So that's okay.

22 MR. HELLERMAN: I would just also note that I think
23 she asked him these questions on cross already.

24 THE COURT: That may be. I don't know that.

25 MR. MOORE: Judge, also, I don't know if D14 revised
SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2 Fagan - cross

1 has been introduced into evidence.

2 THE COURT: N14?

3 MR. MOORE: I mean N14.

4 THE COURT: This is the revised, N24; if it wasn't,
5 it's now in evidence.

6 Back to the point about supervisors. They were
7 excluded?

8 THE WITNESS: I don't recall. I don't know that we
9 did.

10 (Defendants' Exhibit N14 received in evidence)

11 MS. COOKE: Your Honor I have no further questions for
12 the witness but I would like to call Professor Purtell to the
13 stand.

14 THE COURT: Anything more for this witness,
15 Mr. Hellerman?

16 Redirect?

17 REDIRECT EXAMINATION

18 BY MR. HELLERMAN:

19 Q. You may have just said this, but I just want to make sure
20 because I was thinking about something else when you did.

21 What you used with respect to patrol strength is all
22 set forth in your reports; is that correct?

23 A. Yes, in one of the appendices, I don't recall exactly which
24 one, in the first report; a very detailed explanation of how we
25 constructed patrol strength including housing patrols and

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2 Fagan - redirect

1 transit patrols as well.

2 MR. HELLERMAN: Thank you. Nothing further.

3 THE COURT: Okay. You're all set again. I can't
4 promise it's the last time.

5 THE WITNESS: I suspect I'll see you again.

6 THE COURT: Yes. It's very possible.

7 (Witness excused)

8 ROBERT PURTELL, resumed

9 THE COURT: He was just explaining train delay.

10 Just for the record, so you understand you're still
11 under oath.

12 THE WITNESS: Yes, ma'am.

13 THE COURT: Very good.

14 So Professor Purtell in surrebuttal.

15 DIRECT EXAMINATION

16 BY MS. COOKE:

17 Q. Professor Purtell you just heard Professor Fagan testify
18 with respect to his results in table five, correct?

19 A. Yes.

20 Q. In your opinion what do the results in Professor Fagan's
21 table five represent?

22 THE COURT: That's not surrebuttal. He's told us that
23 many times, I believe. He's told us what he believes table
24 five shows.

25 MS. COOKE: Well I guess with respect to the ability

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2 Purtell - direct

1 to represent a logging odds ratio result from table five.

2 THE WITNESS: That's my understanding of those models,
3 yes.

4 Q. That you can represent them?

5 A. That you can represent them as a log odds ratio.

6 Q. You heard Professor Fagan use his example of applying the
7 results of table five to compare census tracts to census tract?

8 A. Yes.

9 Q. Do you agree with Professor Fagan's testimony that he, in
10 fact, can take the population average results from table five
11 and do that comparison on individual census tracts?

12 A. No --

13 MR. HELLERMAN: That mischaracterizes the testimony.

14 MS. COOKE: I don't believe so. I believe he
15 testified he agreed it was a population average effect of table
16 five and he, in fact, testified he could apply those results
17 census tract to census tract.

18 MR. HELLERMAN: But that's not what he did in his
19 testimony.

20 THE COURT: No. In his testimony today he did say
21 that there's a hypothetical census tract with 15 percent black
22 population and a hypothetical census tract with 55 percent
23 black population. The spread of that is 40 units. And he said
24 he could multiply this one percent odds ratio impact of 1.009
25 to the 40-unit spread and reach a conclusion that there's a

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2 Purtell - direct

1 43 percent change in likelihood.

2 MR. HELLERMAN: I agree completely. That's what he
3 said. I didn't think that that's what the question asked for.

4 THE COURT: I think that's exactly what the question
5 asked. It's just she did it in less words.

6 MR. CHARNEY: Can we have the question read back.

7 THE COURT: She said compare census tract to census
8 tract. That was the difference. And that's what Mr. Hellerman
9 objected to. That you could compare tract to tract.

10 And I understand maybe that that would be an actual
11 specific tract to every other actual specific tract.

12 What he did, he took a hypothetical tract, I thought,
13 within the group of 0 to 20 and a hypothetical tract within the
14 group of whatever it was, 40 to 59, and he compared those. So
15 that may be a slight difference.

16 I restated what he said he could do.

17 Q. So Professor Purtell given the restatement of what
18 Professor Fagan testified he could do with the results of table
19 five in a comparison to a hypothetical census tract, do you
20 agree?

21 A. No. A population average effect cannot be applied back to
22 individual cases. It's a -- it's going from the particular to
23 the general, back to the particular, and that can't be done.

24 Q. Why not?

25 A. Because this -- these results are the impact across the

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2 Purtell - direct

1 city, holding all of the underlying data constant. And once
2 you start making those sorts of statements about individual
3 census tracts, you're changing them. And you can't do that.

4 Q. Does Professor Fagan's table five measure process?

5 A. Yes. All Poisson negative binomial models measure process
6 because it's an attempt to look at the drivers behind the
7 decision to cause the police to stop someone, and that's a
8 process.

9 Q. With respect to your table 8 regression in your second
10 supplemental report response which dropped the -- modeled the
11 regression without the zero counts.

12 Do you recall that?

13 A. Yes, I do.

14 Q. Could you explain the difference in the number of cases
15 that were dropped in that table eight regression resulting in
16 the higher number than the 3,772 zero count census tracts?

17 A. The additional cases that were dropped were those where
18 there were only two observations where it was impossible to
19 find a variance and those cases where there were large gaps in
20 the data set, in essence, census tracts that had a substantial
21 number of zeros in them, zero counts in them. And because of
22 the way the estimates are calculated, it's impossible to use
23 that data in a regression. So Stata automatically drops that,
24 those two instances, from the data. That's the additional
25 14,000.

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

D569FLO2

Purtell - direct

1 THE COURT: I'm sorry. What's the additional 14,000?

2 THE WITNESS: It's a technical problem with the way --
3 how the algorithm, the methodology used to calculate the
4 coefficient works. So if there are only two observations with
5 nonzero counts, there's not enough variation for the software
6 to use to estimate the coefficients.

7 And in the other cases there were big gaps -- you
8 know, there was a time series census tract across months, there
9 were big gaps in there for some of these where there were
10 multiple zero counts. And because it wasn't sort of evenly
11 spaced, there was no way to mathematically adjust for that. So
12 it dropped all of the observations for that census tract.

13 Q. With respect to your regression analyses represented in
14 table 8 of Defendants' H13, what were you trying to determine
15 by modeling without the zero counts?

16 A. We were trying to see whether or not a distinct process
17 existed for zero counts and for the nonzero counts. And what
18 that regression -- and since we've dropped those that were
19 dominantly zero and those that had lots of zeroes and all the
20 zero counts, that regression suggests that the zero process is
21 different and should be -- there should be controls in the
22 model to reflect that.

23 Q. Do you know what percentage of census tracts had fewer than
24 50 percent stops?

25 MR. CHARNEY: Objection. Not in the report.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2

Purtell - direct

1 MS. COOKE: Your Honor, Professor Fagan, it wasn't in
2 his report either and he testified to it this morning with
3 respect to the percent of census tracts with a one observation
4 or two observations.

5 MR. CHARNEY: No, he didn't actually. He did the ones
6 that had zero and he said 3,000 something.

7 THE COURT: When I read this: Do you know what
8 percentage of census tracts had fewer than 50 percent stops,
9 did you say that?

10 MS. COOKE: 50 percent zero counts, yes. That's what
11 I meant to say.

12 THE COURT: I don't understand the question. Say that
13 again. Say that again.

14 MS. COOKE: The percentage of census tracts that had
15 fewer than 50 percent of the time a zero count.

16 THE COURT: Had fewer than 50 percent of the time had
17 zero counts.

18 MR. CHARNEY: We maintain our objection. That wasn't
19 what the table that Professor Fagan -- all the Court asked for
20 were the number of zero counts in the period of time.

21 THE COURT: We got that.

22 MR. CHARNEY: This information was not testified to by
23 Professor Fagan.

24 MS. COOKE: Professor Fagan testified to the frequency
25 of census tracts that had two observations or three

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2 Purtell - direct

1 observations.

2 MR. CHARNEY: No, he didn't.

3 MS. COOKE: He did provide --

4 THE COURT: I don't recall that.

5 All I recall today for sure was the very close
6 agreement now on the 3700 or so that really had zero in census
7 tract months language.

8 Then there was an explanation just now why despite it
9 being only 3700 another 14,000 were dropped. Because the way
10 the algorithm works, if it's just one or two, it's just too
11 small to count.

12 Now you're saying what percent of census tracts has
13 less than 50 percent zeros or something. That seems to me a
14 whole new area that we've never talked about. So I will
15 sustain an objection to that.

16 MS. COOKE: I would like to reserve the opportunity to
17 review the transcript and when Professor Fagan comes back I
18 would like to resume a line of questioning on what I understood
19 him to be reporting information about frequencies of the
20 appearances of counts of observations in census tracts today.

21 THE COURT: As a generality, he might have said
22 something about frequency of observations in census tract, the
23 phrase came out. But he did not quantify in any census tract
24 how often -- what percent of the time it's zero or close to
25 zero. That's just has never come up.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2 Purtell - direct

1 MS. COOKE: Could be that I'm mistaken, your Honor.
2 But I did hear something with respect to testimony by Professor
3 Fagan about frequency of certain census tracts with respect to
4 zero counts.

5 THE COURT: I don't think so. But he's right here.
6 Does he think -- he doesn't think so.

7 PROF. FAGAN: I just said there's a distribution.

8 MS. COOKE: I think he just said something about there
9 being a distribution.

10 Maybe that's what I'm referring to. He was talking
11 about the distribution of the census tracts with the rate at
12 which they had observations.

13 MR. CHARNEY: That was not his testimony, your Honor.
14 He's talking about the continuous distribution from zero to
15 infinity or whatever.

16 THE COURT: That's what I heard. He said zero is the
17 low point of the distribution. It can range from zero to
18 whatever the high is. So it's the low end.

19 I remember hearing that phrase, it's the low end of
20 the distribution, which is I guess his explanation of why he
21 counts it.

22 MS. COOKE: I guess, your Honor, that was the basis
23 for my question to Professor Purtell about the number of census
24 tracts which half of the time had no observations.

25 THE COURT: We never had that before. It's come out
SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2 Purtell - direct

1 of the blue. So I'm not allowing it.

2 MS. COOKE: His testimony about the continuum.

3 THE COURT: This is obvious, that there's a continuum
4 from zero to the top number of counts of stops. Your question
5 still seems to me to be introducing totally new material.

6 MS. COOKE: I'd like to reserve my opportunity, if
7 he's recalled, to revisit that based on the testimony.

8 THE COURT: We'll talk about that on an if-and-when
9 basis.

10 MS. COOKE: I have no further questions for the
11 witness, your Honor.

12 THE COURT: Anything further now?

13 MR. CHARNEY: A couple questions, your Honor. I know
14 we keep jumping around with people.

15 CROSS-EXAMINATION

16 BY MR. CHARNEY:

17 Q. Good morning again, Professor.

18 A. Good morning.

19 Q. Now, I wanted to ask you about you said that table five in
20 Professor Fagan's report does measure a process?

21 A. Yes.

22 Q. Are you talking about like a psychological process of some
23 kind?

24 A. I'm talking about a decision process.

25 Q. So a decision-making process?

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2

Purtell - cross

- 1 A. It includes elements that are likely to, I would assume --
2 in fact, they are the elements that Professor Fagan claims are
3 the drivers behind the decision that police officers use to
4 make a stop.
- 5 Q. So you would not agree that what Professor Fagan was doing
6 in table five of his report with the negative binomial
7 regression model that he used, you would not agree that he was
8 instead measuring structural effects of these various factors
9 that influence stop activity as opposed to trying to represent
10 some kind of decision-making process?
- 11 A. They are not mutually exclusive. One is a statistical
12 concept and the other is an operationalized concept.
- 13 Q. And then with respect to the modeling of the zero counts
14 separately which you said was what Professor Fagan should have
15 done. Did you actually ever run a separate model with just the
16 zero count census tract months?
- 17 A. Just the zero count census tract months?
- 18 Q. Yes.
- 19 A. No. Because the data was so sparse it would be impossible
20 to estimate it.
- 21 Q. So you actually don't know empirically if there would have
22 been a very different result with respect to just those zero
23 count months?
- 24 A. We do know that there was a very different result with
25 respect to just the count months. So that, by inference you'd

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2 Purtell - cross

1 expect a different result for the zero count months.

2 Q. And what -- finally what is distinct in your view
3 practically about the zero process that you were talking about?

4 A. Actually I tried to testify about this in my initial
5 testimony and the Court told me I couldn't do it.

6 Q. So you're saying this is something that has to do with
7 police practice?

8 A. It has to do with police practice and observed people on
9 the street and I was restricted by the Court from testifying in
10 that area.

11 MR. CHARNEY: One minute, your Honor.

12 (Pause)

13 Q. Last question. You testified with respect to Professor
14 Fagan's taking the logs odd ratio and hypothetically comparing
15 individual census tracts. You said that that's not something
16 you can do with the logs odd ratio, right?

17 A. It's not something you can do with any population-averaged
18 effect.

19 Q. Now, you also testified, right, that the purpose and
20 practical significance is you try to assess how -- the impact
21 of these factors in the real world?

22 A. That's correct.

23 Q. So would you agree with me in the real world in New York
24 City you don't oftentimes see a census tract's increase in
25 black population by one percent when you go to another census

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2

Purtell - cross

1 tract, right?

2 A. Well that's not what we were looking -- a one percent
3 change in this model is a one percent change in the Black
4 population across the city because it is a population-averaged
5 model.

6 Q. I understand that.

7 But you would also agree that what Professor Fagan was
8 trying to assess was the extent to which a change in a Black
9 population from one census tract to another would affect number
10 of stops?

11 A. But that's not what he measured here.

12 Q. So you're saying he measured if the Black population across
13 the entire city went up one percent --

14 A. If he were trying to interpret these results, yes.

15 It's a population-averaged effect. You cannot go
16 beneath the population average.

17 Q. So you don't agree that Professor Fagan was trying to
18 determine whether or not the patterns of stops, in other words,
19 the fact that stops -- there are more stops in certain census
20 tracts than others has anything to do with the racial
21 composition of the census tracts?

22 A. I don't know what he was trying to show. But I don't
23 believe he -- he demonstrated there was a very small effect
24 citywide but he was unable -- you're unable from a model like
25 this to apply that to specific census tracts.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2 Purtell - cross

1 Q. How is percent Black a process in your view? In terms of
2 table five measuring process?

3 A. It's -- again, this is part of the police process piece but
4 it's a proxy for observed population.

5 Q. And your testimony is that's a process -- that's part of
6 the police officer's decision, that he process --

7 A. It is part of the information that police officers have
8 about observed behavior when they're on the streets. Yes.
9 But, again, I'm restricted from testifying in that area.

10 MR. CHARNEY: I understand. No further questions.

11 THE COURT: Anything further of this witness?

12 MS. COOKE: No, your Honor.

13 THE COURT: Thank you.

14 (Witness excused)

15 So you're back to Dr. Smith.

16 MS. COOKE: Yes.

17 DENNIS C. SMITH, resumed.

18 DIRECT EXAMINATION CONTINUED

19 BY MS. COOKE:

20 Q. Good morning, Professor Smith.

21 I believe when we interrupted your testimony you had
22 just described your understanding of the UF 250 form.

23 Do you recall that?

24 A. That's my recollection, yes.

25 Q. And did you review -- well --

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2 Smith - direct

1 A. This is sort of distracting. Can you just take this --
2 unless you're going to use it right now.

3 Thank you.

4 Q. Are you aware of the manner in which the NYPD maintains
5 UF 250 data?

6 A. Generally, yes.

7 Q. And are you aware that they maintain it electronically in a
8 database?

9 A. Yes, I am.

10 Q. And have you worked with the NYPD's electronic UF 250 data
11 previous to this case?

12 A. Yes, I have.

13 Q. In what context?

14 A. In context with other cases for this court but also in
15 researches I've done with Professor Purtell.

16 Q. What type of information from the electronic UF 250 data
17 have you worked with for work outside of this case?

18 A. Information about the frequency distribution, information
19 on the forms about the nature of the stops.

20 Q. And did you also review the NYPD's electronic UF 250 data
21 for your reports in this case?

22 A. Yes, I did.

23 Q. What period of time did you review UF 250 data for this
24 case?

25 A. 2004 to midpoint of 2012.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2

Smith - direct

- 1 Q. Are you aware of the approximate number of UF 250s included
2 in that time period?
3 A. 4.4 million, something like that.
4 Q. Did you work with any other NYPD data for your reports in
5 this case?
6 A. Yes. We worked with crime data. We worked with data from
7 reports like crime and activity report. Reasonable suspicion
8 stop reports are now emerging. We used data like that.
9 Q. Did you use arrest and complaint report data?
10 A. Yes, we did.
11 Q. Did you use the merged suspect description file data?
12 A. Yes, we did. Thank you.
13 Q. Have you prepared reports in this case?
14 A. Yes, I have.
15 Q. Approximately how many?
16 A. Four, counting reports and declarations.
17 Q. Prior to this case did you have any experience performing
18 statistical analyses of NYPD data?
19 A. Yes.
20 Q. In what context?
21 A. Particularly the study of the management change in Brooklyn
22 North. There was an evaluation study and that used statistics.
23 Q. Did you also prepare reports in related cases, Davis and
24 Ligon?
25 A. Yes, we did.

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

D569FLO2 Smith - direct

1 Q. Did those reports involve analysis of UF 250 data?

2 A. Yes, they did.

3 Q. Did you provide expert testimony in the Ligon case?

4 A. Yes.

5 Q. Was that the preliminary injunction hearing in October of
6 2012?

7 A. That's the one.

8 Q. Did any of the work you've just described regarding
9 analysis of UF 250 and NYPD data result in the publication of
10 articles or other materials?

11 A. In a number of presentations at research conferences. Not
12 yet publications.

13 Q. What's the role of theory or models in empirical social
14 science research?

15 A. I think most social sciences today believe that explicating
16 the theory underlying the use of data in research is critical.
17 It's mapping out the structure of assumptions that are built
18 into the research, identifying the links in between the
19 variables included in the analysis so that you can then look at
20 those links but also compare them in the context of rival
21 hypotheses to draw inferences.

22 Q. And do you use theory or models in your empirical social
23 science research?

24 A. Yes, I do.

25 Q. And how do you integrate theory into statistical models?

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2

Smith - direct

1 A. In teaching evaluation research and in my own work, I use
2 the concept of logic models to identify the structure of
3 assumptions built into how programs and policies are expected
4 to achieve some kind of specified or intended results. Then
5 you assess -- you try to assemble data that you can use to test
6 the links that are identified in that logic model to find out
7 if the evidence supports the assumption that there is a
8 relationship, the nature of the relationship, the direction of
9 the relationships that are built into the logic model structure
10 of assumptions. And also, as I said before, compare those to
11 assumptions built into rival hypotheses that evaluators use to
12 try to determine relative strength of the evidence of their
13 claims and their hypotheses versus the rival hypotheses.

14 Q. And that integration process you just described that you
15 use, is that a process that you're familiar other social
16 scientists in your field use when they include models in their
17 research theory?

18 A. It's absolutely, I think, pervasive and central to
19 evaluation research, Carol Weiss one of the founders and
20 leading writers of textbooks in this field has an article which
21 says nothing is valuable as theory -- nothing is as practical
22 as theory in evaluation research and I think that's a widely
23 held view.

24 Q. Is there another name for statistical models that you're
25 familiar with?

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

D569FLO2 Smith - direct

1 A. Yes. Regression equations is somewhat commonly used as my
2 model, and then they specify what's in the equation.

3 Q. What do regression models measure?

4 A. The average effect of a set of factors.

5 MR. CHARNEY: Your Honor, I'm going to object. As you
6 ruled last August, the statistical stuff would be Professor
7 Purtell and Professor Smith would focus more on the theory and
8 the police practice and those kinds of issues.

9 MS. COOKE: He's just testifying --

10 MR. CHARNEY: We've also heard from Professor Purtell
11 about what statistics and regression models measure, so it
12 would also be cumulative.

13 THE WITNESS: I agree with Professor Purtell.

14 MS. COOKE: He's testified that he uses them in his
15 research. It's just a basic question of his understanding with
16 respect to what they're measuring, your Honor, to establish his
17 knowledge and foundation.

18 THE COURT: He says he agrees with Professor Purtell
19 so I think he's answered the question.

20 MS. COOKE: Okay. So the objection is overruled.

21 THE COURT: Well the objection is overruled but the
22 answer is, "I agree with Professor Purtell."

23 So if Professor Purtell told us what regression models
24 measure, that's it.

25 THE WITNESS: I assume -- may I say anything more

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2

Smith - direct

1 about that?

2 It's the importance about regression being a
3 multivaried analysis. And the point that Professor Purtell
4 reiterated that all the different variables in regression are
5 examined in conjunction with each other, and that that is one
6 of the distinctive features of regression analysis. It's not
7 just binary analysis between two variables.

8 Q. In the field of evaluation research, are you trying to
9 establish causality?

10 A. "Establish" is I guess the word. You can't prove it. But
11 you try to demonstrate it as plausibly as you can because
12 that's the way social science and science in general works. We
13 don't deal in true statements, but trying to demonstrate that
14 evidence supports our arguments for what it means stronger than
15 any alternative arguments offered.

16 Q. Does correlation mean the same as causality?

17 A. No, it does not.

18 Q. Why not?

19 A. Because a simple correlation could easily be the effect of
20 a third variable that's causing both A and B and you would get
21 a spurious correlation that doesn't actually come from any
22 relationship between A and B.

