UNIT SOUT	FLO1 PED STATES DISTRICT COURT PHERN DISTRICT OF NEW YORK	
DAVI	D FLOYD, et al.,	
	Plaintiffs,	
	V •	08 CV 1034(
CITY	OF NEW YORK, et al.,	
	Defendants.	
	х	New York, N April 5, 20 10:00 a.m.
Befo	ore:	
	HON. SHIRA A. SC	HEINDLIN,
		District Ju
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(Trial resumed)

 $\,$ MS. PUBLICKER: The city defendants submitted a letter last night. We wish to know if you would like to discuss that today or at a later date.

THE COURT: I read it. What is the rush?

MS. PUBLICKER: Plaintiffs have asked that city defendants provide their deposition counterdesignations by next week. So that's the only real rush, your Honor.

 $\,$ THE COURT: Do the plaintiff wish to respond in writing or orally?

MR. MOORE: He is not scheduled until the 17th. We are still endeavoring to see if he will come up. He is in North Carolina. He is outside of the 100 mile limit. We are going to try to do it. If we can't get him up here, we will tell the city, and he has given deposition in $50\,(h)$ hearing.

THE COURT: You will need some proof of

unavailability. The man was working in New York. He was deposed in New York.

19 I don't want to get into it now. Let's continue with 20 Professor Fagan.

Ms. Cooke.

22 JEFFREY FAGAN, resumed.

23 CROSS-EXAMINATION (Cont'd)

24 BY MS. COOKE:

Q. Professor Fagan, when we left off yesterday we were SOUTHERN DISTRICT REPORTERS, P.C. (212) 805-0300

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discussing your reclassification of the 84,000 or a portion of

- the 84,000 unable to be generalized in your 2012 report?
- 3 A. Yes.
- 4 Q. We had discussed that of the number you were able to
- 5 reclassify, approximately 55,000, about half of those moved
- 6 into the apparently justified category and about half moved
- 7 into the apparently unjustified. Do you recall that?
- 8 A. I believe the number was 57,000, but the split is about
- 9 right.
- 10 Q. I have placed on the screen a demonstrative slide that your
- 11 counsel used during your direct examination. It's a reflection
- of the January 2010 through June of 2012 reasonable suspicion
- 13 analysis that you conducted, correct?
- 14 A. I recognize it, yes.
- 15 Q. This slide reflects the reclassification of the 57,000
- 16 formerly not generalizable into the apparently justified or
- 17 apparently unjustified?
- 18 A. Yes. They incorporated it.
- 19 Q. And the total number of apparently unjustified from this
- 20 1.6 million UF-250s is 5.89 percent, correct?
- 21 A. The total number of unjustified, yes.
- 22 Q. The total number of remaining not generalizable is 6.15
- 23 percent?
- 24 A. Yes.
- 25 Q. And the total percentage of apparently justified reasonable SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO1 Fagan - cross

- 1 suspicion 250s is 89.95 percent?
- 2 A. That's correct.
- 3 Q. I have placed on the screen another slide from the
- 4 demonstrative your counsel used during your testimony. This is
- 5 your reasonable suspicion analysis results from the 2004 to
- 6 2009 2.8 million UF-250s, correct?
- 7 A. Yes.
- 8 Q. Here we see that the apparently unjustified total
- 9 percentage is 6.15 percent, correct?
- 10 A. Yes.
- 11 Q. The total not generalizable category has 14.93 percent?
- 12 A. Yes.
- 13 Q. And the total apparently justified UF-250s, according to
- 14 your analysis, is 78.92 percent, correct?
- 15 A. Correct.
- 16 Q. It's my understanding that for this analysis covering 2004
- 17 through 2009, you didn't conduct an analysis of the other
- 18 narrative text string for those not generalizable UF-250s,
- 19 correct?
- 20 A. That's right.
- 21 Q. So if you were to conduct the other text string narrative
- 22 analysis for categories not generalizable for this data period,
- 23 would you expect to see similar results from the 2010 to 2012?
- 24 A. I wouldn't speculate. I have no idea what the quality of
- 25 the text strings was back then. We also don't know the SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO1 Fagan - cross

1 combinations in which the text strings -- again, the analysis

- 2 that we did in the later period was based on only the text
- 3 strings in cases where the analysis of the text string would
- 4 determine whether the stop was sorted into one of the other two
- 5 categories. I don't know what the volume of those cases would
- 6 be here. I don't know what their composition would be. I
- 7 don't know the quality of the text string data. I wouldn't
- 8 venture a guess.
- 9 Q. My understanding is also correct that you didn't analyze
- any narrative text strings for any of the UF-250s in this data
- 11 period that fell into the apparently unjustified category,
- 12 correct?
- 13 A. We had a hearing in this court, and I forget exactly the
- 14 date. I believe it was sometime in early 2012, either February
- or March. And at the Court's request, we produced a sequence
- 16 of text strings to give an example of how diverse and difficult
- 17 it might be to work with.
- 18 Q. My question is, you didn't perform the other narrative text
- 19 string analysis on any of the UF-250s that fell into the
- 20 apparently unjustified category in this figure on the screen?
- 21 A. Correct.
- 22 Q. But there are, in fact, UF-250s falling in the apparently
- 23 unjustified category which have other narrative text strings
- 24 populated, correct?
- 25 A. That would, and where their ultimate classification might SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO1 Fagan - cross