23 Q. Are you -- do you focus on concerns of correlation and
24 causality in your research theory?

25 A. Evaluation research is essentially an exploration of

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2 Smith - direct

1 assertions of causality. This program, this policy produced
2 this result. That's very central to the whole enterprise.

3 Q. This work you've described of integrating statistical
4 models into your research theory, have you done this work with
5 Professor Purtell outside of this case?

6 A. I have.

7 Q. And just generally approximately in what contexts?

8 A. In studies of operation impact -- in evaluation of
9 operation impact and evaluation of the effects of stop,
10 question and frisk on crime.

11 Q. And how -- what is the process under which you work with
12 Professor Purtell to incorporate these statistical models into
13 your research theory?

14 A. Involves a white board. We both find it very helpful to
15 draw diagrams of our arguments. We've been working together
16 now for quite a long time. We spend a lot of time working
17 together before we ever start running any numbers to try to
18 figure out what we think the issues are, how valid or useful
19 the numbers we have available are, whether we need other kinds
20 of variables and data to support them. Those kind of
21 discussions go on, considerable length, before we actually
22 assemble the data and start doing analysis, which he does.

23 Q. What's your contribution to the -- this process you've
24 described?

25 A. As Professor Fagan -- I mean Professor Purtell has

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2 Smith - direct

1 testified, he doesn't have a background in policing. And so in
2 all the research we've done on policing, he's relied upon me
3 and my some 40 years of research of police departments to try
4 to frame the issues in ways that relate to the real world of
5 policing.

6 Q. So were you providing information based on your experience
7 with respect to selecting variables for statistical models?

8 A. That's right. Among other things.

9 MS. COOKE: Your Honor, defendants would move to
10 qualify Professor Smith as a policy analyst and performance
11 management scholar who is an expert on police organization
12 management and practice.

13 MR. CHARNEY: No objection.

14 THE COURT: Okay. So qualified.

15 Q. Did you review Professor Fagan's report submitted in this
16 case?

17 A. Yes, I have.

18 Q. And are you aware that that included an initial original
19 report, a first supplemental report, and a second supplemental
20 report?

21 A. Yes, I am.

22 Q. Based on your review of those reports by Professor Fagan,
23 do you have an understanding of the conclusions Professor Fagan
24 reached for this case?

25 A. I think I do, yes.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2

Smith - direct

1 Q. And how generally would you describe those conclusions?

2 A. His conclusions are that race, in particular Black and
3 Hispanic, used in the equations explains patterns of stop by
4 the NYPD. And also his conclusions focus on the
5 constitutionality, apparent justification of the stops made by
6 officers, and concludes various things about that.

7 Q. Have you analyzed the hypotheses and assumptions upon which
8 Professor Fagan built his regressions and other analyses in
9 these reports?

10 A. Yes, I have.

11 Q. Have you analyzed the model or theory of policing Dr. Fagan
12 used in his analyses?

13 A. Yes, I have.

14 Q. And is it an accurate statement to say your central
15 criticism of Professor Fagan's reports is his choice of
16 benchmark in analyzing racial disparity?

17 A. It is a central one, yes.

18 Q. In your opinion what is the appropriate benchmark for
19 measuring racial disparity?

20 A. It is the likelihood that an officer on patrol will
21 encounter certain kinds of behavior by certain categories of
22 population. We are trying to estimate the difference between
23 what you would expect if there were no racial factor involved
24 in stops and what you see when the stops are counted.

25 Q. Does a benchmark for measuring racial disparity incorporate

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2

Smith - direct

1 a certain number of elements in your opinion?

2 A. I believe it does.

3 Q. What are those elements?

4 A. I believe it involves the number of observers, the number
5 of people involved in the practice of policing.

6 It involves the number of people that they are likely
7 to see engaging in behavior that would arouse their suspicion.

8 And it involves the behaviors, the factors involved in
9 the behavior that they would observe.

10 Q. So to see if I understand you correctly are you saying that
11 it would be the number of officers who are on the street
12 observing behavior as one element?

13 A. Sort of roughly, yes.

14 Q. In the population or individuals available on the street to
15 be observed by those officers?

16 MR. CHARNEY: Objection. That's not what he
17 testified.

18 THE WITNESS: More specifically --

19 THE COURT: Just need a moment to check that.

20 I don't think she's asking him what somebody else
21 testified to.

22 MR. CHARNEY: I'm not saying. She asked him what a
23 benchmark was.

24 THE COURT: Right.

25 MR. CHARNEY: He gave an answer. Now she's going back

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2 Smith - direct

1 over what he said.

2 THE COURT: I see.

3 MR. CHARNEY: I'm saying that the question
4 mischaracterizes what he previously said.

5 But you know what, he's going to clear it up so I'll
6 wait until he clears it up.

7 THE WITNESS: I hope so. I will try.

8 THE COURT: Okay.

9 Q. What was your --

10 A. You want to ask the question again?

11 Q. So the second element you identified is that the population
12 of individuals available that an officer might encounter on the
13 street.

14 MR. CHARNEY: That was any objection.

15 THE COURT: I understand.

16 THE WITNESS: My understanding of the literature on
17 measuring racial disparity in policing pretty widely says that
18 in order to have a valid benchmark it has to include some kind
19 of indexing of the likelihood of criminal activity and guilt of
20 people engaging in behavior in front of them.

21 So it takes -- should take into account things that we
22 kind of know when we know that crime is at random, randomly
23 distributed in the population by race, age, gender. So a
24 benchmark should ideally have some way of capturing who is
25 committing the crime in the community the police are policing.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2

Smith - direct

1 Q. So is it your opinion that some element of suspect
2 description should be included in a benchmark of analysis of
3 racial disparity?

4 A. If that's available, I certainly do. It's certainly one
5 way of capturing precisely what I was talking about.

6 Q. Are you familiar with the criminal justice literature
7 addressing benchmarks for racial disparity analysis?

8 A. I'm somewhat familiar with it, yes.

9 Q. And based on your understanding of that literature, what
10 does that literature report with respect to suspect
11 description's presence in a racial disparity analysis?

12 A. I think it's widely subscribed to as a desirable component
13 and for the reasons that I mentioned.

14 Some of the summary literature that I've read by
15 Ridgeway and MacDonald, for example, say that there's a growing
16 consensus that that needs to be included.

17 We refer to in our report of a study funded by the
18 Department of Justice in attempting to pull this literature
19 together, to talk about disparity because it is an important
20 issue all across the country and they suggest that this is an
21 important dimension. The three elements that I mentioned come
22 out of that report and includes characteristics of the
23 population, including the likelihood that that population will
24 be -- is engaged in some kind of criminal activity.

25 Professor Fagan himself has, in some of his work on

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2 Smith - direct

1 disparity, said that this is what should be used and has used
2 it to the extent he could.

3 Q. What benchmark did Professor Fagan use for his racial
4 disparity work in this case?

5 A. Basically population controlling for crime.

6 Q. Did Professor Fagan include suspect description in his
7 regression analyses?

8 A. Assiduously not.

9 Q. Are you familiar with the 2007 RAND study of the NYPD's
10 stop activity?

11 A. Yes, I am.

12 Q. What is your understanding of RAND's -- the RAND report's
13 benchmark with respect to racial disparity?

14 A. The RAND study was asked to.

15 MR. CHARNEY: Your Honor, I think I'm going to object
16 on hearsay grounds to the extent he's testifying about the
17 truth of the content of the RAND report.

18 THE COURT: Taking it for the limited purpose of
19 notice to the city, not for the truth of anything found there.

20 MS. COOKE: I guess to the extent, your Honor, that
21 it's a piece of the literature available with respect to
22 selection of benchmark for analysis of racial disparity. It
23 wouldn't go to the truth of the findings but it would go to the
24 benchmarks that RAND considered.

25 THE COURT: That's also true, to know what benchmark

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2 Smith - direct

1 RAND used is a relevant comparison for him.

2 MR. CHARNEY: I guess that's right, although he was
3 discussing another article he had read that he cites in that
4 report.

5 THE COURT: That's true but he can cite as many
6 sources as he wants.

7 THE WITNESS: These are sources that --

8 THE COURT: That you relied on?

9 THE WITNESS: These are sources that I did cite in our
10 response to the second supplemental.

11 And I wrote about Professor Fagan's critique of the
12 RAND report in his first report.

13 Q. So I guess with respect to my question are you aware of the
14 benchmarks that RAND used in its racial disparity analysis in
15 the 2007 report?

16 A. Yes. As I started to say, he was responding specifically
17 to work that was coauthored by Professor Fagan.

18 Q. When you say "he," I just you need to be clear for the
19 record. You're referring to Greg Ridgeway?

20 A. Greg Ridgeway.

21 THE COURT: I'm sorry?

22 THE WITNESS: Greg Ridgeway, the author of the RAND
23 report, who is now acting head of National Institute of
24 Justice, Greg Ridgeway arrayed different benchmarks. He
25 included just population, which is sort of a widely cited

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2 Smith - direct

1 benchmark in media coverage of the original Spitzer report, the
2 discovery that Blacks and Hispanics were being stopped at a
3 higher rate than their share of the population, something which
4 I thought no particular -- no informed criminologist would find
5 surprising. But the media did. And so he addressed that.

6 And he addressed his own choice of using suspect
7 description information provided by NYPD to see if the claims
8 of police commissioners like Howard Safir that really the
9 police are stopping people pretty much in proportion to their
10 involvement in crime. But that was what he would find in his
11 study.

12 Q. Did the RAND report identify a preferred benchmark for the
13 analysis of racial disparity?

14 A. It expressed its preference for the way suspect description
15 took into account this stereo I'm talking about, which is
16 involvement in criminal activity.

17 Q. Did the RAND report opine on the use of residential census
18 data as a benchmark?

19 A. For the reason that I mentioned, the RAND report
20 acknowledged that just using census information wasn't enough
21 information.

22 Q. Are you aware of the conclusions reached by the RAND study?

23 A. There were a number of conclusions.

24 But the one that's probably most directly relevant to
25 our discussion here today is that when you include suspect

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569FLO2

Smith - direct

1 description, the degree of disparity found previously was not
2 found in his analysis.

3 (Continued on next page)
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

D568FLO3 Smith - direct

1 Q. Based on your review of the RAND report and the analysis
2 therein, do you have an opinion as to the reliability of the
3 RAND results?

4 MR. CHARNEY: Objection.

5 THE COURT: This goes beyond notice. It is asking him
6 to vouch for the RAND report. That is more than that it is
7 citing it for benchmark. That is more than citing it for
8 notice. That seems inappropriate.

9 MS. COOKE: Not for the truth, but for the
10 appropriateness as to whether or not it was reliable enough for
11 the police management to have relied on the RAND report's
12 conclusions. Not the conclusions themselves, but that the
13 methodology and the analysis was sound and therefore reliable
14 such that, as a management scholar and expert, police
15 management can rely on those results, not for their truth but
16 for the soundness of the analysis.

17 MR. MOORE: That sounds like the truth. When they say
18 not for the truth but for the soundness of the analysis --

19 THE COURT: I think she can't ask him his opinion as
20 to the reliability of the RAND results, but she could say, in
21 your opinion, was it fair essentially for the police department
22 to rely on the RAND report in your expert opinion?

23 Yes or no?

24 THE WITNESS: Yes. Do you want to know why?

25 THE COURT: No.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO3

Smith - direct

1 I think that's what he can testify to. He thinks it's
2 reasonable for the police department to rely on that study.

3 BY MS. COOKE:

4 Q. Do you have an understanding of Professor Fagan's, the
5 basis of Professor Fagan's criticisms of the RAND report?

6 A. There was a criticism that the regression that Greg
7 Ridgeway used was not identical, in one respect at least, to
8 the regression that he had done --

9 Q. "He" being?

10 A. Professor Fagan had done. So there was a replication study
11 that was an issue. There, as I think throughout his response
12 to the use of this variable, I think he also --

13 Q. "He" being?

14 A. He being Professor Fagan also raised the issue about how
15 complete the information about suspect description is. A lot
16 of the criticism in his first report was sort of the second
17 part of Greg Ridgeway's analysis, which is the internal
18 benchmarking, comparing officers in similar circumstances and
19 their stop behavior, which doesn't really speak -- doesn't come
20 into this discussion directly.

21 Q. Do any of the criticisms raised by Professor Fagan with
22 respect to the RAND report affect your conclusion -- your
23 testimony that, in your opinion, the RAND report could be
24 relied upon by the NYPD?

25 A. The way in which it was constructed, no. The answer is no.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO3

Smith - direct

1 Q. Are there any other factors that informed your criticism of
2 Dr. Fagan's approach to benchmarking stops for his racial
3 disparity analysis in this case?
4 A. Well, some have already come out in terms of my feeling
5 that population -- my sense that, based on my research and
6 work, that population alone, it's just not sufficiently rich,
7 as far as the information, to explain what police confront. It
8 doesn't -- and the way he used it, not including, for the most
9 part, things like gender and age, other factors that we know
10 are part of that story of my saying crime is not randomly
11 distributed in the population, that strikes me as a weakness in
12 just using population. Residential population is what he uses
13 and that might work in, I don't know, Peoria, Illinois, or
14 Iowa, but I don't think it works in New York City where
15 population is just an ever-changing thing, from day to day,
16 hour to hour, the resident population is a fraction of the
17 population of the city, given the extraordinary, 50 million or
18 so visitors we have a year, tourist visitors, the commuter
19 population coming and going, the variation in terms of the
20 population that are out at night and out in the daytime. All
21 those things are just not captured by census numbers. So using
22 that as a benchmark just strikes me as falling short of
23 providing information that you would like to get if you don't
24 have better information about who is committing the crime.
25 Q. Professor Fagan includes crime data in his regression

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO3 Smith - direct

1 analysis, correct?

2 A. In a number of ways, yes.

3 Q. Does that cure your concerns with respect to the absence of
4 suspect description in the disparity analysis?

5 A. No, for a lot of reasons.

6 Q. You mentioned that Professor Fagan had used suspect
7 description in prior work, is that correct?

8 A. A version of it, yes.

9 Q. What were you referring to when you said prior work?

10 A. In a study published in 2007, Professor Fagan and his
11 coauthors, having acknowledged that they wanted to have this
12 index of who was engaged in crime, said that the thing that was
13 available to them that they would use is the previous year's
14 race information from arrests in New York City, and that would
15 give him a way of estimating the pattern of racial involvement
16 in crime for that study that he published in 2007.

17 Q. Was all race information available for the arrest data that
18 Professor Fagan used in that study?

19 A. If I understand your question, how complete was the
20 information about race that the arrest data provided?

21 Q. Yes. Correct.

22 A. As I have said in my reports questioning that, using arrest
23 data particularly from the year previously -- a number of
24 issues, but in terms of the race information, it's the least
25 complete of the various -- of the various kinds of suspect

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO3

Smith - direct

1 description information we have heard. We have heard about all
2 crime, violent crime. But in the 2007 study, he was using 1997
3 arrest data, at a period of time when arrests were being made
4 for total crime in the range of 20 something percent of all
5 crimes. That's the clearance rate. In those cases, when you
6 clear for a crime by arrest, you get information about who
7 committed the crime. So compared to what we know now and have
8 known for a while about who is committing the crime from
9 suspect description data, that was a much lower percent count.

10 Now, I sort of criticized that mostly in my reports,
11 not because the range of the information about the proportions
12 of crime committed by different categories is so necessarily
13 different. It's just in response to a recurring resistance to
14 using more up-to-date data that covers the span from 2004 and
15 2012 we have available. Certainly more recently in detail
16 about who is committing the crime in New York City, where
17 having 40, 60, 80, 90 percent information about who is
18 committing the crime was deemed not sufficient, but for this
19 peer reviewed journal article, a far lower percent of suspect
20 descriptions being known was what they offered.
21 Q. What opinion do you reach about Professor Fagan's prior use
22 of suspect description and then resistance to suspect
23 description criticisms in this case?

24 MR. CHARNEY: I just want to clarify for the record.
25 Professor Smith testified that Professor Fagan used arrestee

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO3 Smith - direct

1 data, not crime suspect data. So I would ask that counsel stop
2 saying that he used crime suspect data.

3 THE COURT: He used arrestee data.

4 Q. The arrestee data of the description of the perpetrator of
5 the crime.

6 THE COURT: It's arrestee, not suspects.

7 So what is your question again?

8 Q. What opinion did you reach with respect to Professor
9 Fagan's prior use of arrestee data in his benchmarking of
10 racial disparity versus his resistance to incorporating suspect
11 description in this case?

12 A. I frankly was confused by his resistance because on other
13 matters, like our contention that using data lagged by a year
14 or a quarter didn't work in terms of our understanding of how
15 policing is done in New York City, he made that adjustment. In
16 terms of his analysis of whether a precinct is the appropriate
17 focus or census tract, he made that adjustment. But he didn't
18 seem to want to even try as an alternative for regression to
19 see what it shows.

20 THE COURT: Isn't there a big difference between
21 arrestee racial identification data and suspect identification?

22 THE WITNESS: It's different in the way they are
23 obtained obviously. The suspect description comes from the
24 victim. The arrest data comes from some combination of what
25 the victim tells the police to look for and what they find and

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO3 Smith - direct

1 what they put on the form. Actually, the correlation between
2 the two is very high.

3 THE COURT: The other difference is one has a 100
4 percent completion and one has a 66 percent completion?

5 THE WITNESS: What has a 100 percent completion?

6 THE COURT: Arrestee data. If you arrest somebody,
7 you note the race.

8 THE WITNESS: If we arrested everybody, we would be
9 fully covered. But since we only arrest a fraction, it is also
10 an incomplete representation.

11 THE COURT: No. It's not incomplete for those who are
12 arrested. I am just saying there is a difference in the
13 numbers between arrested data and suspect data. One is 100
14 percent complete and one is two thirds percent complete. Could
15 that not be a reason for his resistance?

16 THE WITNESS: It could be. Again, I think you have
17 said a couple of times, your Honor, we shouldn't let the
18 perfect be the enemy of the good. And we are seeing here his
19 use of a very incomplete representation of who is committing
20 the crime in his 2007 study. And as we get closer to 60, 70,
21 80 percent in what we know about through the merged files of
22 who is committing the crime, it's absolutely impossible. You
23 can't use it. That's my surprise.

24 THE COURT: All I am asking, you do see a difference
25 between using arrestee data in one study and not wanting to use

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO3

Smith - direct

1 suspect data in another study because there is a percent
2 missing in the latter category.

3 THE WITNESS: We have also heard from Professor Fagan,
4 his assumption that if two measures are highly correlated, then
5 that sort of validates the two. And the correlation between
6 the racial distribution, as Phil McGuire testified in this
7 court, the racial distribution and the arrest population and
8 the racial information and the suspect population is highly
9 correlated. So it seems to me that brings home the view --

10 THE COURT: You want to drop your criticism of patrol
11 strength used? You can't have it both ways either.

12 THE WITNESS: I think I do.

13 THE COURT: You do what?

14 THE WITNESS: I do have some criticism about patrol
15 strength.

16 THE COURT: You mentioned this data is highly
17 correlated. Do you want to drop your criticism of the patrol
18 strength data since that is highly correlated according to
19 Professor Fagan?

20 THE WITNESS: One measure of validity is his
21 correlation. There are other things -- if you correlate two
22 things that are both wrong, they can be highly correlated and
23 both wrong. And I am suggesting that --

24 THE COURT: I am justing saying the same argument
25 might apply to what you're talking about.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO3

Smith - direct

1 THE WITNESS: You told me the arrest data is
2 absolutely perfect.

3 THE COURT: All I said it's 100 percent known. I have
4 no idea whether it's perfect. People could still misidentify
5 the race. I don't know if it's perfect, but it's 100 percent
6 known.

7 THE WITNESS: If the one that has 100 percent known
8 and the one that's got a 60 percent known are highly
9 correlated, that sheds some light on this issue, and I think
10 there are a different set of issues to be raised in connection
11 with patrol strength.

12 BY MS. COOKE:

13 Q. You mentioned the suspect description percentage available
14 in merged data files?

15 A. Yes.

16 Q. Are you familiar with the issues Professor Fagan has raised
17 with reliance on those merged data files for racial disparity
18 analysis?

19 A. Yes.

20 Q. Are you persuaded that his concerns are legitimate
21 methodological issues?

22 A. No, I am not.

23 Q. Why not?

24 A. Well, some I don't understand. One problem is that adding
25 the arrest data now is a problem because arrests are not

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO3

Smith - direct

1 relationship between a crime pattern bringing additional police
2 deployment to an area and police stops in an area as a result?

3 A. We introduced the word pattern. If you just said, is there
4 a one-to-one relationship between a reported crime, or the
5 counts of crime, the way we categorize it sometimes, and the
6 way in which the police respond using stops, the answer is no.

7 Q. In your opinion why?

8 A. A crime is not a crime is not a crime. They are all
9 crimes, but in terms of the way the police react to it,
10 starting with if somebody says there is a person with a gun
11 robbing my bodega, the way the police respond, and somebody
12 calls and says my car has been stolen, the response will be
13 different. If there is a homicide, one of the elements in the
14 complex category called violent crime, and it is a domestic
15 dispute, and they are obviously tragic and homicides no less,
16 and if that's the way it happened, versus a drive-by shooting
17 that suggests gang activity, stop activity in response to those
18 two, nominally the same events as crimes, could probably be
19 different given the way policing is done today.

20 Q. Are you aware that the NYPD data with respect to suspect
21 description varies according to what crime has been committed?

22 A. Say that again.

23 Q. The availability of suspect description data to you from
24 the NYPD data, does that vary?

25 A. If there is a face-to-face victim, a robbery victim, maybe

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO3

Smith - direct

1 a rape victim, an assault victim, the higher proportion of
2 those produce a characterization of the perpetrator. Large
3 volume crimes, like burglary and auto theft, typically the car
4 is gone, the property is gone, and there is nobody to be
5 identified by the victim until an arrest is made.

6 Q. Are you concerned about using a measure of suspect
7 description in racial disparity analysis where some percentage
8 of the suspect's description is unknown?

9 A. Social scientists, of course, always like to have perfect
10 data, complete data, and good data obviously, but that's rarely
11 available to us. Every measure we use in this discussion, in
12 this research is imperfect. Crime data is imperfect. People
13 don't report their victimizations. And they do vary across how
14 police respond to crime. A better response to rape by police
15 can result in rising rape reports because that's a category of
16 crime that often is not reported.

17 So the citizen who is a victim may not report the
18 crime. The police officer who encounters the report may want
19 to go golfing or something instead of bring the report in. We
20 have done studies to look at how the police department tries to
21 keep track of the data, that nobody claims the New York Police
22 Department wouldn't invest several hundred officers in trying
23 to maintain crime data integrity if there weren't issues to be
24 concerned about this. So crime data is an issue, the
25 population data in these studies, a whole range of issues.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO3

Smith - direct

1 There are a whole bunch of issues about population as a factor.
2 Patrol strength is a variable and it's problematic.

3 So every one of these are problematic. But the thing
4 that reassures me about the suspect description data, among
5 other things, is its stability over time, that a big part of it
6 comes from victims who are themselves, in terms of racial
7 disparity, are themselves minorities, the fact that crime is
8 concentrated in certain parts of the city and is particularly
9 concentrated in parts of the city that are heavily minority.

10 So since there has been no explanation from Dr. Fagan
11 about why we should think the people who are unknown are
12 somehow significantly different from the people who are known,
13 I think I make a reasonable extrapolation from the known to the
14 unknown, finding it hard to imagine that in some of these areas
15 where it is high crime and where a lot of the crime occurs,
16 that the unknown part is being committed by Asians or whites or
17 somebody who on a regular basis over time are going into those
18 areas committing these crimes and escaping freely without being
19 detected.

20 So given that, it seems to me reasonable to
21 extrapolate from the known to the unknown, and the fact that I
22 focused particularly on the suspect description related to
23 violent crime, because from my research on this the police
24 department, and many police departments, but this department in
25 particular, there is a disproportionate focus on violent crime.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO3

Smith - direct

1 Not disproportionate in any negative sense, but just in terms
2 of the statistical sense. How they respond? The resources
3 committed in response to violent crime. All of those things
4 sort of capture what the police are doing and where they are
5 doing it, and in that case, for violent crime, the suspect
6 description percentage goes way up. And so since I think that
7 that's the factor in the equation that is producing a lot of
8 the other elements of the equation, I am not concerned about
9 using suspect description in terms of its validity as a measure
10 in this dialogue.

11 Q. In fact, you conducted alternate regression analyses with
12 Professor Purtell which incorporated suspect description?

13 A. That's correct.

14 Q. What conclusions did you draw from those regression
15 analyses?

16 MR. CHARNEY: Objection. This is cumulative. This is
17 exactly what Professor Purtell testified about.

18 MS. COOKE: I think it's a shared opinion.

19 THE COURT: It may be shared, but it is putting it in
20 the record twice.

21 It can't take that long. What was the conclusion?

22 A. The conclusion is what we thought it would show, and we are
23 frankly pleased that it did show, that it was a factor that
24 should be taken into account. We did not view our role as
25 starting from a blank slate, for example, in the first report

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO3

Smith - direct

1 we did where we had a month to respond, that we were going
2 reconstruct this whole world of research. We looked at it in
3 terms of being thoughtful critics of what was being provided to
4 the Court. So based on our assessment, this should have been
5 included. It was an omitted variable. It should have been
6 included, and we thought if we showed that it made a difference
7 that would be persuasive.

8 THE COURT: Did you include all the variables he
9 included or you added this one and subtracted the others, for
10 example, SES and patrol strength?

11 THE WITNESS: I was thinking about that. I went back
12 to recollect what we did with that. The answer is patrol
13 strength is such an --

14 THE COURT: Isn't the shorter answer, yes, we added
15 one but dropped two?

16 THE WITNESS: The answer is yes.

17 THE COURT: Then you can say why wouldn't it make any
18 difference.

19 THE WITNESS: We knew it was going to be -- having
20 seen what the reaction was to a change in the regression that
21 Greg Ridgeway made and ran, almost all the variables are there,
22 but one variable was done differently, we didn't try to
23 replicate. Essentially, we tried to include variables that we
24 had questions about. But we did include the variable of
25 suspect description, showed that it reduced to virtually zero

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO3 Smith - direct

1 the evidence of race having an impact, and that's what we
2 thought would provoke an effort to consider this by the
3 plaintiffs' expert.

4 THE COURT: To provoke what?

5 THE WITNESS: An examination of this, to have him
6 include his other variables and why not this one.

7 BY MS. COOKE:

8 Q. In your reports in this case, did you examine the
9 correlation between suspect description, the race of suspects
10 and stops versus the race of the population and stops?

11 A. Yes, we did.

12 Q. Did you report the results of that analyses in scatter
13 plots in your reports?

14 A. Yes, a number of times.

15 Q. Directing your attention to Exhibit H13, which is in
16 evidence, and in the binder before you. In the binder before
17 you, it's the last tab, pages 72 to 75.

18 THE COURT: OK.

19 Q. Looking at page 72, the title of this scatter plot is
20 Hispanic stops percentage and Hispanic suspects percentage by
21 census tract 2010 to 2011?

22 A. Yes.

23 Q. What are we seeing in these scatter plot results in this
24 figure?

25 A. We are seeing a pretty tight cluster along the axis. There

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO3 Smith - direct

1 are some dispersions, but it's concentrated right on the axis,
2 and that shows a high correlation.

3 Q. A high correlation between Hispanic stops and Hispanic
4 suspects?

5 A. That's right.

6 Q. Turning to page 74, which is figure 9, this figure
7 indicates it's the percentage of Hispanic stops and the
8 percentage of Hispanic population by census tract?

9 A. That's right.

10 Q. Can you describe what we are seeing in this scatter plot
11 and how it compares to figure 7?

12 A. Well, the word scatter comes to mind. The dots are much
13 more widely dispersed around the axis and it reflects a lower
14 correlation between these two variables.

15 Q. A lower correlation between the stops of Hispanics and the
16 percentage of Hispanics and the population?

17 A. That's correct.

18 Q. Figure 7 was the stops of Hispanics and the percentage of
19 Hispanic suspects for crimes?

20 A. These are two direct comparisons. One comparison with the
21 population, one comparison with the benchmark we recommended,
22 which is suspects.

23 THE COURT: Nobody used variables in figure 9, right?

24 THE WITNESS: Right. But a regression is built up
25 from all these different --

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO3

Smith - direct

1 THE COURT: I am just saying figure 9 only compares
2 percentage of standard stop to percentage of standing
3 population.

4 THE WITNESS: I don't know anybody who has figured out
5 how to show multiple regressions in a two-dimensional form.
6 But as a starting point of analysis, looking at the simple
7 correlation is in fact a source of insight, and I think the
8 insight that this shows -- and we have heard so much about the
9 challenges of statistics and so on. These visuals I think are
10 pretty persuasive --

11 THE COURT: Yes and no. If anybody had tried to reach
12 a conclusion based solely looking at the percentage of Hispanic
13 stopped versus the percentage of the Hispanic population, you
14 might have a point, but nobody did that. You said it's a good
15 starting point.

16 THE WITNESS: It is built into our alternative
17 regression because we include blacks and Hispanics and include
18 suspect description. And when you do that, the fact that these
19 are -- they have such low simple correlation brings down the
20 correlation that you get when you do include it in a
21 regression. It's built up from all these different pieces
22 coming together. Admittedly in the regression compounding
23 them, but this is what you're starting with.

24 BY MS. COOKE:

25 Q. You have figures 8 and 10 are the scatter plots for the
SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO3 Smith - direct

1 black stops and black suspects compared to the black stops and
2 black percentage of the population, correct?

3 A. I do.

4 Q. What are we seeing in terms of a correlation for these two
5 scatter plots?

6 A. Everyone looking at these can be a judge, but to my eye
7 they represent the same story, if anything, more strongly told,
8 with respect to the high correlation between black suspects and
9 black stops, and the relatively dispersed pattern you see in
10 terms of the relationship between black stops and black
11 population. So the idea that population per se is what is
12 predicting the stops seems to be, as an initial impression,
13 starting with the foundations of building this analysis, on a
14 weak foundation.

15 Q. What does this suggest to you, in your opinion, about the
16 inclusion of suspect description by race in a racial disparity
17 analysis?

18 A. It's another sort of confirming element that it's worthy of
19 attention in this kind of analysis.

20 Q. With respect to Professor Fagan's use of population data --

21 THE COURT: One more question. Is there a mistake in
22 figure 10, the words, underneath where it says "percent black
23 stops and percent Hispanic population"?

24 MS. COOKE: That's a typo. The title in the chart has
25 the black and the black.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO3

Smith - direct

1 THE COURT: I just want to make sure to correct that.

2 Q. Professor Fagan used population as part of his benchmark in
3 his racial disparity analysis, correct?

4 A. I'm sorry?

5 Q. Professor Fagan used population by census tract as part of
6 his racial disparity analysis benchmark?

7 A. Yes.

8 Q. You mentioned in your testimony earlier some concerns you
9 had about that measure of population, is that correct?

10 A. I did.

11 Q. You were describing the, I guess the fluctuation of the
12 population numbers in New York City?

13 A. Right.

14 Q. That concern about the fluctuation of the population in the
15 City of New York, what other elements of concern does that
16 present for you with Professor Fagan's racial disparity
17 analysis?

18 A. Well, it assumes that the population committing crime that
19 the police might encounter, they might encounter and suspect of
20 committing crime, are only the residential population. And we
21 know that's impossible given the actual data we have here
22 because there are census tracts with no resident black
23 populations that have stops of blacks. There are also in those
24 same census tracts victims who identified blacks as
25 perpetrators. So that's just sort of one flag in the play that

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO3

Smith - direct

1 suggests we can't just rely upon resident population here
2 because the residents go to other places and could be
3 victimized or could be targeted as potential victims. The
4 people committing the crimes may not just stick to their own
5 census tract. And then all the other people I mentioned
6 earlier who move through those census tracts are also not
7 captured by the resident population.

8 So even if resident population were more appropriately
9 captured than we have argued Professor Fagan does in his
10 analysis, with his fixing a particular point of time, not
11 capturing the dynamics of the population in terms of changes in
12 resident population over time, even if he had done that better,
13 he still would have had to deal with his phenomenon, if he is
14 just trying to capture the population not using suspect
15 description, he would have to do something to more
16 appropriately represent the population confronting officers as
17 they patrol some of these census tracts.

18 Q. What general conclusions did you draw from your analyses
19 regarding Professor Fagan's view of modern policing?

20 A. It's changed a little bit in response to our criticisms,
21 but our initial response, when I read his first report, was
22 that there was kind of a Rip Van Winkle thing about his
23 presentation.

24 THE COURT: What does that mean?

25 THE WITNESS: He had been asleep during a

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO3 Smith - direct

1 transformation of NYPD, because major changes that I thought
2 were important, in terms of looking at and understanding how
3 New York City was being policed, were not evident in the way he
4 constructed his analysis.

5 THE COURT: In what sense?

6 THE WITNESS: In the first time I encountered his work
7 was in the research that he had used annual data from the
8 previous year, but more in this work, last quarter's data as a
9 lag for his crime analysis.

10 Everything I had been seeing since at least '94, with
11 the introduction of CompStat, and everything during the period
12 of time that this case addresses, 2004 to now, three months ago
13 data is ancient history. One of the huge changes that CompStat
14 brought is, in fact, that quarter lag was -- the reality of
15 police pretty generally, unless there is a very celebrated
16 crime that got into the media, basically police managers were
17 using data produced by management information, a division of
18 NYPD, three months later.

19 THE COURT: Did he switch to a monthly lag?

20 THE WITNESS: I said in the beginning he was
21 particularly suggesting that he had sort of missed the turn.
22 But that wasn't the only one.

23 Q. Did his switch to the monthly lag cure your concern about
24 Professor Fagan's understanding of modern policing?

25 A. He didn't necessarily credit the reasons why he adopted our

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO3

Smith - direct

1 suggestion that three months' lag was far too long. We
2 actually from the beginning recommended weekly data because in
3 our experience the police are trying to be in touch with
4 real-time events as possible, and they work hard to do that.
5 Obviously, in the real-time crime center.

6 But, in general, in the precincts, anybody who has
7 attended roll call, as I do, know that officers are briefed on
8 not only what happened yesterday and is happening this week,
9 but what happened in the previous tour that day, if that's
10 relevant to sort of orienting and informing police officers so
11 they can engage in this process that Professor Purtell referred
12 to of observing and making sense out of what they are seeing on
13 the street.

14 Q. With respect to the use of originally quarter lag crime
15 data moving to calendar month lag crime data, did the use of
16 that calendar month lag data continue present concerns to you
17 with respect to the reliability of Professor Fagan's results?

18 A. For the reason that I mentioned, the time aspect of it, a
19 month even is too long, and in some of the work we did on
20 another aspect of the research related to this topic, we
21 acknowledged at the time we did our study, we thought we would
22 have a better ability to report on this if we had weekly data,
23 and we are glad we have it now.

24 Q. You mentioned that police not only use the lagged crime
25 data, but data from their day on patrol. Did Professor Fagan

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO3

Smith - direct

1 include that day of crime data in his analysis in any way?

2 A. No. Of course, I don't know how you want to do this, but I
3 also was concerned that he chose to log his crime data. And I
4 thought that that was another reflection of his being out of
5 touch with the practices of policing New York City today.

6 Q. Why did you have a problem with the logging of crime data?

7 A. Having sat in CompStat meetings and observed what is
8 happening, having read about policing and written about it with
9 one of the architects of CompStat, William Bratton, I was aware
10 that the police in modern times, since the mid 1990s, have been
11 very concerned about and trained people and engaged in an
12 effort to discern patterns of crime and also to see changes in
13 crime as quickly as possible. The CompStat model that's been
14 widely reported has timely intelligence and rapid responses to
15 the key ingredients of their logic model of how they produce
16 the results that they are trying to achieve, which is increase
17 public safety. So timely data means as fast as you can get it
18 to your decision-makers, including the officer on patrol.

19 THE COURT: I think I am a little lost. I understand
20 lag. I am not sure I understand logging. Refresh my
21 recollection.

22 THE WITNESS: Logging has the effect of, quote,
23 smoothing the data. And in some research it's an absolutely
24 legitimate and appropriate kind of tool where you think that
25 the spikes are misleading. You go along and there is a spike,

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO3 Smith - direct

1 the assumption is that that's just going to come back down.
2 But the police assumption is, in fact, if there is a spike
3 because of gang violence, if they don't intervene, it's going
4 to keep going up. And I have heard conversations, I have read
5 analysis of that, it's not just my kind of imagination, that
6 that's the way in which police would interpret a spike.
7 So in the analysis by somebody who is trying to make
8 sense out of and have their data interpret what is happening in
9 an organization, in a system like police in New York, to
10 suppress those spikes, as if it were some other kind of thing,
11 means that they don't understand the role of spikes in
12 informing and guiding police decisions, and it's a very central
13 part. Any precinct commander, since basically CompStat, who is
14 asleep at the wheel and didn't see a spike in his precinct,
15 would probably have a very painful CompStat meeting ahead of
16 him.

17 THE COURT: We have to take our luncheon recess now
18 till 5 after 2.

19 MR. MOORE: Can I raise one question with respect to
20 scheduling? A witness I was supposed to do may come on this
21 afternoon. I just want to get a sense of how much longer Dr.
22 Smith will be.

23 THE COURT: Can you estimate your direct?

24 MS. COOKE: I am about two thirds of the way through.

25 THE COURT: Another half hour of direct?

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO3

Smith - direct

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

MS. COOKE: Probably.

THE COURT: That's 2:30. Then there is cross.

MR. MOORE: The issue for me --

THE COURT: You can talk to your own colleagues about estimating cross.

MR. MOORE: I have two other matters in two different courtrooms in this building so I may be in and out.

The other issue is we still have not received the proffer with respect to Inspector Catalina and Chief Hall, and we still have not yet received the information referred to by Chief Morris in his declaration. He is supposed to testify tomorrow.

MS. GROSSMAN: No, not tomorrow.

Anyway, I mentioned to you on Friday that Inspector Catalina was out of the country and was just back, and I have plans to meet with him. We are going to be able to comply within the 48 hours that you had asked us last week.

THE COURT: What about Morris? Mr. Moore thinks he is coming tomorrow.

MS. GROSSMAN: He is not. I think he has an outdated schedule.

THE COURT: Give him a copy of the revised schedule.

MR. MOORE: It's not that much complicated information. It was 40 UF-250s he looked at and a memorandum he issued.

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

D568FLO3

Smith - direct

1 MS. GROSSMAN: He is talking about a different
2 witness.

3 THE COURT: Would you two talk to each other, please?
4 Thank you.

5 (Luncheon recess)
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

D568FLO3

Smith - direct
AFTERNOON SESSION
2:05 p.m.

1

2

3

DENNIS C. SMITH, resumed.

4

BY MS. COOKE:

5

Q. Good afternoon, Professor Smith.

6

A. Good afternoon.

7

Q. You're aware that Professor Fagan conducted an analysis of whether the stops that he was analyzing were supported by apparent reasonable suspicion?

9

A. Correct.

10

11

Q. Did Professor Fagan address his conclusions with respect to the apparent reasonable suspicion in his disparate impact analysis?

12

13

A. He did not.

14

15

Q. Do you have an opinion with respect to his decision not to address that?

16

17

A. Well, I wondered why nearly 90 percent of the cases that were found to be justified are by him and his analysis elsewhere were treated like any other case in his analysis of disparate impact.

18

19

Q. Can you explain further what you mean by that?

20

21

A. There has been from the beginning the notion that race was the reason why people were being stopped as an alternative to reasonable suspicion. But if 90 percent are found to be reasonable, based on the approach that Professor Fagan

22

23

24

25

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO3

Smith - direct

1 developed, it seems like some consideration of that vast
2 majority of the cases in his analysis, who he is saying
3 reasonable suspicion has been credited for the reason why they
4 are stopped, has included analysis of race as a factor for
5 their stops.

6 Q. What role did Operation Impact play in Professor Fagan's
7 disparate impact analysis?

8 A. Basically no role.

9 Q. Did you find that to be problematic?

10 A. Well, I did. It goes back to my original discussion of how
11 the model that he was -- Professor Fagan was using in his
12 analysis of disparate impact in a lot of ways didn't seem to
13 take into account what was happening on the ground in terms of
14 how the police were serving New York. And Operation Impact was
15 the dominant new idea initiated by the Bloomberg
16 administration, Commissioner Ray Kelly, and was running during
17 the entire period of the analysis that is included in this
18 case, and it was an important change in the deployment of
19 police, the focus of police, the evidence based direction of
20 police. It was sort of a notch up from the earlier shift of
21 evidence based policing and proactive policing of CompStat, and
22 the fact that it was not considered, discussed, he does include
23 it in a different case so it's not that he is not aware of it.

24 Q. Are you referring to his work in the related case of Davis
25 v. City of New York?

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO3

Smith - direct

1 A. Yes, I am.

2 Q. What role did the presence of impact zones in Professor
3 Fagan's disparate impact analysis?

4 A. Sorry?

5 Q. What role did the presence of impact zones in the City of
6 New York play in Professor Fagan's disparate impact analysis?

7 A. No role.

8 Q. Did you find that to be problematic?

9 A. Yes, I did.

10 Q. Why?

11 A. I must have misheard. I thought we were just discussing
12 that.

13 Q. Operation Impact is a deployment model as opposed to the
14 geographic distinction of impact zones.

15 A. What happens in impact zones is that officers who graduate
16 from the academy, essentially in teams, under close
17 supervision, are deployed to those very small areas within
18 precincts where, even though crime is down in the city as a
19 whole, crime is concentrated in those precincts. My
20 understanding is because of their status as recent graduates,
21 they have greater flexibility in how they are deployed so they
22 can put them even more precisely at the times -- they are not
23 constrained by the usual tours -- they can put them precisely
24 at the times and places where the analysis shows violent crime
25 is concentrated and be informed of the kind of crimes they

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO3

Smith - direct

1 should be on the lookout for because that's what the pattern of
2 that particular hotspot suggests. And that has, as Professor
3 Fagan acknowledged in his Davis analysis, has an impact on the
4 vigilance and the likelihood of stops and the number of stops.
5 So not to include it in the Floyd analysis seems to ignore an
6 important part of the reality that he is trying to model in his
7 statistical analysis.

8 Q. Were there indications in Professor Fagan's reports
9 provided in this case that raise questions in your mind about
10 his understanding of the work of police officers while they
11 were on patrol?

12 A. Yes. It seems to me that given the attention he gave in
13 his reports to the complexity of the 250 form and all the
14 information that captures, for an analyst, in the comfort of
15 our university settings, to try to look at and make sense out
16 of all of this complexity, that there is nowhere an
17 acknowledgement that this complexity, and then some, confronts
18 the individual officer.

19 So they are dealing with the situation itself. They
20 are dealing with requirements of the form. They are dealing
21 with the instructions they have received in training about
22 this. They are dealing with the fact that they don't make very
23 many of these stops -- out of a month they make a few stops.
24 So they are having to learn this too, and there was no
25 recognition that this complexity confronts them. It might

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO3 Smith - direct

1 affect the need to build in some recognition of learning by a
2 work force over time.

3 And so it was part of what I flagged when I criticized
4 the fact that Professor Fagan's analysis did not show the trend
5 in stop patterns, particularly in his analysis of whether or
6 not stops were apparently justified. That trend shows
7 improvement over time, over the five years of his first study,
8 but that was not acknowledged -- sort of selectively trends
9 were found in those data, but not the overall trend and the
10 thing you would really think he would focus on, disparity and
11 reasonable suspicion are the two kind of anchors of this whole
12 case, and that wasn't addressed. So I felt like the complexity
13 of officers on the street of New York was not adequately sort
14 of just reflective. It doesn't mean he has to come to some
15 conclusion about that, but it would shape your analysis and
16 open you to some different questions.

17 Q. You mentioned that there was an upward trend in the first
18 report of five years under review. That was in the reasonable
19 suspicion analysis?

20 A. That's correct.

21 Q. That upward trend was an increasing trend in the apparently
22 justified stops under Professor Fagan's Fourth Amendment
23 analysis?

24 A. That's correct.

25 Q. Was that continued upward trend present in his supplemental

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO3 Smith - direct

1 report 2010 to the second quarter of 2012?

2 A. Basically, yes.

3 Q. With respect to the UF-250 form in Professor Fagan's
4 disparate impact analysis, did Professor Fagan take into
5 account the frequency with which certain boxes were checked on
6 the form, such as fits description?

7 A. Mentions of it in one way, yes. It mentions that -- at one
8 point I think it appeared from reading that he was sort of
9 confusing suspect description, as we were recommending, and
10 fits description. And he said, how can we use suspect
11 description when in fact the number of times fits description
12 is being checked is declining? Those are similar language, but
13 they are operating in different parts of the story.

14 As crime has declined in New York City, from almost
15 700,000 serious crimes in 1990 to 100,000 some in 2012, the
16 number of times a radio broadcast goes out and says fits
17 description has come down. But in terms of justification, if
18 there is fits description, that's pretty much suggesting that
19 it's not the officer's perception of race that is guiding their
20 reason for stopping, but a radio dispatch that says this person
21 fits description. So at least it seemed like in the regression
22 some consideration of that category, which was 20 percent early
23 on, 13 percent later, but basically it was not a factor
24 considered in his regression analysis.

25 Q. On the subject of reasons for which officers gave for

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO3

Smith - direct

1 making stops, Professor Fagan is critical of the frequent use
2 of the box furtive movements, is that correct?

3 A. That is correct.

4 Q. Do you share his criticism of the frequency with which
5 officers checked that box and the conclusions he draws?

6 A. No. I think that we are all trained to be skeptical and
7 alert to things that we need to be skeptical about. On this
8 one, there were things about the way he drew attention to this
9 that it didn't seem quite clear to me why he would do it. He
10 was drawing upon some sort of understanding of police behavior,
11 of learning scripts and stuff like that, which I am not sure
12 what literature on policing he is drawing upon or experience or
13 studying policing he is drawing upon.

14 But it seems to me, if you have given an officer a
15 form and there are a variety of options to fill out, and he has
16 been observing behavior that arouses his suspicion, and he acts
17 upon it, and he is there to act upon it, it seems to me that an
18 alert and person who is contemplating a crime would also be
19 aware of the dynamics between police and people who are
20 engaging in crime, and that they might well be furtive, and
21 that that would not be an unusual thing for a person, playing
22 the role of a police officer on the streets of New York, to
23 observe, and it's one of the things that they check as part of
24 a whole set of things that they check. That by itself doesn't
25 seem to be to me suspicious in terms of being suspicious about

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO3 Smith - direct

1 the police's behavior. So I raised that question about it.

2 Q. What about the box "area has high incidence of reported
3 offense"? Professor Fagan is also critical of the frequency of
4 the appearance of that box, is that correct?

5 A. There he attempted to engage in kind of a measurement
6 validity test. He basically was saying, well, an officer says
7 that this is a high crime area, which is not of course what
8 they say. The form says, area has a high incidence of offense
9 suspected, but for some reason he called it high crime area.
10 But that change kind of opened it up to kind of an ordinary
11 sort of sense that maybe an area is what they are talking
12 about. And the area he chooses to test empirically, whether or
13 not an officer's indication of high crime area, is the precinct
14 and crime pattern from the previous month.

15 Q. That was the first report he used the precinct as the
16 geographical area. In the second report did he use census
17 tract?

18 A. That's true.

19 Q. Did the same analysis apply with respect to the area had a
20 high incidence of reported offense, that high crime area box in
21 the second report is relating to a census tract being a high
22 crime area?

23 A. Yes.

24 Q. Do you agree with that analysis?

25 A. I find it flawed. Because, as I said earlier, a police

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO3

Smith - direct

1 officer does not patrol a precinct. A police officer has an
2 area sector within a police precinct, and oftentimes with
3 Operation Impact they had a very specific geographic focus, and
4 to them, having been briefed at roll call about crime
5 situations that they are tracking and attending to, it seems to
6 me highly plausible that to an officer, high crime area could
7 be a subway station where there have been a series of muggings,
8 it could be a housing development where there has been a series
9 of rapes, where it seems the pattern is that people are
10 trespassing and then committing rapes. And so in their
11 headset, what is in the head of the officer, it seems
12 plausible, is a very confined area.

13 There is literature -- there is an article called
14 solving the problem of high crime areas, and one of the things
15 that the authors of that study say is that, to kind of help be
16 more specific about this, we need to be very temporally and
17 spatially specific about what the area that the officer has in
18 mind and in what you're using to test it. And I felt that
19 Professor Fagan in his analysis, by using last month's crime
20 statistics, was pretty far removed from the situation on the
21 ground that the officer was reporting on on the form.

22 Q. To your knowledge, as a police practices and management
23 expert, does the City of New York Police Department patrol in
24 census tract geographic zones?

25 A. To my knowledge, the census tract is not part of the way

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO3 Smith - direct

1 the police organize, manage, analyze, report, period. That's
2 just not a unit that they use.

3 Q. You testified before the luncheon recess a little bit about
4 your concerns with Professor Fagan's measurement of patrol
5 strength. Do you recall those questions?

6 A. I do.

7 Q. The judge asked you whether or not Professor Fagan's
8 testimony that he finds his patrol strength measures in his
9 first report and the second report highly correlated were a
10 reason to believe that it was reliable the way he calculated it
11 in the second report. Do you recall those questions?

12 A. I do.

13 Q. Taking Professor Fagan's initial measure of patrol strength
14 in his first report, what concerns do you have about the way in
15 which patrol strength was operationalized in his regression
16 analysis?

17 A. In his appendix, he did sort of indicate that he was using
18 the staffing data for quarters provided by the police
19 department in a way that sort of sorted out different
20 categories of officers and so on. But what he did not do is
21 spatially match the deployment of officers with the crime
22 situations in the precinct. So that seemed to me to be an
23 important weakness. It didn't distribute those deployments
24 over time. And as we presented in our most recent report,
25 there is a very patterned structure to when stops occur, and

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO3

Smith - direct

1 it's a familiar thing to anybody studying crime, it's also a
2 pattern of when crimes occur, which is not equally distributed
3 across the day. So the failure to be able to represent what he
4 was including in his analysis as patrol strength.

5 There was a time under Ed Koch, when he had committed
6 as a candidate for mayor that the number of police would never
7 drop below a certain number while he was mayor. And the City
8 Council adopted that, and they hammered the police
9 administration every time they testified, did you drop below
10 that number last week or something like that? That's not been
11 an issue in policing for quite some time. And my understanding
12 is that the crime statistics -- the patrol statistics just
13 don't include even that level of specificity. Are they out on
14 patrol or not? They could have a patrol assignment and not be
15 on patrol. He said this morning -- I don't remember if he
16 distinguished in his appendix a description of how they
17 organized the data. He differentiated between the supervisors
18 and the people they were supervising.

19 So for all those reasons, I had questions about patrol
20 strength, not feeling that they captured what you wanted in
21 putting that into your equation.

22 Q. With respect to Professor Fagan's second supplemental
23 report and his measurement of the patrol strength, did you have
24 concerns about the way in which that variable was
25 operationalized there?

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO3

Smith - direct

1 A. I did. Out of economy, I don't want to repeat the
2 testimony of my colleague, Professor Purtell, but we felt that
3 there was an endogenous measure, that in so many ways it just
4 sort of didn't make sense to think that if you knew that an
5 officer had made one stop in a census tract in a month, that
6 that captured police patrol strength. We knew that officers
7 made stops in multiple census tracts in the same month. We
8 knew that some census tracts had no stops, and so therefore it
9 seems like they had no patrol strength. We knew that officers
10 typically patrol in pairs, but for some 9,000 of his census
11 tract months there were census tracts with one stop, therefore
12 one patrol strength, but in fact there must have been two.

13 Why is that important? Because when you have two
14 officers, there's four eyes, not two eyes, surveying, looking
15 for suspicious behavior. Even in principle, one person could
16 be engaged with a citizen in a situation that's sort of pretty
17 active, and the partner officer could be attending to something
18 else. That wasn't reflected. Professor Fagan said this
19 morning that maybe an officer was patrolling a census tract and
20 nobody committed a crime so he didn't see any crime.
21 Hypothetically, they might have been deterred from committing a
22 crime.

23 THE COURT: They might have what?

24 A. They might have been deterred from committing the crime.
25 Hypothetically, that could be a reason why there is a zero.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO3 Smith - direct

1 His analysis can't capture that using that patrol strength
2 measure.

3 Q. Directing your attention to table 11 on page 80 of
4 Defendants' Exhibit H13. We will put it on the screen.

5 What does this table reflect, Professor Smith?

6 A. It captures with numbers what I was saying earlier about
7 officers who are making stops, according to these data, in more
8 than one census tract. And again, the way he has constructed
9 his measure of patrol strength is not at all clear. In fact, I
10 think it doesn't.

11 Q. Are you aware that areas in which police officers could be
12 assigned to patrol, for example, in a particular sector might
13 encompass several census tracts?

14 A. There is no particular, that I know of, rhyme or reason
15 between census tract and sectors and operation impact zones.
16 They are not lined up in any particular way.

17 (Continued on next page)

18
19
20
21
22
23
24
25

D569flo4 Smith - direct

1 Q. But several census tracts --

2 A. Yes.

3 Q. -- in a sector or an impact zone --

4 A. That's entirely possible.

5 Q. -- within a precinct?

6 A. That's entirely possible.

7 Q. With respect to your understanding of supervisors
8 supervising officers on patrol, is it your understanding that
9 they could be traveling through several census tracts while on
10 patrol?

11 A. My guess is if they weren't they would be viewed as not
12 doing their job.

13 Yes.

14 Q. With respect to your concerns you've detailed regarding the
15 patrol strength measure used in Professor Fagan's first and his
16 second supplemental report, do you find it persuasive that
17 Professor Fagan finds a high degree of correlation between
18 those two measures such that he concludes they're reliable?

19 A. As I said this morning, no.

20 Q. And if in controlling for patrol strength in a disparate
21 impact analysis a researcher does not specify that measure of
22 patrol strength properly, what effect does that have?

23 A. Well in regressions all the different variables included
24 are obviously interdependent. And having a variable that is
25 misspecified jeopardizes the validity of the findings.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo4 Smith - direct

1 Q. After reviewing Professor Fagan's report submitted in this
2 case and in particular identifying the issues you've testified
3 to here today, do you -- have you formed an opinion as to the
4 validity of Professor Fagan's conclusion that racial
5 composition of precinct neighborhood and census tract is a
6 statistically significant, strong robust predictor of NYPD's
7 stop, question and frisk patterns even after controlling for
8 simultaneous influences of social conditions and allocation of
9 police resources?

10 A. Actually I have come to the conclusion that his analysis
11 doesn't support in a credible way those assertions.

12 It just is hard for me to imagine that we could assume
13 that if we know the population of an area and the crime in the
14 area that that would enable us to know who is committing the
15 crime in that area in the way a benchmark needs to do to give
16 us a credible finding.

17 And that's the benchmark issue of the fundamental
18 basis of this disparity argument. And the name we put on top
19 of that, the problems we have, is this population measures.
20 And his sort of aggregation of crime waves that don't line up
21 with the way police response use stop -- occurs as a part of
22 the police way of dealing with crime. Issues of patrol
23 strength.

24 All those things gang up on his conclusions and say
25 are not there yet.

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

D569flo4

Smith - direct

1 Q. Let's turn to the second issue that Professor Fagan
2 analyzed and that's the reasonable suspicion or apparent
3 reasonable suspicion of the stops for 2004 through 2012.

4 Are you familiar with the method Professor Fagan used
5 to categorize whether stops were apparently justified,
6 apparently unjustified, or ungeneralizable?

7 A. In all of the several forms, yes.

8 Q. And as a social scientist in your opinion did you find his
9 approach to the categorization of the UF 250s a valid approach?

10 A. Well, several times at least there's been mention that
11 lawyers have some difficulty dealing with statistics. Here I'm
12 at a disadvantage because I'm not lawyer, I'm not a judge and
13 so, you know, in some ways I was impressed by the way in which
14 Professor Fagan went through and tried to create these
15 combinations and so forth.

16 But I have real difficulty in making independent
17 judgment about whether or not the things that he concludes make
18 something apparently justified or things that he concludes are
19 unjustified will stand up under that kind of legal scrutiny.

20 What I could conclude is some of the ways in which,
21 over the course of this research and our back and forth, there
22 have been some troubling sort of mistakes, inadvertent or
23 otherwise, which raise questions about how much we can rely
24 upon the methods that he's using to give us these distributions
25 that sometimes get reported in the press and then get corrected

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo4

Smith - direct

1 but are not reported in the press, which I think is important
2 because if I were a minority person in this community and I
3 were constantly in trouble, the only reason why the police are
4 stopping me was because I'm a person of color, that, you know,
5 that would affect my interaction with the police.

6 And the police interaction with citizens, when they're
7 stopping somebody when they're patrolling neighborhoods, are
8 challenging enough without that. If it's right, then they
9 should know it. But if it's not, then therefore that sort of
10 how accurately captured this justified, unjustified thing is
11 obviously terribly important.

12 But I am not convinced in the first round that it's
13 been adequately presented because I don't think there's much
14 attention given to the high volume of stops that were, by his
15 analysis, apparently justified. And in the early analysis that
16 was often combined with something that he called
17 indeterminable, as if those two together represented failure of
18 the police and, in a sense, they do, but they could also be a
19 weakness of a form, other things.

20 The hard number of unjustified was not that high to
21 begin with and it went steadily down. And so I think that
22 there's reason to pay really close attention to the methods he
23 used in constructing that and I'm at a disadvantage for some
24 parts of that analysis.

25 I think that -- I also should call attention to the

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo4

Smith - direct

1 fact that we raise questions about some aspects of his approach
2 to coding. Not so much because we knew exactly what the answer
3 was, but we felt that he should at least acknowledge that he
4 didn't either; that the totality of the circumstances
5 confronting a police officer as reflected in the 250 form, as I
6 mentioned earlier, he thought were so many permutations he had
7 to simplify. And that's not a choice that the officer on
8 patrol has. They have to deal with the situation. They have
9 to capture as fully as they can and get on with their work. So
10 at least some acknowledgment of that seemed in order.

11 The fact -- we raised questions about the fact that he
12 had not -- he sort of dismissed with absolute certainty the use
13 of information from the "other" category. And we said, well,
14 on what did you base that? And apparently there was a sample
15 of a thousand that he had looked at and said that condition was
16 gibberish or not meaningful. When we wanted to look at that
17 sample, it wasn't there anymore. When we drew our own sample
18 we found there was a lot of good information available, already
19 coded, had been converted from handwriting to electric codes
20 and so forth like the rest of the data.

21 I also raised questions in my report, if I can go on,
22 I'm going on --

23 Q. I could ask another question, if that's --

24 A. I'll let you do that.

25 Q. With respect to the criticism you just mentioned of

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo4 Smith - direct

1 Professor Fagan initially not including the narrative text
2 strings handwritten in by the officer on the UF 250 form which
3 are then transcribed into the 250 electronic database, he did
4 respond to that criticism; isn't that correct?

5 A. Yes.

6 Q. And when he did so, he did so in the second supplemental
7 report, correct?

8 A. Right.

9 Q. Did you have -- did you find Professor Fagan's analysis of
10 those other text strings persuasive to improve his opinions
11 with respect to reasonable suspicion on the Fourth Amendment in
12 the second supplemental report?

13 A. There were many, I think seven or eight, different reasons
14 why he said he couldn't possibly, as a serious social
15 scientist, use the data from the other forms: It was
16 handwritten, it was emotional, it was done perhaps after the
17 fact, it was subjective, it wasn't something for which they had
18 been trained to give sort of routine response, that those kinds
19 of reasons just meant that it was just -- there were words that
20 they couldn't code and so on.

21 And so when we looked and found officers giving
22 reasons that seemed like they should at least suggest that
23 maybe leaving that out wasn't getting a complete picture of
24 what was happening. He rejected it I think not once but twice
25 saying it just absolutely irresponsible for a social scientist

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo4 Smith - direct

1 to use such questionable data.

2 Q. But he did do that in his second supplemental report,
3 correct.

4 A. Without any sort of explanation of his conversion, he
5 certainly is -- feels totally comfortable doing a different
6 kind of analysis using it to draw conclusions about how
7 justified or unjustified the stops are.

8 Q. Did you find his conclusions with respect to the analysis
9 of the other text strings in the second supplemental report to
10 be persuasive and valid?

11 A. Again, I have the same disadvantage I mentioned earlier.
12 After all that labor, didn't yield a huge amount of different
13 finding. It seemed to me in one category, trespass, he found
14 more stops that he could classify as unjustified.

15 But basically I don't know what to make of how he did
16 that because we don't know enough about the way in which he got
17 to -- the tool that he used to draw the conclusions about the
18 stated as justified or unjustified because, as has been
19 mentioned by Dr. Purtell, we asked for but did not get what we
20 think is necessary to know how much we should rely upon this
21 sample that he's taken a 37 -- 3,710 sample out of many more
22 stops to look at one category of classification to try to see
23 how they should be redistributed.

24 He basically used the algorithm of the previous
25 research and then supplemented, by going into these others.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo4

Smith - direct

1 But the way to get into those others was this survey that we're
2 in the dark about.

3 Q. So with respect to your opinion about regarding the
4 validity of Professor Fagan's conclusions about reasonable
5 suspicion under the Fourth Amendment, what conclusions did you
6 did you reach?

7 A. I concluded that he did not convince me that --
8 particularly in the second report that we know what to make of
9 his findings; convinced me that in the first report, to the
10 extent we can accept the algorithm he used, he should have
11 reported the very significant improvement, I think we've
12 agreed: Having a higher number of stops that are justified, a
13 lower number of stops that are apparently unjustified, is an
14 improvement, he doesn't acknowledge that that had gone on
15 during the period of his study because he used all the -- the
16 whole years in aggregate.

17 Those are the things that weaken my willingness to use
18 his statistical analysis to think that he's demonstrated that
19 race, not reasonable suspicion, is the reason that these
20 officers are making these stops.

21 MS. COOKE: Your Honor I have no further questions at
22 this time.

23 THE COURT: All right. Just before we start the cross
24 I just want to review one answer but go ahead and get
25 organized.

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

D569flo4

Smith - direct

1 All right.

2 CROSS-EXAMINATION

3 BY MR. CHARNEY:

4 Q. Good afternoon, Professor.

5 A. Good afternoon.

6 Q. I want to ask you a little bit about your professional
7 experience. You've talked a little bit about it on direct.

8 Now prior to your work in this case and the Davis and
9 Ligon cases, you've never worked on a statistical study
10 published or otherwise that analyzes racial disparities in
11 police stop rates, right?

12 A. Right.

13 Q. Or for that matter in any other police practice, right?

14 A. Right.

15 Q. Or in any other context outside of policing, right?

16 A. Right.

17 Q. And the studies that you have done with Professor Purtell
18 on the NYPD, those looked at the efficacy of certain police
19 practices, right?

20 A. Right.

21 Q. And you've never worked on a study with Professor Purtell
22 or anyone else that examined whether or not a particular police
23 practice was legal and constitutional, right?

24 A. Right.

25 To be complete on that, Mr. Charney. I did discuss a
SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo4

Smith - cross

1 little bit in my Does Stop and Frisk Stop Crime, the fact that
2 the Warren decision and Terry, sort of included the possibility
3 of police officers intervening before crime happened. And that
4 had -- in the literature on police, there were stories about
5 officers waiting until the crime happens so that they could
6 make an arrest and so -- and to that extent I talked about --
7 Q. So are you suggesting that there are two different
8 standards under the constitution for stops; one where an
9 officer stops somebody before a crime has happened and one
10 after a crime has happened?

11 A. Well I'm at least aware that there's a difference between
12 reasonable suspicion and probable cause. And if an officer
13 observes a person actually committing a crime, that's probable
14 cause and they make an arrest and they get a collar. In the
15 old days, that's all they had to do to get glory.

16 Q. My question is do you think there are two different
17 standards for reasonable suspicion under the Fourth
18 Amendment --

19 A. Oh that wasn't your question before.

20 Q. Well let me make myself clear.

21 Because you would agree that your understanding of the
22 phrase is if an officer has reasonable suspicion to believe a
23 crime has been committed, is being committed, or is about to be
24 committed, right?

25 A. That's my understanding.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo4

Smith - cross

1 Q. So about to be committed is what you're talking about where
2 somebody would make a stop to try prevent a crime, right?

3 A. And I focused on that, if I may say --

4 Q. Okay. But my question is regardless of whether it's a stop
5 made to prevent a crime or a stop made on reasonable suspicion
6 that a crime has already been committed, the standard is the
7 same, right? You have to have reasonable suspicion, correct?

8 A. Right.

9 Q. So, back to my original question. You have never actually
10 done a study where you've analyzed the extent to which police
11 stops or police arrests or any other policing tactic were
12 complying with the constitution, correct?

13 A. I've done a lot of studies.

14 I think that's correct.

15 Q. Okay. Now, you also testified on direct about this
16 benchmarking business. I want to ask you just to make sure I
17 have it correct that I think you mentioned there were three
18 elements which you thought the benchmark -- the proper
19 benchmark to analyze racial disparity in stop an frisk should
20 include. And I think you said the first was a measure of the
21 number of people involved in policing the particular area that
22 you're looking at, right?

23 A. That's right.

24 Q. So, would you agree with me that if properly constructed,
25 which I know in your view is a big if, a patrol strength

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo4 Smith - cross

1 variable would measure that aspect of the benchmark, right?

2 A. With that caveat, yes.

3 Q. And secondly, you said the second element would be the
4 number of people that are likely to engage in the kind of
5 suspicious behavior which would cause an officer to make a
6 stop, right?

7 A. Right.

8 Q. We're going to come back to that one.

9 The third one I think you said was -- see if I have
10 this right -- would it be the number of -- a measure of the
11 number of people that would be available to be stopped, in
12 other words, present and on the street in the area where
13 officers are patrolling?

14 A. I think I had a different third one. But I wanted to ask
15 you to differentiate between the second one and the one you
16 just posed as the third one.

17 Q. That's a good -- thank you for pointing that out. So let
18 me first just ask you what is your third one that I didn't
19 mention.

20 A. It has to do with criteria used to determine which
21 behaviors constitute suspicion.

22 Q. So, your testimony is that in a regression analysis there
23 needs to be a variable that would assess that issue?

24 A. Ideally, yes.

25 Q. Do you know of any such variable that can be constructed

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo4 Smith - cross

1 that would assess that issue?

2 A. Well I did raise in earlier testimony that I thought that
3 Professor Fagan had gone to great lengths to try decide what
4 proportion of stops were apparently justified, and he had that
5 data and he could have fed that into his regression and that's
6 the kind of behavior that I was talking about.

7 Q. So are you saying that your third element is some kind of
8 measure of the extent to which the stops that are being made
9 are, in fact, constitutional or not?

10 A. The criteria and the process of making that element come
11 into the pattern of stops, yes.

12 Q. And so what would that kind of variable look like? I mean
13 would it be -- what data would you use to construct that kind
14 of variable?

15 A. Well I thought I just gave you an example, Mr. Charney.

16 Q. I guess -- maybe her Honor knows or understands but I am
17 totally lost as to what variable you would include in a
18 multivariate regression analysis of racial disparities in stop
19 and frisk that would provide you with the information that
20 you're talking about here with respect to the criteria that
21 officers would be using to decide to make stops.

22 A. The justified -- apparently justified, unjustified,
23 findings could have been fed into his regression as a variable.

24 Q. So are you saying, in other words, the percent justified
25 stops would or something would be a percentage of all stops

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo4 Smith - cross

1 that were apparently justified?

2 A. There are a variety ways you could do that but yes that's
3 what I'm saying.

4 Q. Would you agree that -- may be a legal question but I'll
5 ask you anyway and if it is then you'll tell me -- that
6 officers could be making stops that technically complied with
7 the Fourth Amendment but they could be doing it selectively in
8 a way that would violate the Fourteenth Amendment; in other
9 words, stopping only black people when they actually see
10 suspicious behavior by all races, would you agree that that
11 would still be improper for them to do?

12 A. Sure.

13 Q. So if that's the case, then is it -- you don't think it's
14 permissible to then assess the racial disparities of stops
15 separately from whether or not the stops are legal or not in
16 terms of the Fourth Amendment?

17 A. Yes.

18 But I also noticed that Professor Fagan, particularly
19 in his first report, talked about looking at the overlap or the
20 intersection between those two Fourth and Fourteenth Amendment
21 claims, and I was suggesting a way to do that.

22 Q. Well, you would agree that he looked at the intersection
23 with respect to the stop outcome, right?

24 A. Different things that he did, yes. But I'm saying in terms
25 of --

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

D569flo4 Smith - cross

1 Q. But would you agree that he didn't look at the intersection
2 with respect to the initial decision whether to stop someone,
3 right?

4 A. I don't recall that he did, no.

5 Q. So going back --

6 A. But I must say, if I can, that in these homogeneous census
7 tracts that Professor Fagan talked about this morning, that the
8 times when a lot of stops were occurring when a crime was
9 occurring, there is no racial choice available to the officer.

10 Q. I'm going to come back to that because that's something
11 that I do want to ask you about. But I want to first see if we
12 make sure we have -- what you think the elements of a proper
13 benchmark require. And you mentioned the three that you
14 mentioned so far, essentially a valid measure of patrol
15 strength, right, would be one.

16 A valid measure of the number of people likely to
17 engage in suspicious behavior.

18 And then this third one is the -- some kind of measure
19 of the factors that are involved in the officer's decision to
20 make stops, right?

21 A. Right.

22 Q. And is that it? Are those the only elements you think are
23 necessary?

24 A. Those are the three that we -- I think derived from the
25 Department of Justice funded study. And they seem to line up

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo4

Smith - cross

1 with a lot of what the other people writing on racial disparity
2 say.

3 Q. So is it your testimony that that third one is in the
4 Department of Justice study that you referenced?

5 A. I was just looking at it to see if I could refresh my
6 memory. Can I do that?

7 Q. I have a copy if you want to take a look and tell me if you
8 can see that.

9 I don't know if we should mark this.

10 Not planning to introduce it into evidence.

11 THE WITNESS: It's in the report.

12 MR. CHARNEY: The citation is in the report but I was
13 going to show you the actual Department of Justice study to see
14 if it was anywhere in there. If you can remember by looking at
15 your report, then that's probably easier.

16 THE WITNESS: Okay. I was trying to do that.

17 THE COURT: If not, he's willing to show you the
18 actual report.

19 THE WITNESS: That's fine. If you have it, I'll be
20 happy --

21 THE COURT: Just give it a number or a letter or
22 something.

23 MR. CHARNEY: 568.

24 THE COURT: 568 for identification only. Just to see
25 if it refreshes your recollection as to whether it's actually

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo4 Smith - cross

1 in the report as one of the criteria.

2 THE WITNESS: Okay.

3 MR. CHARNEY: I think chapter 2 is where they talk
4 about the benchmarking stuff.

5 THE WITNESS: They use very generic terms.

6 Quantity is one of the terms that they use.

7 THE COURT: Quantity of what?

8 THE WITNESS: Quantity of people who are acting
9 suspiciously and quantity of people who are there to observe
10 the suspicious behaviors.

11 As I said, my recollection was some kind of
12 observational component was also something that this
13 benchmarking recommendation study included.

14 This is only part of the document.

15 MR. CHARNEY: If I remember correctly, in your report
16 you cited to the beginning of the study. You said that there
17 were, in the first chapter that that was where there was a
18 discussion of benchmarking. So I actually included the first
19 two chapters to try to make sure I wasn't missing anything.

20 But I guess we can come back to that.

21 Q. But I wanted to ask you actually about this study that you
22 have in front of you.

23 Is it your recollection based on your review of it
24 that this study actually deals with analyzing racial
25 disparities in traffic stops, right?

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo4

Smith - cross

1 A. A lot of the literature does and this does as well.

2 Q. It also is focused on traffic stops made on suspicion of
3 traffic violation, not crimes, right?

4 A. That's right.

5 Q. Do you see any -- do you have any concerns that the methods
6 that are set forth in this report don't translate perfectly to
7 the context of pedestrian stops on suspicion of crimes?

8 A. I would say that they are different.

9 I would say that most of the people who I've read
10 discussing this challenge of measuring racial disparity,
11 including Professor Fagan, include both kinds of studies in
12 their discussion of this.

13 In terms of the issue of whether or not you would want
14 to have included in the benchmark who is committing the
15 offense, whether it's a driving offense or an offense that a
16 pedestrian might be capable of committing, that seems to be a
17 constant across these.

18 The criticism throughout this literature, traffic and
19 pedestrian, questioning or criticizing the use of population is
20 a constant across. It doesn't seem to differentiate them.

21 Q. Isn't it true that in your most recent report of you and
22 Professor Purtell you make no mention of the first and third
23 components that you just listed off for a proper benchmark.
24 And I direct your attention to pages 14 and 15 of Defendants'
25 Exhibit H13.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo4

Smith - cross

1 THE COURT: Page 14 and 15?

2 MR. CHARNEY: 15 of Defendants' Exhibit H13.

3 THE COURT: Page 15?

4 MR. CHARNEY: 14 and 15 there's a discussion.

5 THE COURT: All right.

6 MR. CHARNEY: And it lists three components and I
7 would ask you the three components listed here in pages 14 and
8 15.

9 Q. At least with respect to the first and third ones you
10 listed off today, those are different than what's in this
11 portion of your report, right?

12 A. Yes.

13 I think that the analysis in the department of justice
14 funded study was talking about the weaknesses of studies that,
15 for example, rely on population because they don't include
16 those things.

17 I said earlier this morning that it seems to me that
18 if you have suspect description data, that sort of finesses
19 some of the missing pieces in the way in which it's done if you
20 only have population data.

21 Q. But my question is, Professor Smith, in this section of
22 your report, pages 14 and 15, you talk about how there are
23 three necessary elements for an appropriate benchmark. And you
24 describe them as location, quantity, and criminal
25 participation.

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

D569flo4

Smith - cross

1 Now criminal participation, I think we can agree,
2 you're referring there to the suspect description, in other
3 words, figuring out the estimate or the number of people that
4 are likely to engage in the targeted behavior?

5 A. Mm-hmm.

6 Q. But the other two, location and quantity, those are
7 different from the other two that you're talking about today?

8 MS. COOKE: Your Honor, just -- I raise an objection
9 to the mischaracterizing this section of the report which is
10 clearly identifying the following terms are from the Department
11 of Justice publication that Professor Smith just pointed out
12 are the terms quantity --

13 MR. CHARNEY: That's not true. Because if you look at
14 page 15 he then goes on to say, "All three of the necessary
15 elements for an appropriate benchmark remain."

16 MS. COOKE: Yes, but --

17 MR. CHARNEY: So now he's applying it to the Terry
18 stop context, which is this context. So he's taken it from the
19 DOJ context and now applied it to this case.

20 MS. COOKE: My objection, your Honor, is that the
21 question mischaracterized the text of the report, pages 13 and
22 14.

23 MR. CHARNEY: I said 14 and 15.

24 THE COURT: You are arguing back and forth, which is
25 annoying.

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

D569flo4

Smith - cross

1 But the bottomline is, on page 15 he does seem to
2 adopt these very terms when he says, "All three of the
3 necessary elements for an appropriate benchmark -- location,
4 quantity, and criminal participation -- remain. But now we
5 apply these elements to racial and ethnic groups rather than to
6 gender and to Terry stops conducted by police officers rather
7 than grades given by English teachers."

8 So it does seem that he applies those three himself.
9 MS. COOKE: Correct.

10 My objection was to the extent that question was
11 mischaracterizing that those were his terms.

12 THE COURT: They became his. He adopted them.

13 MS. COOKE: Well I was objecting to the form of the
14 question, your Honor.

15 THE COURT: Okay.

16 THE WITNESS: I think it must be sort of postlunch
17 sort of fatigue.

18 But when I was listing the three, I conflated things
19 that are in this triad of issues and something else that's
20 emerging in the literature, including Professor Fagan's
21 literature, about the call for including some kind of evidence
22 of observation as a factor in constructing the benchmark.

23 Location, which I didn't mention, has been central to
24 everything I've been saying about the problems with Professor
25 Fagan's way of constructing his analysis. Location has to do

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo4 Smith - cross

1 with my claim that area has a high innocence of offense
2 suspected, is not a precinct, is potentially a very small area.

3 And so what they're saying is you've got -- if you're
4 doing a benchmark, you have to focus on the area properly or
5 you've got, you know, benchmarks for different things.

6 And so area, quantity, and criminal participation are
7 something I do, in fact, think represent a pretty solid
8 structure for the things that you need to take into account if
9 you're going to say this pattern of stops by race is evidence
10 of something other than proper police behavior.

11 Q. I'm going to follow up on a couple things.

12 First of all, you would agree with me that the
13 Department of Justice study doesn't say anything about this
14 observational component that you're now discussing, right?

15 A. Not in this context, no.

16 Q. And then with respect to the quantity and location factors,
17 wouldn't you agree that Professor Fagan, by looking at crime
18 and population at the census tract level, is trying to account
19 for location?

20 A. He is trying. And not succeeding.

21 Q. With respect to quantity, quantity is, again, a measure of
22 who is on the street and available to be stopped, right?

23 A. In the two ways I mentioned.

24 Q. By two ways meaning what?

25 A. The officers who are present is a quantity factor.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo4

Smith - cross

1 Q. Okay.

2 A. And the people that are in front of them.

3 Q. Which again would be a measure of -- some sort of valid
4 measure of the population of a particular area where police are
5 patrolling, right?6 A. Well if you use the word population, I'm going to suspect
7 that you're talking about census. The people present on the
8 street.9 Q. And so, again, Professor Fagan tried to control for that,
10 right, by using the census data, correct?

11 A. Eventually, yes.

12 Q. Now, with respect to the criminal participation variable
13 component, the measure of the number of people on the street
14 who would be likely to engage in suspicious behavior. I want
15 to ask you about that one. Your basis for that opinion is
16 based on literature, correct?

17 A. My basis on --

18 Q. The fact that appropriate benchmark has to include this
19 criminal participation factor. That's only based on a
20 literature review on your part, right?

21 A. As opposed to?

22 Q. You've never -- you don't have any practical experience
23 yourself conducting a study where you would use a benchmark to
24 assess racial disparities, right?

25 A. I've said that already.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo4

Smith - cross

1 But I think that somebody had to start this field of
2 study at some point and they had to sort of think about it and
3 figure it out. And I think that these elements, I hope I would
4 have insight to figure out, without having read any studies --
5 Q. The answer is it's based on a review of the literature,
6 right?
7 A. Not entirely. It's based also on just thinking about what
8 a benchmark is and is supposed to provide in any kind of
9 analysis.
10 Q. But your thinking on that you have to draw from experience,
11 right?
12 A. I'm sorry?
13 Q. In order to think about something and form an opinion about
14 it, you would have to either base it on experience or training,
15 right?
16 A. Yes.
17 Q. And you don't have any experience creating benchmarks to
18 assess racial disparities in any kind of policing practice,
19 right?
20 A. I've been getting some experience with this project.
21 Q. Prior to this case.
22 A. Not specifically, no.
23 Q. So then going back to my original question which is that
24 the way you informed yourself is you looked at the literature
25 on analyses of racial disparities in police stops, right?

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo4 Smith - cross

1 A. That certainly helped, yes.

2 Q. And you looked at this Department of Justice study, right?

3 A. Mm-hmm.

4 Q. And you looked at, you mentioned an article by Greg
5 Ridgeway and I guess there was a professor John MacDonald as
6 well?

7 A. Right.

8 Q. So that's two articles. And then you read some of
9 Professor Fagan's work?

10 A. Right.

11 Q. And other than that you didn't review anything, right?

12 A. I think that those were the key sources, yeah. And some
13 British literature.

14 THE COURT: I'm sorry?

15 THE WITNESS: Literature in Britain.

16 THE COURT: British.

17 THE WITNESS: I read certainly Walker's study about
18 the denominator problem.

19 Q. Did you read these before or after your deposition in March
20 of 2011?

21 A. Some before, some after.

22 Q. But you would agree that as of your deposition in
23 March 2011 you had read Fagan's studies, right? And you had
24 read Ridgeway's studies, right? And that was it, at that
25 point?

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

D569flo4 Smith - cross

1 A. If that's what I said, yes.

2 Q. Now you would agree, though, that if you -- all those
3 sources that I just listed off, there is actually a difference
4 of opinion in there about the validity of Professor Fagan's
5 benchmark, right?

6 A. Not much, including Professor Fagan.

7 Q. Well, Professor Fagan has actually used the benchmark he
8 used in this case on prior occasions, right?

9 A. He didn't use it in his 2007 study of New York City, no.

10 Q. So your testimony is he did not use at the precinct level a
11 measure of the crime level and the population demographics of
12 those precincts.

13 He didn't use that?

14 A. I think he has in some studies, yes.

15 Q. So I guess what I'm saying is Professor Fagan --

16 A. And he did in his study with the Attorney General.

17 Q. I believe you also testified at your deposition that you
18 had reviewed the study that a Professor Ian Ayres had done in
19 Los Angeles of the stop patterns there?

20 A. Right.

21 Q. And he used a similar benchmark to Professor Fagan?

22 A. Almost identical.

23 Q. So that's at least two different scholars that have used
24 the Fagan, we'll call it for lack of a better word, the Fagan
25 benchmark, right?

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo4 Smith - cross

1 A. One of Fagan's benchmarks.

2 Q. And then on the other side you have Ridgeway and you have
3 the Department of Justice talking about the need for criminal
4 participation, right, that that has to be factored into the
5 benchmark?

6 A. And Walker who has another whole idea.

7 Q. But it's fair to say that neither Ridgeway nor the
8 Department of Justice study specifically criticized Professor
9 Fagan's version of the census benchmark in those two reports,
10 right?

11 A. Well, you mean by name?

12 Q. Well, the idea of where you combine a measure of the local
13 population using census with a measure of the local crime
14 levels using crime data.

15 That combination benchmark is never specifically
16 mentioned or criticized in either of those two studies; isn't
17 that right?

18 A. I don't know anyone beside Ayres and Fagan who have done
19 that.

20 Q. But they did it before Ridgeway's study came out, right?

21 A. Ridgeway is critical of using population as a benchmark.

22 Q. But what about population in combination with a measure of
23 the local crime level? Does he ever specifically criticize
24 that?

25 A. I don't recall that he did.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo4

Smith - cross

1 Q. Okay.

2 So with respect to the crime suspect portion of the
3 benchmark which I know you've testified about on direct --
4 actually before we get there. Let's go back to Professor
5 Fagan's measure of population.

6 One of your critiques of Professor Fagan's measure of
7 population is that he doesn't account for the fact that the
8 population in a census tract changes throughout a day, right?

9 A. Right.

10 Q. And you mentioned a couple examples was there could be
11 commuters coming into work and tourists, right?

12 A. Right.

13 Q. Now, you would agree with me that the census tracts where
14 the vast majority of NYPD's stop-and-frisk practices -- I'm
15 sorry -- activity occur are not in lower Manhattan, right?

16 A. Right.

17 Q. They're not in midtown Manhattan, right?

18 A. Right.

19 Q. They're mostly in the outer boroughs, correct?

20 A. Well parts of Manhattan.

21 Q. Harlem and above?

22 A. Right.

23 Q. And you would agree with me that there are not many people
24 commuting from Jersey and Westchester and Long Island to work
25 in Harlem or East New York or the South Bronx?

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo4

Smith - cross

1 A. I wouldn't agree to that for a moment.

2 Q. Do you have any empirical data to show that there are
3 people commuting from outside the city, large numbers of them,
4 on a regular basis during the day to work in these areas?

5 A. Well I -- the answer is I'm not a demographer. But I do
6 know there are lots of studies about hordes of people that go
7 to churches in Harlem to hear the choirs and so on and so I
8 think that the changing demography of the city, I wouldn't know
9 which areas don't have tourists.

10 Q. And isn't --

11 A. Brooklyn is attracting lots of tourists. These days
12 there's a throng of tourists.

13 Q. I'm talking about the areas of Brooklyn, first of all,
14 where the most stops occur would you agree with me are not
15 Brooklyn Heights, Park Slope and those areas, right?

16 A. That's true.

17 Q. So I guess I pose the question again. Are there a lot of
18 people commuting on a regular basis each day to East New York
19 or Brownsville to work or to go to church from other parts of
20 the world?

21 A. On the commuter side, I can't say. I suspect there are
22 less tourist attractions.

23 Q. And similarly your example of Harlem and the churches so
24 you're talking about basically on Sunday mornings, rights?

25 A. That's one of the times, sure.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo4

Smith - cross

1 There are other clubs and things in Harlem that are
2 attractions.

3 Q. And your testimony is there are a lot of people from other
4 parts of the city coming into Harlem on a regular basis to go
5 to clubs or to go to church?

6 A. Well unfortunately there was a time -- and I don't have the
7 exact study, Mr. Charney, but I can find it for you -- that a
8 lot of the arrests for drugs in those areas were people coming
9 in from New Jersey.

10 Q. But we're, first of all, we're not talking about arrests
11 for drugs today. We're talking about stop and frisk.

12 A. Well the two do sometimes kind of go together, Mr. Charney.

13 Q. But my question is, your critique that Professor Fagan is
14 not accounting for the changing demographics during each day in
15 the census tracts around the city is really -- applies mostly
16 to those areas of the city where most stop and frisk is not
17 happening, right?

18 A. I wouldn't agree with that at all.

19 I was talking about public housing areas where middle
20 of the day you'll see women, grandmothers, young children out.
21 In the evenings the times we've done some observational stuff,
22 only males, only young males for the most part, all minorities.

23 Q. What about race?

24 A. I'm sorry?

25 Q. What about race?

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo4

Smith - cross

1 Are you saying that there are a lot of white people
2 outside of public housing buildings during the day and at night
3 it's only black people? Is that what you're saying?

4 A. I don't think I said that, no.

5 Q. So since this case is about race discrimination, and we'll
6 probably deal with gender discrimination at a different time, I
7 want to ask you with racial demographics and the changing
8 racial demographics, is it your testimony --

9 A. But for the purpose of what we know about suspect
10 description being overwhelmingly young male Blacks and
11 Hispanics, the fact that that's a variable over time of day
12 seems to me -- and their mobility seems to me factors to
13 consider.

14 Q. So is it your testimony the racial demographics of the
15 census tracts -- the racial demographics of the census tracts
16 where most stops occur on a regular basis changes during the
17 course of an average day?

18 A. Race alone, maybe not.

19 Q. Okay.

20 Now, the other thing you mentioned was the time of day
21 when stops occur. You would agree that most stops, the
22 majority of stops are happening in either the late afternoon,
23 evening, late night or early morning hours, right?

24 A. That's correct.

25 Q. And would you agree that during those periods of the day

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo4 Smith - cross

1 the people most likely to be present on the street are going to
2 be people that live in those neighborhoods?

3 A. I wish I had the answer to that. It seems plausible. But
4 not in every neighborhood. There's some magnets.

5 Q. Okay. We're going to come back to that issue.

6 Now your critique of Professor Fagan's census --
7 combination of census and local crime level benchmark -- one of
8 your critiques is that he's not accounting -- he may be
9 accounting for the amount of crime in a census tract but he's
10 not accounting for who submits the crime in that census tract?

11 A. Yes.

12 Q. But you would agree also, and I believe you state in your
13 most recent report that the areas of the city where the highest
14 concentration of stops occur are very racially homogenous
15 majority minority neighborhoods, right?

16 A. Unfortunately those are the high crime areas in the city,
17 yes.

18 Q. So the answer to my question is yes?

19 A. Yes.

20 Q. So if that's the case, isn't a measure of the level of
21 crime in that -- in those kinds of census tracts, you're going
22 to know the race of the people committing crime because
23 everybody is the same race, right?

24 A. Well if I may say in principle if you also knew the gender
25 demography of that census tract you wouldn't necessarily draw

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo4 Smith - cross

1 the same conclusions about engagement in crime as --

2 MR. CHARNEY: I'm going to object and move to strike
3 that answer as nonresponsive.

4 THE COURT: I think I'll think about that long enough
5 for the court reporter to get a drink of water.

6 I think that was not responsive to the exact question
7 he asked. Let him rephrase.

8 Q. If you accept what I said before that the areas of the city
9 where most stop-and-frisk activity is concentrated are very
10 racially homogenous majority minority areas, wouldn't a measure
11 of the local crime in that area tell you the race of the people
12 committing the crime because everybody there is the same race?

13 A. Well, I, again, don't know how to make it responsive but,
14 you know, there's the literature, my former student Jeremy
15 Travis has written about the problem of prisoners being removed
16 from neighborhoods and communities.

17 If you have an area that is heavily minority but the
18 males are not there, the crime pattern and the suspect
19 description pattern, the population figures wouldn't give you
20 the same results than if you had the actual suspect description
21 because they're going to be different.

22 Q. I'm asking about population and crime.

23 So if you knew the racial demographics of the people
24 that lived there, you knew the level of crime, how many crimes,
25 what kinds of crimes are being committed, wouldn't you then,

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo4 Smith - cross

1 for the most part know the racial demographics of your criminal
2 suspects because everybody there is the same race?

3 A. You know there's so many different parts of this that we've
4 had to raise questions about I would have to point out that it
5 would depend upon which crime. If it's shoplifting, it's
6 different than if it's more violent crimes, which are committed
7 by men.

8 So if you -- you can't just say if you know the
9 population of an area, you know the racial composition of the
10 area, you know who is committing the crime there. You don't.

11 THE COURT: He meant by race not by gender.

12 Look to make it simple, he's saying take the
13 hypothetical that a certain area is a hundred percent Black --
14 let's say in this perfect world we can construct because it's a
15 hypothetical -- if everybody in the community is Black, if it's
16 a totally homogeneous community, all the crime committed by
17 those residents will be committed by black people. That's all
18 he's saying.

19 THE WITNESS: I don't mean to be unresponsive but you
20 know there's another group called Hispanics.

21 THE COURT: That's not my hypothetical. My
22 hypothetical --

23 THE WITNESS: I'm using your hypothetical and saying
24 the people who commit crime in any area of the city are not
25 restricted to people who live there.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo4 Smith - cross

1 THE COURT: Well, okay.

2 THE WITNESS: So if Hispanics and Black neighborhoods
3 are adjoining and there's something going on between the two,
4 it would be entirely possible by that --

5 THE COURT: So the simple answer, his answer is no
6 because the crime may not be committed by the residents.

7 THE WITNESS: Precisely.

8 Q. But you would agree that you have stated on prior occasions
9 in this case that most crime in these areas that we're talking
10 about, the areas where most crime happens and where most stops
11 occur is committed largely by the people that live there. Is
12 that what you --

13 A. I've never said.

14 Q. You've never said that. Okay. I'm going to hand you a
15 copy of your deposition.

16 You remember being deposed in this case, correct,
17 Professor?

18 A. I do.

19 Q. Okay.

20 First of all, you promised to tell the truth at that
21 deposition, correct?

22 A. And here.

23 Q. And here. Okay.

24 I want you to turn to page 242, line 20.

25 A. Go ahead.

D569flo4 Smith - cross

1 Q. This is you speaking.

2 "I've been out there in those neighborhoods with those
3 officers. And there are major places where crime is
4 concentrated where the population is highly homogeneously
5 minority. And some places it's Hispanic and some places it's
6 Black. So if that's where you're policing because that's where
7 the crime problem is, the people that you see engaging in
8 suspicious behavior and that you take steps to respond to are
9 going to be the people who live in those neighborhoods."

10 Do you recall giving that testimony?

11 MS. COOKE: I would just note for the record --

12 THE COURT: Can we stop there for one second.

13 Do you recall saying that? Just please give me a yes
14 or no.

15 THE WITNESS: I don't recall saying it but I can
16 certainly imagine I said it.

17 THE COURT: And you want to add.

18 MS. COOKE: I just wanted to note for the record that
19 Mr. Charney read only a portion of an answer to a question in
20 the deposition.

21 THE COURT: Go ahead. Read it all.

22 MS. COOKE: I don't need to read the entire thing. I
23 just want the record to reflect that that was not the complete
24 answer.

25 THE COURT: I think you should read the complete

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo4

Smith - cross

1 answer.

2 MR. CHARNEY: I'll even read the prior question, which
3 the prior question, which is on page 241, line 19 is, "Are
4 there any other pieces of evidence you rely on to form your
5 opinion that the stop, question and frisk practices of the NYPD
6 are not racially biased?"

7 There was an objection by defense counsel where he
8 says the report sets it all out but go ahead, you can answer.

9 And the start of the answer is, "Part of it maybe has
10 no place in this process but part of it strikes me as common
11 sense. If you follow the argument that I make in this, that
12 police have learned that to be effective they need to put the
13 police where the crime is, this is something that Jack Maple
14 talked about, talked about in his book. And if we look at
15 where crime is concentrated in New York and you assume that
16 police are being disproportionately put there, and a result of
17 that crime is dramatically declining, neighborhoods that had a
18 hundred homicides in 1990 have zero or one or two now, and
19 those neighborhoods are where the police are concentrating
20 their attention, concentrating their vigilance, that it would
21 be utterly spectacular and unbelievable if doing their work
22 there they were stopping a lot of white people because they're
23 not there. I have been out there any those neighborhoods with
24 those officers and there are major places where crime is
25 concentrated where the population is highly homogeneously

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo4 Smith - cross

1 minority. In some places it's Hispanic. In some places it's
2 Black. So if that's where you're policing because that's where
3 the crime problem is. The people that you see engaging in
4 suspicious behavior that you take steps to respond to are going
5 to be the people who live in those neighborhoods."

6 THE COURT: Thank you for reading the entire answer.

7 THE WITNESS: Well read. Thank you.

8 This feels like something I shouldn't have said, your
9 Honor. And it's in the record here so I said it.

10 Up here above when I talk about population. I'm not
11 necessarily talking about census population. I'm talking about
12 the population you see, the people you see. And they could be
13 residents or not residents. And they -- you know they could be
14 a mix of Blacks or Hispanics. And those things all muddy the
15 water that you're asking me to clarify.

16 The majority would be people that live there, who live
17 there. But that's just possible that another significant part
18 of it are visitors or people that are passing through looking
19 for drugs or whatever.

20 Q. So back to my original question on this topic. Would you
21 agree with me that given the homogeneity of those census tracts
22 where most stops happen, if you have both the measure of the
23 demographics of the population and the measure of the amount of
24 crime, you can determine for the most part the race of who is
25 committing the crimes?

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo4 Smith - cross

1 A. You keep wanting me to say something that I've said I don't
2 feel comfortable saying.

3 Q. So your answer is no?

4 A. My answer is no.

5 Q. Now, you believe that the crime suspect description
6 variable is -- and I want to make sure I don't use your words
7 incorrectly -- I think term you use is the best proxy for the
8 share of the population by race engaged in the targeted
9 behaviors that lead officers to make Terry stops.

10 Do you recall saying that?

11 A. That sounds familiar. Yes, sir.

12 Q. And I think you've already answered you agree with me that
13 regardless of whether a stop is made to prevent crime or based
14 on a belief that a crime has already happened, the officer has
15 to have reasonable individualized suspicion, right?

16 A. Right.

17 Q. And you would also agree with me that the use of race as a
18 proxy for criminality would be discriminatory and prohibited
19 under the constitution, right?

20 A. Right.

21 Q. Now are you familiar at all with the Department of
22 Justice's policy guidance for law enforcement on racial
23 profiling?

24 A. I have seen it. I'm not familiar with it in terms of being
25 able to recall the specifics.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo4

Smith - cross

1 Q. Well I'm going to ask you if you would agree with the
2 following statement. Even if there were overall statistical
3 evidence of differential rates of commission of certain
4 offenses among particular races, the affirmative use of such
5 generalized notions by law enforcement officers in routine
6 spontaneous law enforcement activities is tantamount to
7 stereotyping.

8 Would you agree with that?

9 A. Absolutely.

10 Q. So you would agree then that if the police department has
11 data that shows that, for example, in a particular census tract
12 the overwhelming majority of robberies are committed by male
13 Blacks ages 14 to 20, that that information alone would not
14 give an officer a constitutionally legitimate reason to stop a
15 young black male who is ages 14 to 20, right?

16 MS. COOKE: Objection, your Honor. To the extent he
17 is asking Professor Smith to draw a legal conclusion which is
18 in the purview of the Court's determination and not any expert
19 or witness here.

20 THE COURT: Well he phrased it in terms of data in a
21 particular census tract.

22 I might add the witness has already said that.

23 MS. COOKE: I guess I have a problem with the
24 constitutionality portion of the question.

25 MR. CHARNEY: Do you think that --

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo4

Smith - cross

1 THE COURT: Just say justified.

2 Q. Would that be justified?

3 A. Do you mind if I ask you to repeat the question.

4 Q. Sure. If the police department has data that shows that in
5 a particular census tract the overwhelming proportion of
6 robberies are being committed by male Blacks ages 14 to 20,
7 would it be appropriate for the police to then stop a young
8 black man who was in that age group without any other
9 information that would -- related to their behavior?

10 A. I say now and I have always said you require specific
11 suspicion to stop.

12 Q. Now in order for crime suspect -- well, first of all, when
13 you say that the crime suspect description is the best proxy
14 for the group of people who would be most likely to engage in
15 the targeted behavior, that assumes, right, that there is an
16 overlap between the people who the police department are
17 stopping and the people who are actually committing crimes,
18 right?

19 A. Well benchmarks are used retrospectively. Let's be clear
20 about that. It's something you use after the fact to see what
21 happened. It's whether what happened is somehow out of line.
22 So if you start with that, I don't see how you -- I'm confused
23 by your question. It just seems to me --

24 Q. Well in order to say that the best proxy for the population
25 that is acting suspiciously, the best proxy for that in your

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo4 Smith - cross

1 view is the population of people committing crimes, the
2 criminal suspects, right? That's your belief?

3 A. Well actually now I argue it's the merged information from
4 suspect description and arrests.

5 Q. Fine. So the -- you believe the best proxy are arrestees
6 and criminal suspects, right, because I think --

7 A. That's what we know about who is committing crime.

8 Q. So in order to form that belief -- in other words, to
9 formulate that opinion, don't you have to assume that there is
10 actually an overlap between that population, the arrestees and
11 crime suspects, and the population that the police are actually
12 stopping? Doesn't there have to be some overlap there?

13 A. There doesn't have to be but I would expect there to be.

14 Q. So if everybody that the police are stopping are not
15 actually engaged in any criminal activity, so that they aren't
16 from the same population of arrestees and crime suspects, do
17 you still believe that this is the best proxy to use?

18 A. Well, I do. Because it's the best proxy we have.

19 But I also do because the underlying sort of premise
20 to your question is this whole matter of innocence, isn't it?

21 THE COURT: Yes. He's saying if you stop a hundred
22 people who overlap the description of the suspect arrestee
23 group.

24 THE WITNESS: Right.

25 THE COURT: But all hundred turn out to be --

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo4 Smith - cross

1 THE WITNESS: Innocent.

2 THE COURT: Really innocent, in other words, nothing
3 is found, no answer is given, nothing has happened, it's
4 basically turned out to be a zero or empty stop, then he's
5 saying what's left of the comparison?

6 THE WITNESS: But.

7 THE COURT: Other than they look like the first group.

8 THE WITNESS: Well, your Honor, how do we know?

9 THE COURT: How do we know what?

10 THE WITNESS: If they were utterly innocent.

11 THE COURT: We don't -- we never -- excuse me. You
12 asked me a question. We never know utterly innocent. But we
13 know that the stop didn't turn up any indicia at all of
14 criminality. That's what we know. There is no arrest. There
15 is no summons. There is no gun seizure or contraband seizure.
16 There's nothing.

17 I don't know about utter innocence. I have no idea
18 what happened yesterday or tomorrow.

19 THE WITNESS: If all of these people were arrested
20 they would all technically be innocent, right, until -- you're
21 innocent until proven guilty.

22 THE COURT: No.

23 The stop would have turned up some evidence of
24 criminality. These are sort of dry stops, shall we say. No
25 contraband. No evidence. Nothing. It's a hypothetical. I'm

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo4 Smith - cross

1 saying a hundred stops.

2 THE WITNESS: If I can replay that with a
3 hypothetical.

4 THE COURT: A hundred stops turn up dry. All he's
5 saying is the only overlap is the description fits that of a
6 crime suspect, of arrestee data.

7 THE WITNESS: Your Honor, if the stop prevents a
8 crime --

9 THE COURT: I'm sorry. You're answering the question
10 I didn't ask.

11 (Continued on next page)

12
13
14
15
16
17
18
19
20
21
22
23
24
25

D568FLO5

Smith - cross

1 THE COURT: I won't go through that. It's completely
2 speculative. It's got nothing to do with what I said. I said,
3 if it is a dry stop, which means no contraband, no evidence of
4 criminology whatsoever, the only overlap left of the arrestee
5 suspect data is the physical description, in other words, the
6 race is the same. That seems to be the import of the question.

7 THE WITNESS: Well, I will say this. Every time that
8 the police do prevent a crime, they get a black mark then.
9 Because they will be accused of --

10 THE COURT: You want move to strike?

11 MR. CHARNEY: Move to strike as not responsive.

12 THE COURT: That has nothing to do with my question.

13 BY MR. CHARNEY:

14 Q. Let me ask a different question. I think her Honor was
15 very clear, and I understood perfectly what her Honor was
16 saying, but I will ask a different question.

17 Let's assume for the sake of this discussion that
18 everybody the police stops, black or white, is actually
19 law-abiding. They have no criminal record. They were not
20 found to have done anything wrong when they were stopped. They
21 are actually what I will call law-abiding people. If we assume
22 that, can you still use the race of criminal suspects and
23 arrestees as your proxy for the group that is most likely going
24 to be suspicious?

25 A. Well, since we have agreed that the officer has to use

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO5

Smith - cross

1 suspicion, then every stop that is justified seems to me to be
2 at least worth adding to that tally, and 90 percent of the
3 stops, according to Professor Fagan's analysis, meet that
4 standard. So if that's the rules under which the police are
5 operating, then it seems to me, if there is a pattern of racial
6 distribution in the stops that mirrors the pattern of racial
7 distribution among suspects in the merged file, that seems to
8 me what we use benchmarks to do, and that seems to be perfectly
9 legitimate.

10 Q. So is it your testimony that law-abiding black people in
11 New York City are more likely to engage in suspicious behavior
12 than law-abiding white people?

13 A. I'm only saying that that's the evidence from the stop
14 patterns, which we have said, according to Professor Fagan, are
15 90 percent apparently justified. I am just using his --

16 MR. CHARNEY: I don't want to belabor this. I am not
17 going to ask any more questions on this topic, but I would move
18 to strike the last two answers as nonresponsive.

19 THE COURT: I think they were responsive to the
20 questions you asked. I don't know that the question or the
21 answer was particularly helpful to me as the trier of fact, but
22 you went there and that's his answer. I think the problem with
23 it is it's very easy to use the 90 percent apparently justified
24 terminology from the Fagan study, but I don't think he
25 understands totally what that meant.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO5

Smith - cross

1 As you know, that study is based solely on the
2 UF-250s. As you know, there has been criticism, from both
3 sides here, as to what you can really determine from knowing
4 nothing by the UF-250. The defense has spent a good deal of
5 time pointing out that you can't know enough from just the
6 form. You need to look at the memo book. You need to talk to
7 the officers. How much can you really know from a form?

8 What he is saying is, based solely on the form, where
9 you can check off fits description, where you can check off
10 furtive movements, that makes it apparently justified. Another
11 way to look at it would be that of these 100 stops, only 6
12 percent or less result in an arrest, a summons or a seizure.
13 So you can say 94 percent are dry stops. So you can play with
14 the numbers any way you want.

15 I hope that helps for you to understand my problem
16 with your answer. It was based on his use of the term
17 apparently justified for 90 percent. It doesn't make those
18 stops good. It means he had to use an analytical framework to
19 look at 4.4 million UF-250s.

20 THE WITNESS: Thank you, your Honor.

21 MR. CHARNEY: I will move on.

22 BY MR. CHARNEY:

23 Q. The merged file that you testified about on direct, before
24 we get into how it worked, I just want to make sure I
25 understand. After the merged process was completed, at that

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO5 Smith - cross

- 1 point, the suspect race that was known for the entire
2 population of the merged arrestee suspect population was 63
3 percent of all cases, right?
4 A. Yes.
5 Q. So that's with the merging, right?
6 A. Yes.
7 Q. So without the merging, it's even lower than that, right?
8 A. Yes.
9 Q. Now, you are aware that Professor Fagan has made arguments
10 in, I think, some or all of his reports that to rely on data
11 where almost 40 percent of the cases is missing would introduce
12 sample selection bias into the analysis, right?
13 A. Yes.
14 Q. And he actually cited several articles supporting his
15 assertion, right?
16 A. Right.
17 Q. Now, you have, on your end, come back and said, no, we can
18 impute the information from the 60 or so percent in the full
19 universe, right?
20 A. It seems like there is reason to make that case, yes.
21 Q. But you haven't cited any authority in the literature or
22 otherwise to support your assertion, right?
23 A. I'm not sure where it's come up in the literature where it
24 could have been made, but no, I haven't.
25 Q. Now, is the reason it hasn't come up because, to your

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO5 Smith - cross

1 knowledge, have you ever read a study that analyzes racial
2 disparities that used data in which 40 percent of the
3 information was missing?

4 A. Well, the criticisms of using population, implicitly you're
5 saying that an awful lot of information is missing. I don't
6 know what the percentage is.

7 Q. Here the percentage of times that the suspect's race is
8 known is missing in almost 40 percent of the cases, right?

9 A. For all crime, not for violent crime.

10 Q. For all crime, right?

11 A. Right.

12 Q. So my question is, are you aware of any study of racial
13 disparities in the policing context or any context where the
14 benchmark that's being used is missing data in 40 percent of
15 the cases?

16 A. No.

17 Q. Now, with respect to this merged file, and I know we have
18 heard --

19 A. Can I just correct? In some of the studies, there are sort
20 of revisionist studies of driving while black, they have
21 basically argued that the original numbers that were using the
22 entire day or something like that, without getting
23 observational data about the times when stops were happening
24 and the patterns of drivers who were driving at times the stops
25 were happening, I think they may have had numbers approximating

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO5

Smith - cross

1 Q. So does that concern you at all that then using a merged
2 file of crime and arrestee descriptions could, in fact, hide
3 police officer bias if in fact arrests were being made on a
4 racially biased way?

5 A. If evidence were presented that that was the case, I would
6 consider that. But the correlation between the demography of
7 arrestees and demography of suspects is so high, I would be
8 surprised if that could be found.

9 Q. You would agree with me, for example, for drug crimes,
10 particularly drug possession crimes, those are mostly police
11 initiated crime complaints, right?

12 A. Right.

13 Q. So it's not a situation where a victim calls the police and
14 gives a description, right?

15 A. That's correct.

16 Q. You are aware of the research of Professor Harry Levine at
17 Queens College on the racial bias in marijuana arrests in New
18 York City, are you aware of that study?

19 A. I am.

20 Q. Does that give you any concerns that maybe there could be
21 some racial bias going on in a portion of these arrests that is
22 now affecting the data that you want to use as your benchmark?

23 A. Well, you have asked a kind of complicated question if I
24 can give a slightly complicated answer. Professor Fagan in
25 some of other his other writings has talked about how patterns

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO5

Smith - cross

1 of drug use and so forth have changed over time due to
2 policing, things like that. If parts of the population used
3 drugs, the drug markets for different parts of population
4 operate differently. The extent to which that presents itself
5 to police on patrol, police on the streets, could alone explain
6 disparities in the racial composition of people arrested for
7 drugs.

8 Q. So is the answer, no, you're not concerned that there may
9 be bias in drug arrests which is now affecting the validity of
10 your proposed benchmark?

11 A. I don't see it as a big factor in the validity of the
12 proposed benchmark.

13 Q. Similarly, with respect to trespass arrests, you're aware
14 that in the Ligon case, one of the assistant district attorneys
15 from the Bronx testified about improper arrests for trespass
16 outside of Clean Halls buildings in the Bronx?

17 A. I heard that she had that opinion; I didn't see any data.

18 Q. Did you hear her testimony that this problem has been
19 ongoing for several years, and she has been notified of many,
20 many examples of this?

21 A. I heard that was her report, yes.

22 Q. So does that give you any concern that -- first of all, you
23 will probably agree with me that Clean Halls buildings are
24 heavily populated by people of color, right?

25 A. I think that's correct.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO5

Smith - cross

1 Q. So then does that give you any concern that with respect to
2 the trespass portion of the crime suspect benchmark that you
3 want to use, that could be affected by police bias?

4 A. The implication that this is somehow based on some
5 characteristics of the police rather than some characteristics
6 of a phenomenon that the police can encounter is what I am
7 resisting, because I don't see any evidence of that. And I
8 said before, if the police are encountering -- making two or
9 three stops a month, or four stops a month, given all the
10 people that they see, the idea that -- and in these
11 concentrated neighborhoods in particular, the idea that they
12 are deciding to stop this person rather than that person
13 because of race, on the face of it, seems implausible.

14 Q. The last thing I want to ask you about the merged file is,
15 you recall that Professor Fagan, one of his critiques was that
16 the description of the merged process did not appear to include
17 any matching done with respect to place or crime category. Do
18 you recall that critique?

19 A. I mentioned it earlier, yes.

20 Q. But that's true, right? In other words, the process, at
21 least on its face, does not appear to match up a reported crime
22 and arrest that took place in geographic proximity to each
23 other, right?

24 A. Where the arrest occurred?

25 Q. In other words, was there any assessment in the merged

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO5

Smith - cross

1 process to make sure that you weren't -- and I know I used this
2 example with Commissioner McGuire, but I will use it again. If
3 it was a reported crime in, let's say, the Bronx and an arrest
4 made 24 hours later in South Brooklyn, was there any assessment
5 done to determine if maybe that spatial remoteness meant that
6 these were not necessarily matched?

7 A. I'm not sure why a match would be relevant to knowing the
8 characteristics of the offender.

9 Q. Isn't the purpose of the merging to try to see if some of
10 the reported crimes where a suspect's race was not given, to
11 see if you can match that up with an arrest where you would
12 know the suspect's race, to then see if in fact in combination
13 there are more suspects whose race you know, right?

14 A. But if you have the complaint number and the Omni system
15 connects the arrest to the victim's complaint report, it
16 doesn't seem to me clear why you would be concerned with the
17 thing you're asking me about.

18 Q. As long as the computer says -- computer is only using time
19 to make this connection?

20 A. It's using the fact that an officer fills out a form and
21 says this is the crime that they are making the arrest for.
22 That's my understanding.

23 Q. All right. Well I will move on then.

24 Now, you also testified on direct about how Professor
25 Fagan's models are based on an outdated model of policing,

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO5

Smith - cross

1 right?

2 A. I did.

3 Q. In New York City.

4 And you said that -- let's start with the first part
5 of that critique, which is that he used the wrong temporal unit
6 of analysis?7 He did use months in his first and second supplemental
8 reports, right?

9 A. In the supplemental report, yes.

10 Q. You would agree that one of the time periods that's looked
11 at at CompStat meetings regularly is a month period of time,
12 right?13 A. That's sort of the broad frame of the report, but they
14 oftentimes are discussing what happened yesterday.15 Q. But they do look at crime stats for the month, they look at
16 stop and frisk activity for the month, right?17 A. Yes. And we are now eight years past the time when
18 CompStat was the only place where this kind of analysis was
19 occurring.20 Q. But I am just right now focusing on CompStat. You agree
21 they are analyzing these things on a monthly basis, right?

22 A. Included in a monthly basis, yes.

23 Q. Now, you also mentioned that some of these analyses are
24 done at the precinct level too, right, in other words,
25 precincts themselves are analyzing this data?

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO5 Smith - cross

1 A. That was a big change that came in with CompStat.

2 Q. I think you testified that some of the these decisions are
3 being made on information based on things that happened
4 yesterday, right?

5 A. I did.

6 Q. Or happened over a week ago?

7 A. Yes.

8 Q. Are you aware that in this case, one of the plaintiff's
9 stops that is at issue involves an alleged burglary pattern
10 that actually goes back two months?

11 A. Not specifically, no.

12 Q. So wouldn't it also be -- if you assume that I am correct,
13 wouldn't it also be fair to say that even at the precinct level
14 they are looking at things over the course of a month or
15 sometimes even longer periods of time?

16 A. You have given me one anecdote. I am sure there are things
17 that go back, cold cases, years.

18 Q. But I am actually talking about an analysis of crime
19 patterns, which is something that you think influences stops,
20 right?

21 A. Sure.

22 Q. So would you agree that even at the precinct level, they
23 will oftentimes look at crime patterns over the course of a
24 month and not just yesterday or last week?

25 A. If a current homicide provokes recollection of a cold case,

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO5 Smith - cross

1 the pattern could go back a number of years.

2 Q. What about a string of burglaries?

3 A. That can happen too.

4 Q. The other criticism you have of Professor Fagan's outdated
5 model is that he is using the wrong unit of spatial analysis,
6 right?

7 A. That's correct.

8 Q. And you would agree, though, that he did switch to census
9 tracts for his first and second supplemental reports, right?

10 A. I would.

11 Q. And you would agree that census tracts are fairly small
12 geographic areas, right?

13 A. I would.

14 Q. Sometimes a series of five or six city blocks?

15 A. Right.

16 Q. Would you agree that in many cases the size of the census
17 tract is comparable to the size of the impact zone?

18 A. I don't know how many, but in principle it could be.

19 Q. You would agree that census tracts, by and large, are quite
20 racially homogenous?

21 A. I think that's probably true.

22 Q. Similarly, impact zones are also oftentimes very small in
23 terms of geographic space, right?

24 A. Right.

25 Q. And also oftentimes very racially homogenous, correct?

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO5 Smith - cross

- 1 A. Right. Oddly, the same census tracts sort of areas with
2 the same demography might be a good candidate for a hotspot
3 deployment, another one not.
- 4 Q. But you still think that relying on census tracts is not
5 going to give you an accurate picture of how crime patterns and
6 stop patterns exist in New York City?
- 7 A. I suspect it's better than precinct.
- 8 Q. I want to ask you about, turning back to Exhibit H13, which
9 is your most recent report, those figures with the scatter
10 plots, I guess starting on page 72.
- 11 The first two there, figures 7 and 8, those are the
12 scatter plots which show the correlation between the crime
13 suspect description and the stops of the people in that same
14 racial group, right? So we have Hispanic stops, Hispanic
15 suspects, black stops and black suspects, right?
- 16 A. Right.
- 17 Q. And you said that based on that, there is a very close
18 correlation, right?
- 19 A. Closer than the comparison groups.
- 20 Q. But you can't, based on this alone, you can't infer what
21 you referred to earlier as causality, right, in terms of the
22 suspect descriptions and the stop rates?
- 23 A. I made no assertion of causality.
- 24 Q. I think as her Honor asked you earlier, you can't really
25 say that these are statistically significant correlations

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO5 Smith - cross

1 because you're leaving out so many of the other significant
2 predictor variables, right?

3 A. Of course you can. It's a bivariant correlation and it
4 could be statistically significant. Whether it's adequate to
5 answer the question is entirely dependent on what question
6 you're answering.

7 Q. If you're trying to figure out if crime suspect description
8 is a statistically significant predictor of stops after
9 controlling for other very important predictors, can you draw
10 that conclusion based on the information in these two charts?

11 A. No. But my understanding is, and recall I am not the
12 statistician in this team, but my understanding is that this is
13 one of the building blocks of the multiple regression that
14 you're creating, and so if the bivariant correlations that are
15 here are stronger, that carries over in important ways into the
16 multiple regression.

17 Q. I want to turn back a couple of pages to page 70 of your
18 report. So the same exhibit, page 70. It's two pages back.
19 To table 10.

20 A. Yes.

21 Q. I know you're not the statistician on this project, but you
22 can interpret the results in this table?

23 A. I think I can, yes.

24 Q. Is it fair to say that this table reflects the results of a
25 regression analysis that you and Professor Purtell performed

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO5

Smith - cross

1 using Professor Fagan's regression model that was in table 5 of
2 his report, right?

3 A. That's my recollection, yes.

4 Q. And you added it looks like variables on race of criminal
5 suspects, right, you added four different variables?

6 A. Right.

7 Q. Isn't it true that the results listed here show that, even
8 after you add those variables, the percent black and percent
9 Hispanic variables are still highly statistically significant?

10 A. Yes.

11 Q. Are you aware that, in fact, if you did the calculation
12 where you divided the coefficients that are listed here by the
13 standard errors for each of these coefficients, that, in fact,
14 the magnitude of the statistical significance would be higher
15 for the percent black and percent Hispanic than it would be for
16 the crime suspect variables?

17 A. Well, again, my statistician side of this partnership
18 testified that, basically, the mathematical procedure you're
19 suggesting is already reflected in these stars here, that
20 something is statistically significant or it's not, and it's
21 statistically significant at a particular level or it's not,
22 and so we are talking here about statistical significance.

23 Q. I'm not going to fight you on this one. Let me just ask a
24 different question.

25 Is the fact -- first of all, the percent black and

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO5 Smith - cross

- 1 percent Hispanic variables are statistically significant to the
2 P is less than 001 level, right?
3 A. Yes.
4 Q. Which is the highest you can possibly have in a test like
5 this, right?
6 A. It's the highest normally reported, yes.
7 Q. Given that that is the result here, even after you bring in
8 the crime suspect race variables, you still don't agree that
9 the percent black, percent Hispanic variables are important
10 predictors of what the stop patterns are in New York City?
11 A. You will notice that virtually every variable in this
12 equation is significant to the .001 level, consistent with my
13 colleague's presentation that, given the numbers that we are
14 dealing with, any even small correlation will be statistically
15 significant.
16 Q. Would you agree that each of the variables listed there,
17 based on your knowledge of criminology and policing, you would
18 expect that each of those would be a significant predictor of
19 stop patterns, right?
20 A. They are in this one, but not in a lot of the models that
21 Professor Fagan ran.
22 Q. Aren't they all --
23 A. It would depend on the particular combination of census
24 tracts.
25 Q. I am saying, aren't all of the variables listed here

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO5 Smith - cross

1 also -- we can pull it up, Exhibit 417, table 5, which is on
2 page 18. This is Professor Fagan's most recent report.

3 Aren't they all statistically significant in this one
4 as well, except for a percent foreign born, which is also not
5 significant in your regression?

6 A. That appears to be the case, yes. Again, in this
7 particular one, that's true.

8 Q. Isn't it fair to say that your inclusion of the suspect
9 race variables doesn't change Professor Fagan's findings?

10 A. There is not a big change apparent to me, no.

11 Q. Now, you also mentioned that Professor Fagan did not
12 account in either his Fourteenth Amendment or Fourth Amendment
13 analysis for the presence of impact zones. Do you remember
14 that testimony?

15 A. I do.

16 Q. Now, I think one of the arguments you make around
17 that -- first of all, can you explain what you mean by that,
18 that he didn't account for them?

19 A. He doesn't mention them. He doesn't include them as a
20 dummy variable in his regression.

21 Q. How if at all -- are you talking now about his -- let's
22 focus on the Fourteenth Amendment, the regression analyses on
23 the racial disparities. Your testimony is that that should
24 have been included in that analysis?

25 A. In the regressions?

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO5

Smith - cross

1 Q. Yes.

2 A. I thought so, yes.

3 Q. What about in the Fourth Amendment, the analysis of whether
4 or not stops are based on reasonable suspicion?5 A. I would have been perfectly happy to see if there was any
6 difference in his findings with regard to apparent
7 justification between different areas in which the police are
8 engaged in policing.9 Q. Wouldn't you agree again that the standard for whether a
10 stop is legal or justified or not is going to be the same
11 whether it's an impact zone or another part of the city?12 A. I suppose it would. Impact zones are not necessarily
13 related to this study.14 Q. But you don't know if in fact he included impact zones or
15 he focused specifically on impact zones that his findings would
16 change at all?

17 A. In terms of the Fourth Amendment?

18 Q. Yes.

19 A. No.

20 Q. Now, you said that, with respect to the sample he did of
21 the text strings, you mentioned that he basically did a 180,
22 right? He first said in his original reports that you couldn't
23 look at this stuff and then in his most recent report he goes
24 ahead and does it, right?

25 A. I did say that.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO5

Smith - cross

1 Q. And you said you were confused by that, right?

2 But you're aware that in the intervening time, between
3 his first reports in this case and his most recent case, he did
4 work in the Davis case, right?

5 A. Right.

6 Q. And you're aware that in that case, he tried for the first
7 time to do the text string analysis on a much smaller universe
8 of stops?

9 A. I am.

10 Q. Are you aware that he testified at this trial that through
11 that exercise he learned, as social scientists often do,
12 through trial and error, that it was possible to now try to use
13 that analysis in this case?

14 A. He introduced that information here, yes.

15 Q. As an experienced social scientist yourself, isn't that
16 something that is actually considered good social science
17 practice, in other words, to learn through your experience to
18 maybe change your approach?

19 A. Well, if as a methodologist he had included an explanation
20 of that, in the report he made this 180 shift, with information
21 that I could have used to sort of see whether or not that was a
22 credible basis for 180 degree shift, which his expert opinion
23 was in two previous reports absolutely meaningless, totally
24 invalidates the findings, I would have had less to say on that
25 subject in my criticism of his second supplemental report. But

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO5

Smith - cross

- 1 I repeat what I also said in connection with this. I never
2 said that I thought that if he did go looking in there, that
3 would solve all the problems of challenges of adequately
4 capturing the totality of the circumstances that officers
5 encounter, or that the possibility that selection bias would
6 intrude in the way in which that analysis was conducted. All
7 of those things are still open for scrutiny.
- 8 Q. But you would agree that he didn't -- his text string
9 analysis was not -- he only focused on a subset of those stops
10 in which there was a text string, right? He didn't look at all
11 stops where there was a text string, right?
- 12 A. He didn't look at all stops, period. He looked at one
13 subcategory of the stops he was trying to classify, which were
14 the ones that were difficult to determine.
- 15 Q. On page 27 of his report, if we can pull up Exhibit 417,
16 doesn't he clearly define the categories from which he is going
17 to try to pull his sample from, he very specifically defines
18 the universe of stops from which he is going to pull his
19 sample, isn't that right?
- 20 A. He gives some information about it. As I recall, he
21 doesn't give any justification for stratification proportions
22 that he used. He doesn't explain how there would appear to be
23 almost 5 percent in his sample that didn't belong there. He
24 didn't explain that.
- 25 Q. Putting aside the 5 percent that you say didn't belong

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO5 Smith - cross

1 there, the stratifications, what you mean by that is he sampled
2 certain crime categories of stops more heavily than others,
3 right? For example, he sampled 5 percent of trespass, I think
4 he sampled 5 percent of --

5 A. Some of our --

6 MS. COOKE: I would object. This is beginning to
7 appear cumulative of the testimony Professor Purtell has
8 offered. I was allowing some leeway, but it seems we are
9 treading down a road of repetitiveness if we are going to get
10 into the sampling selection that Professor Purtell testified at
11 length.

12 MR. CHARNEY: The only reason is Professor Smith did
13 say that Professor Fagan did not clearly explain what he did
14 with the sampling.

15 THE COURT: Yes. Of the text string group?

16 MR. CHARNEY: That's what I am trying to do.

17 THE COURT: I think that's right. That's my memory
18 also. I thought this witness would be qualified to talk about
19 what he criticizes in his sampling.

20 MS. COOKE: Professor Purtell did address the
21 criticisms in the sampling at length.

22 MR. CHARNEY: Didn't he just say that Professor Fagan
23 didn't explain the stratification decisions he made.

24 THE COURT: He did just say that. You can follow up
25 with what he said. Try not to repeat what Purtell said.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO5 Smith - cross

1 MR. CHARNEY: Understood.

2 A. We spent a fair amount of time trying to figure out what
3 that 156,000 stops was, to determine finally there was typo.

4 Q. You are aware that that was actually a typographical error
5 and that the 84,000 that was in the code that you received is
6 in fact the 84,000 from which the sample was drawn, you're
7 aware of that?

8 A. When we got the code, we were able to determine that.

9 Q. So putting aside the 156 issue, in terms of the
10 stratification and the 5 percent versus 3 percent of certain
11 categories, you're aware that the categories that were sampled
12 at the 5 percent level actually appear more frequently in that
13 84,000 group than do the ones that were sampled at a 3 percent
14 rate? Are you aware of that?

15 A. I know that that's been asserted. I didn't see the numbers
16 in it.

17 Q. Did you ever look at those 84,000 to determine whether or
18 not trespass stops and property stops were more heavily
19 represented in that group than the other categories?

20 A. What I said was he didn't present that.

21 Q. Do you have any reason to think that it's not true, that
22 the categories that he more heavily sampled were in fact more
23 heavily represented?

24 A. Mr. Charney, if you're going to extrapolate from 3710 to
25 84,000 or 156,000, small details matter, and we didn't have the

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO5

Smith - cross

1 details that I am talking about that are missing to explain why
2 3 and 3 and why 5 and 5. And I don't recall that that in fact
3 lines up perfectly with the differences that you're describing.

4 Q. Just to correct the record, you are aware that he didn't
5 extrapolate to the full 84,000?

6 A. For some reason he couldn't, right.

7 Q. In an abundance of caution, he didn't want to --

8 A. He couldn't.

9 Q. He didn't want to overgeneralize, right?

10 A. But still, extrapolating from 3,000 to whatever number of
11 thousands he did is still an extrapolation that is going to
12 be -- every little bit of error in the base gets wider as you
13 get to a bigger group. Do it to a million, it's huge. But
14 it's an error term that needs to be included and addressed and
15 made explicit. Social science is not perfect, but most careful
16 social scientists announce their problems and sort of try to be
17 explicit about the potential biases that that introduces.

18 Q. I am almost done here.

19 I want to ask you about violent crime suspects. You
20 mentioned that, while the merged data only reports 63 percent
21 of all crime suspects for all crimes, that for the violent
22 crime category it's much higher, right?

23 But violent crime is the suspected crime in a really
24 small number of the stops, right?

25 A. That's correct.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO5

Smith - cross

1 Q. In fact, one of the largest category of stops is for
2 property crimes, right?

3 A. That's correct.

4 Q. And property crime is actually the crime category where the
5 percentage of suspect race known is extremely low, correct?

6 A. That's true.

7 Q. So again, does that give you any concern about the validity
8 of the crime suspect race data as your benchmark in doing this
9 analysis?

10 A. I have written about and I think I may have mentioned in my
11 testimony that there is this sort of, I think, mistaken notion
12 that we should expect a one-to-one correlation between crime
13 patterns and stop patterns in terms of the reason for the stop.
14 I indicate in my report that if the police are on the case, as
15 it were, because of a pattern of rapes in a public housing
16 building, the stops that they may be making to try to address
17 that, especially if the pattern that's been determined is that
18 outsiders are committing these offenses, is they will be making
19 more trespass stops. Do you consider that a property crime?

20 Q. Is that opinion in one of your reports?

21 A. Yes, it is.

22 Q. Which report is it in?

23 A. My most recent one.

24 MR. CHARNEY: Your Honor, I don't recall that opinion.
25 I want to be able to check the report. I guess if I do find

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO5 Smith - cross

1 that it's not in there, I would move to strike that opinion as
2 a new opinion. I am not saying it's not in there.

3 THE COURT: He actually says, I indicate in my report.

4 MS. COOKE: You want to ask him if he can identify the
5 location of the report?

6 MR. CHARNEY: If he can tell me now what page it is
7 on. I didn't want him to have to spend time leafing through
8 it.

9 A. I am convinced it's here. I can spend time turning pages
10 in front of you. I am willing to do that.

11 MR. CHARNEY: I don't really have any follow-up
12 questions on that point. So it seems like it can be something
13 we can figure out and then just strike that one answer if it's
14 not in there.

15 THE COURT: All right.

16 A. I suspect that I have said it before because I think it is
17 an important insight into the way in which current policing
18 tries to get ahead of crime rather than wait until after it
19 happens.

20 Q. Now, are you aware in the Ridgeway/McDonald article that
21 you cited in your report that they state that using violent
22 crime as your benchmark is too narrow of a benchmark because
23 officers make stops for a lot of other kinds of crime?

24 A. Yes, I am.

25 Q. So that doesn't give you any concern that using violent

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO5

Smith - cross

1 crime as your crime suspect raises your benchmark and maybe is
2 not the best benchmark to use?

3 A. I don't believe I said that it was a benchmark. I said, in
4 order to understand police deployment, police vigilance,
5 violent crime gets a higher priority than does -- I am
6 perfectly comfortable using all crime, but violent crime does,
7 in fact, tip the scale in terms of what the police do, when
8 they do it, how much they do it. So to leave it out and say,
9 oh, all crimes are created equal, that the police stop patterns
10 would be exactly the same for a burglary and a gang homicide
11 doesn't make sense to me.

12 Q. You would agree Professor Fagan didn't leave violent crime
13 out of his analysis, right?

14 A. No, but he collapsed them into a lot of different kinds of
15 crimes that aren't necessarily going to produce the same police
16 response in terms of stops.

17 Q. Let's look again then at table 5 of Professor Fagan's
18 Exhibit 417. Let me see if you can clarify for me.

19 Are you saying that the categories that he lists in
20 table 5 here for the crime categories, are you saying that
21 those are -- it's not appropriate to categorize crimes or group
22 them in that fashion, violent crime, property, drugs, trespass,
23 other, you're saying that's not appropriate?

24 A. I celebrated the fact that this was better than just
25 lumping all crimes certainly. But even this morning, I think I

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO5

Smith - cross

1 testified that I thought we should be aware that a homicide on
2 the record, which is a domestic violence homicide, and a gang
3 shooting would not, from my knowledge of the way police act,
4 produce anything like the same deployment and probable
5 attention to people looking for guns and so forth. So I
6 thought that collapsing all violent crime into one category was
7 an example of what I was talking about.

8 Q. Are you aware that the groups or the categories that
9 Professor Fagan includes in violent crime are the same
10 categories that the FBI includes in violent crime in their
11 universal crime reporting system -- or uniform crime reporting
12 system?

13 A. My recollection is they do both. They have rapes
14 separately. They have homicides separately. They have assault
15 separately.

16 Q. But when they do group them, they group them the same way
17 Professor Fagan does, right?

18 A. For other purposes. But how you use variables, how you
19 analyze them, are very particular to the questions you're
20 asking me. So if the questions you're asking are supposed to
21 somehow help us explain stop patterns, then you have to look at
22 how particular kinds of crimes are connected to particular
23 kinds of police responses. That's all I am saying.

24 Q. Now, with respect to using violent crime as your benchmark,
25 you're aware that that's what the RAND study used as its

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO5 Smith - cross

1 benchmark, right, just violent crime?

2 A. This is Professor Ridgeway who says that's not a good idea?

3 Q. But in his actual study he did for the NYPD, he used
4 violent crime suspects, right?

5 A. Yes. My recollection is because of the high proportion
6 known and the realization that that's the focus of police.

7 Q. Given the fact that violent crimes make up such a small
8 percentage of the stops, the suspected crimes and the stops
9 that the NYPD does, does that give you any concern about the
10 reliability of the methods used for the RAND study and
11 therefore the validity of the results of that study?

12 A. I believe I have answered that question not about RAND, but
13 in general. But I think what I said about it in general is
14 true of RAND.

15 Q. So is the answer, no, you're not concerned, or yes, you are
16 concerned?

17 A. I don't have a big concern about that, no.

18 MR. CHARNEY: One minute, your Honor.

19 No further questions, your Honor.

20 THE COURT: Ms. Cooke.

21 MS. COOKE: Just a couple, your Honor.

22 REDIRECT EXAMINATION

23 BY MS. COOKE:

24 Q. Professor Smith, Mr. Charney asked you questions on
25 cross-examination about the change in population over time

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO5 Smith - redirect

1 throughout New York City. Do you recall those questions?

2 A. Actually, I remember him asking change of population over
3 the course of a day.

4 Q. Yes. That's what I mean, over time, the course of the day,
5 the day of the week. You testified with respect to some
6 locations and times of day or week that you thought --

7 A. We had that whole other criticism of population change over
8 the period of the study.

9 Q. Yes.

10 With respect to locations in the city, Mr. Charney
11 asked questions about tourist attractions being the reason that
12 the population would fluctuate over time, being a day of the
13 week or an hour of the day. Do you recall that?

14 A. I do.

15 Q. Mr. Charney identified locations in the city where there
16 were homogeneous census tracts of majority minority
17 neighborhoods, which he indicated he didn't believe had tourist
18 attractions that would be drawing population fluctuations. Do
19 you recall those questions?

20 A. I do.

21 Q. Taking, for example, a neighborhood in Brooklyn such as
22 Brownsville, Brooklyn, would you agree that there might not be
23 as many tourist attractions drawing population changes there as
24 in Times Square?

25 A. Certainly.

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

D568FLO5 Smith - redirect

1 Q. But the presence or lack of a tourist attraction in
2 Brownsville, would that be the only reason that population
3 could fluctuate in Brownsville on a particular day, at a
4 particular time, or a day of the week?

5 A. Not at all.

6 Q. What reasons do you believe, or do you have an opinion to
7 believe that the population in a neighborhood such as
8 Brownsville, absent the presence of a tourist attraction, could
9 still fluctuate in population?

10 A. There could be events, you know, there could be parties,
11 there could be street festivals, there could be farmers'
12 markets. There could be a lot of different things that are not
13 Times Square quality tourist attractions, and not even attract
14 outside tourists, but they might attract people from other
15 parts of Brooklyn.

16 Q. What about people's just day-to-day activities in terms of
17 going to work or shopping?

18 A. Depending on where you live, to get to the subway you might
19 have to go there.

20 Q. Would you agree with me the population could move in and
21 out of Brownsville for day-to-day activities, like work or
22 school or shopping?

23 A. I would.

24 Q. Professor Smith, Mr. Charney asked you questions about
25 Professor Fagan's 2007 study. Do you recall those questions?

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO5

Smith - redirect

1 A. Yes.

2 Q. Did Professor Fagan's 2007 study, which used arrestee data
3 as a component of its benchmark, have missing data?4 A. The absence of most of the information about who the
5 suspects were would constitute missing data, yes.6 Q. Professor Smith, directing your attention to table 5 from
7 Plaintiffs' Exhibit 417, which is Professor Fagan's second
8 supplemental report regression analysis?

9 A. Yes.

10 Q. With respect to the violent crime category represented in
11 this regression, it doesn't include weapons, stops on suspicion
12 of weapons possession, correct?

13 A. That's separated, yes.

14 Q. Mr. Charney asked you questions about the relative small
15 percentage of stops that are on suspicion of violent crime. Do
16 you recall that?

17 A. Yes.

18 Q. Are you aware of the relative size of the number of stops
19 on weapons possession?20 A. It's not an insignificant number either. It's a sizable
21 number, isn't it? I think it is.

22 Q. I'm sorry?

23 A. It's a sizable number is my recollection. I don't have a
24 direct recall.

25 Q. So if you were to include weapons suspicion stops in

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO5 Smith - redirect

1 violent crime, would you describe that as a significantly sized
2 category of stops?

3 A. It's getting there, yes, ma'am.

4 MS. COOKE: No further questions.

5 MR. CHARNEY: Just a couple.

6 RECROSS-EXAMINATION

7 BY MR. CHARNEY:

8 Q. On the subject of Professor Fagan's use of arrestee data in
9 the 2007 study, again, you in your report, most recent report,
10 didn't you make a statement that by 2010 it was clear that
11 arrestee data was not the best data to use for this purpose?

12 A. Alone, yes.

13 Q. Again, Professor Fagan's decision to shift away from
14 arrestee data, isn't that just another example of a social
15 scientist trying to improve on his approach, to learn from his
16 past experiences and to do a better method the next time
17 around?

18 A. No. If he had shifted to the better measure of who is
19 committing crime, I would say that. But since he instead chose
20 to claim that having population data and crime data is all you
21 need to know really to know who is committing crime, I would
22 say that doesn't represent progress. His standard in his 2007
23 report, which I quote probably in every report that I have
24 written in response to his reports, was perfectly appropriate,
25 and he said we need to be able to index who is committing the

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO5

Smith - recross

1 crime, and he tried to do that with arrest data that he used
2 there. That standard still seems to be persuasive, and he
3 didn't use it in any of these studies.

4 Q. But he also did two things in the 2007 study. He also did
5 a similar analysis to table 5, in other words, he looked at
6 population and crime across precincts and tried to determine if
7 the level of stops in those precincts was affected by the
8 racial composition of those precincts, right?

9 A. Which is a problem.

10 Q. But he did do that in his 2007 study as well, right?

11 A. He did it in some of these reports as well. But in not
12 using suspect description, he missed many precincts, who are
13 now census tracts, where there is virtually no minority
14 population but significant numbers of blacks and Hispanics in
15 the suspect population and in the arrest population in those
16 non-minority precincts. And his using population and census
17 completely missed those cases.

18 Q. But aren't those also the census tracts with the lowest
19 stop activity?

20 A. Relatively. But in terms of their contribution to these
21 disparities, because they have very little minority population
22 and have stops done of minorities, and they have arrest
23 statistics of minorities, and they have suspect description of
24 minorities, they are sort of weighing into these equations in a
25 way that is missed by -- there is no way for him to capture

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO5 Smith - recross

1 that by using resident population, and that's what I am saying.

2 Q. Last question is on this --

3 A. And I found in 71 of the 75 precincts, in terms of violent
4 crime, in the 2011 report, blacks were stopped less often --
5 percentage of black stops was lower than their percentage of
6 being reported as suspects.

7 Q. You said in 71 of 75 precincts, for violent crime suspects?

8 A. Yes.

9 Q. Is this in your most recent report, this conclusion that
10 you just stated?

11 A. Yes, it is.

12 Q. Can you tell me what page? I have it in front of me.

13 A. That one is worth looking for. They are all worth looking
14 for, but since we are nearing the end, I will ask your
15 indulgence to find it.

16 Did you find it?

17 Q. No, I haven't.

18 A. If you find where I cite the reasonable suspicion stops as
19 a footnote, I think we will find it.

20 Q. I remember what you are referring to.

21 Here we go. Is it page 42 -- 43. I see it.

22 But with respect to just all crime suspects, isn't it
23 true that in 41 of the 76 precincts in 2011, Latinos were
24 stopped at rates higher than their share of the crime suspect
25 population?

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO5 Smith - recross

1 A. I show Hispanics represent 30.8 of known violent crime
2 suspects and the 34.8 of individual stops for violent crimes.

3 Q. Not violent crimes.

4 A. I think I am in the all crime suspects.

5 Q. On page 42. It says, Latinos are stopped at rates equal or
6 lower than their share of criminal population in 35 of 76
7 precincts. Which if I do the math, that means in the other 41,
8 they are being stopped at rates higher than their share of
9 criminal activity.

10 THE COURT: Same or higher.

11 Q. Same or higher.

12 A. There is a last sentence in that. And no percentage does
13 the percent of African-American stops for violent crimes exceed
14 their --

15 Q. I am talking about just all crime categories.

16 A. I put that in there, Mr. Charney, because I felt that it
17 was fair to report both. But I also will tell you, as I have
18 said a number of times before here, that violent crimes provoke
19 more stops.

20 Q. Even though most stops are not on suspicion of violent
21 crime?

22 A. Again, that direct one-to-one relationship is something I
23 have spoken to.

24 MR. CHARNEY: No further questions.

25 MS. COOKE: No further questions.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO5

1 THE COURT: Thank you, Dr. Smith.

2 Before we go, I want to talk a little bit about
3 scheduling. I don't know if you have had a chance to read
4 Judge Pitman's decision. It was issued this afternoon. He
5 e-mailed me. The long and short is that he has held that, with
6 terribly minor exceptions, Stewart should not be allowed to
7 testify at all. Very minor exceptions, which would take ten
8 minutes.

9 So what I wanted to note is when is Sam Walker
10 testifying? He is not on the last schedule.

11 MR. CHARNEY: At the close of defendants' liability
12 witnesses, he would be the first remedy witness.

13 THE COURT: When is that, after Chief Hall? Is that
14 after Chief Hall?

15 MR. CHARNEY: I believe so.

16 THE COURT: So it's basically where Stewart is listed
17 now. Stewart is listed now for May 14 and 15. What you would
18 do essentially is be putting Walker in there, and then to the
19 extremely limited extent that Judge Pitman held, we would hear
20 from Stewart. But as I have said, he has left in so little.

21 MS. GROSSMAN: We haven't had a chance to read the
22 opinion.

23 THE COURT: I realize. I just got it by e-mail this
24 afternoon.

25 MS. GROSSMAN: We reserve the right to move for

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D568FLO5

1 preclusion of Walker.

2 THE COURT: Why? Wait a minute. I don't see that one
3 thing has anything to do with the other. Plaintiffs moved
4 timely and said they read Stewart's lake-breaking report and
5 said it really went to liability and really didn't go to
6 remedies. I said I didn't want to look at it because I am a
7 nonjury trial trier of the facts. A magistrate judge would
8 review it. I have skimmed it. He has basically said it's all
9 about liability, there is no remedies there at all. So it's a
10 liability report, which you know is untimely, period. To say,
11 now we think we suddenly have the right to move to strike
12 Walker, that just sounds like, you know, I lost one, I want one
13 back. Come on. They are not related at ail. You have had the
14 Walker report for how long?

15 MR. CHARNEY: March 5.

16 THE COURT: It's absolutely untimely to make. Walker
17 is a remedies expert. In fact, in Judge Pitman's decision, he
18 summarizes what Walker does. He talks about all of the
19 potential remedies. That's what Walker addresses. Here is his
20 view of this remedy and that remedy. He goes through six or
21 seven or eight different remedies. There is no basis to move
22 now to strike Walker, and I won't allow any such motion.

23 Mr. Kunz.

24 (Continued on next page)

25

D569flo6

1 MR. KUNZ: I was just going to say that our motion in
2 response to the plaintiffs' motion was basically arguing that
3 the two reports were on par.

4 THE COURT: But they're not. Not at all.

5 Judge Pitman's, which you haven't seen, short opinion
6 summarizes I don't know if he's a professor -- Professor Walker
7 as discussing potential remedies. He talks about remedies that
8 are used in other districts. He talks about why he thinks they
9 are good remedies here. It's very detailed as to remedy.

10 Judge Pitman reviewed the other report and said
11 nothing at all. It's all about liability but -- or whatever it
12 is. It's not about remedy. There is no mirror imaging here.
13 You have to take a look.

14 But the point is it's way too late to say well now I
15 want to move to strike Walker because they moved to strike
16 Stewart and were successful.

17 No. You've had that report since March. This is
18 mid-May. This is eight weeks later in the middle or end of
19 trial.

20 When I got the motion to preclude Stewart, which is
21 maybe a week ago, I immediately, immediately acted, immediately
22 sent it to the magistrate judge. And the magistrate judge
23 worked over the weekend, worked very hard, got it done.

24 There is no basis now to make any motion directed to
25 Walker and I won't accept any such motion. Period.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo6

1 MS. GROSSMAN: Can I just have one moment to confer?

2 THE WITNESS: Can I --

3 THE COURT: You're done.

4 (Witness excused)

5 MR. KUNZ: I didn't see -- I just checked the docket
6 sheet. I did not see the order on there yet.

7 MS. GROSSMAN: So what's our remedy in terms of
8 appealing to your Honor?

9 THE COURT: It's not to my Honor. I mentioned that
10 earlier. I said -- hold on.

11 I think I said at the time that your only remedy was
12 to go to the Part I judge if you wanted an Article III ruling
13 because I really think, again, that to read a report that I'm
14 not supposed to be reading doesn't make sense. That's the
15 difficulty of a nonjury trial.

16 MS. GROSSMAN: Yes, your Honor. If I just may?

17 THE COURT: I'll do it, but I suspect, you know, based
18 on the summary, I'm just going to -- if you wanted an
19 independent view of somebody studying both reports all over
20 again.

21 MS. GROSSMAN: Yes. We may need -- the reason I
22 didn't --

23 THE COURT: I think at some point if you go to the
24 Part I judge, you have to accept that's the Article III judge
25 you're going to get. There's not another judge, maybe that

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo6

1 judge, higher. Either you're coming here and I'll do it. I
2 don't think it would be terribly effective. Or you'll go to
3 the Part I judge. But after that I don't think there's
4 anywhere to go.

5 MS. GROSSMAN: Without getting into the substance, I
6 think that's probably clear from the papers, we believe that
7 our expert is responding point by point.

8 THE COURT: I know you do. But that's why I asked
9 Judge Pitman to spend the time reading both reports thoroughly
10 side-by-side. He's a very experienced, very fair, very good
11 magistrate judge and he read these side-by-side. That's what
12 he did.

13 I asked him to do that. That's what he did. He
14 reached his conclusion totally independent of me. Believe me.
15 I had nothing to do with it. I forwarded the two letters. You
16 forwarded the two reports. Got nothing to do with me.

17 MS. GROSSMAN: Just in terms of process you're
18 suggesting that if we wanted to appeal Magistrate Pitman's
19 ruling.

20 THE COURT: You can appeal it here or you can appeal
21 it to the Part I judge.

22 But appealing it here has inherent problems: A, I
23 would have to read the reports side-by-side and know everything
24 it says, which I don't know that plaintiffs would think it's
25 appropriate if it's going to be precluded, but I'll do it if

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo6

1 they have no problem with it.

2 MS. GROSSMAN: I just wanted to know what our options
3 are. That's all.

4 THE COURT: I can't think of a third option.

5 MS. GROSSMAN: So one option is to appeal to your
6 Honor and another is to an Article III judge.

7 We need a chance to confer and read the opinion.

8 THE COURT: You need to move extraordinarily quickly.
9 If you're going to do that, if you're going to make that
10 decision after you review his opinion, which I did scroll
11 through. It's seven pages double-spaced, doesn't take a lot of
12 reading. But do what you have to do because we are in the
13 middle of a trial.

14 And when I saw your latest schedule, I didn't see
15 Walker. So I didn't know when he was intended.

16 MR. CHARNEY: He was intended to go before Stewart.

17 THE COURT: I understand.

18 MR. CHARNEY: Obviously it's your Honor's decision
19 whether to accept the appeal or not.

20 We would strongly prefer that it go to a Part I judge
21 for all the reasons that you suggested.

22 THE COURT: But I always thought that, in the sense of
23 referring it to the magistrate judge. I've tried hard not to
24 read material which is going to be precluded from either side.
25 On some exhibits I've said I haven't studied the exhibit.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo6

1 MS. GROSSMAN: Your Honor, in terms of if we were to
2 present this to your Honor, it wouldn't be about precluding the
3 plaintiffs' report, right? It would be to revisit whether both
4 experts --

5 THE COURT: I have to read a report that has been
6 recommended that I not see.

7 MS. GROSSMAN: Well I was just addressing
8 Mr. Charney's concern about the decision that you might
9 preclude --

10 THE COURT: No. No. That's not what he said at all.
11 He doesn't want me to read material that is likely to be
12 precluded. The magistrate judge has recommended precluding the
13 Stewart report.

14 I'm the trier of the fact. I'm not anxious to read
15 precluded material. Obviously, if we had a jury we wouldn't
16 show them evidence that the court ruled they couldn't see.
17 That's why -- I realized it was sensitive from the start and
18 referred it to the magistrate judge.

19 MS. GROSSMAN: I guess there are very fine lines, your
20 Honor, that have been drawn throughout the seven to eight weeks
21 of trial here.

22 THE COURT: Correct and I think -- excuse me. Excuse
23 me. I think I've consistently said, "Oh, please don't hand me
24 that exhibit. I don't wish to look at it unless it's received.
25 That's -- I've said it so many times you go through the

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo6

1 transcript. Find those phrases.

2 MS. GROSSMAN: There are those times as well.

3 THE COURT: What are the other times, Ms. Grossman?

4 MS. GROSSMAN: I'd have to look at the thousand of
5 pages of the transcript.

6 THE COURT: What are the other times you are alluding
7 to?

8 MS. GROSSMAN: There are a few times where you've --
9 there are many times where you've looked at criminal histories
10 and you say that you're able to make assessments --

11 THE COURT: You mean before we started trial a year or
12 two ago?

13 MS. GROSSMAN: No. I'm just talking --

14 THE COURT: There's been no criminal histories during
15 the trial. This was all before the trial over the many years,
16 as motions in limine, etc., etc. Once -- probably before I
17 knew it was a nonjury trial, I might add. When I looked at
18 criminal histories was way before the plaintiffs' announcement
19 this was nonjury. It was long ago.

20 During this trial I've repeatedly and carefully said I
21 don't wish to look at evidence that's not going to be received
22 because I am now the sole trier of the fact. So you find it
23 for me.

24 All right. I guess that's enough conversation for
25 tonight. See you tomorrow.

SOUTHERN DISTRICT REPORTERS, P.C.

(212) 805-0300

D569flo6

1 Just to save you time, Mr. Kunz, my clerk said he'll
2 just mail -- my clerk will forward it right away.
3 MR. KUNZ: I just checked again and it's now up.
4 THE COURT: So which do you want?
5 MR. KUNZ: We have it.
6 THE COURT: Very good. Thank you.
7 (Adjourned to May 7, 2013 at 10:00 a.m.)
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

INDEX OF EXAMINATION		
1		
2	Examination of:	Page
3	DENNIS C. SMITH	
4	Direct By Ms. Cooke . . . . .	.5994
5	JEFFREY FAGAN	
6	Direct By Mr. Hellerman . . . . .	.5999
7	Cross By Ms. Cooke . . . . .	.6038
8	Redirect By Mr. Hellerman . . . . .	.6043
9	ROBERT PURTELL	
10	Direct By Ms. Cooke . . . . .	.6044
11	Cross By Mr. Charney . . . . .	.6052
12	DENNIS C. SMITH	
13	Direct By Ms. Cooke . . . . .	.6056
14	Cross By Mr. Charney . . . . .	.6121
15	Redirect By Ms. Cooke . . . . .	.6185
16	Recross By Mr. Charney . . . . .	.6189
17	PLAINTIFF EXHIBITS	
18	Exhibit No.	Received
19	566 . . . . .	.6023
20	567 . . . . .	.6028
21	DEFENDANT EXHIBITS	
22	Exhibit No.	Received
23	H13B . . . . .	.5996
24	N14 . . . . .	.6043
25		

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