- 1 depend on the text string.
- 2 Q. So, in fact, some number of the 6.15 percent could move out
- 3 of apparently unjustified into the other two categories?
- 4 A. That's not going to happen. They are apparently
- 5 unjustified on a fairly strong ground.
- 6 Q. You didn't analyze the narrative text strings, correct?
- 7 A. No. But the way we set up a coded classification, I don't
- 8 believe that we would have wound up with others in there -- I
- 9 don't believe we would have wound up with others in there.
- 10 Q. You didn't perform any similar analysis on the apparently
- 11 unjustified UF-250s in your 2010 to 2012 report that had
- 12 populated narrative text strings?
- 13 A. The only ones we analyzed were the ones where the
- 14 determination of the classification would depend on the context
- of the text strings. We set those rules out fairly clearly in
- 16 our report.
- 17 Q. So you don't know whether or not any of those apparently
- 18 unjustified UF-250s would move after an analysis of the
- 19 narratives, do you?
- 20 A. The way we constructed the unjustified category, it's
- 21 extremely unlikely that they would move.
- 22 Q. You testified that high crime area is used indiscriminately
- 23 by officers according to your review of the UF-250s?
- 24 A. Yes.
- Q. You make this claim because of the frequency of the SOUTHERN DISTRICT REPORTERS, P.C. (212) 805-0300

D458FLO1 Fagan - cross

1 appearance of that check box in the data, correct?

- 2 A. Yes.
- 3 Q. And your support for this assertion is the fact that when
- 4 you grouped census tracts by quintiles, you saw the same
- 5 relative frequency of the appearance of high crime area
- 6 regardless of the overall crime rate of the census tract?
- 7 A. Correct. That was part of it. The other part was simply
- 8 the frequency with which it was checked off.
- 9 Q. You reported that quintile analysis in figure 13 of your 10 2012 report, Plaintiffs' 417, correct?
- 11 THE COURT: Wait a minute. What page is that? 12 MS. COOKE: Page 33 of Plaintiffs' 417.
- 13 Q. Is that correct?
- 14 A. Yes. That's the right figure.
- 15 Q. While you report that the percent of the box high crime
- area is represented in here, you know that the UF-250 doesn't
- 17 contain a box that reads high crime area, correct?
- 18 A. I know the precise language that the box states, yes.
- 19 Q. The precise language of the box is area has high incidence
- 20 of reported offense of type under investigation, isn't that
- 21 right?
- 22 A. Yes. That's exactly what it says.
- 23 Q. And the reported offense referred to is the observed
- 24 suspicious behavior indicative of a felony or penal law
- 25 misdemeanor that is observed by that officer completing that SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO1 Fagan - cross

- 1 particular UF-250, isn't that right?
- 2 A. In other words, it's supposed to be high crime that
- 3 correlates with the suspected crime for the stop.
- 4 Q. Correct. So, in fact, an officer could be marking area has
- 5 high incidence of reported offense on a UF-250 for the reason
- 6 that a particular building that the stop took place, or a
- 7 corner or a block within a census tract, is in fact an area
- 8 where it has a high incidence of that reported offense as
- 9 completed on the UF-250, correct?
- 10 A. It could also be beat, sector, patrol, any area. The
- 11 concept of area is poorly defined. It doesn't say building.
- 12 It says area. Area has never been precisely defined in any of
- 13 the documents that we have ever reviewed.
- 14 Q. Professor Fagan, I appreciate if you could answer my
- 15 question. Could an officer in fact be marking that the area
- has a high incidence of the reported offense under
- investigation because the particular building where the person
- 18 was stopped is a high crime building for that offense?
- 19 A. With respect to a building, it's possible.
- 20 Q. And that would be possible notwithstanding the fact --
- 21 A. However, I don't think it's possible almost 60 percent of
- 22 the time.
- 23 Q. That would be possible notwithstanding the fact that the
- 24 census tract crime rate overall might not fall into the high
- crime quintile on your figure 13, correct?

SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO1 Fagan - cross

1 A. Yes. It doesn't obviate my point. It happens 60 percent 2 of the time. It's a pretty high rate.

Q. Thank you, Professor Fagan.

In your reports offered in this case, you use a combination of crime and population by race as a benchmark for your regression analyses, correct?

- A. We use population by race. We use total population and
- 8 then we decompose the race by percentages and use the overall crime rate, and we decompose crime rate by particular crimes.
- 10 Q. You perform separate regressions on table 5, as we looked,
- 11 that had trespass, violence, weapons, that's what you're
- 12 referring to?
- 13 A. Yes.

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- Q. You are aware that defendants' experts, Professor Dennis
- 15 Smith and Professor Robert Purtell, in their reports argue that
- 16 the inclusion of suspect description data makes for a more
- 17 complete benchmark for this type of disparate impact analysis?
- 18 A. I have read that statement.
- 19 Q. In fact, the defendants' experts used suspect description
- 20 data from the merged arrest and complaint files for an
- 21 alternate regression analysis, isn't that correct?
- 22 A. Which alternate regression analysis?
- 23 Q. The alternate regression analysis in Defendants' Exhibit
- 24 H13, Exhibit I, that you reviewed yesterday during your
- 25 testimony.

D458FLO1 Fagan - cross

- 1 A. Yes.
- 2 Q. And you're aware --
- 3 A. Is it possible for me to look at that while we are having a
- 4 conversation about it?
- 5 Q. Yes. There you are.
- 6 A. Thank you.
- 7 Q. Professor Fagan, you received the merged files that the
- 8 defendants used for their alternate regression, correct?
- 9 A. I have them, yes.
- 10 Q. Those merged files contain suspect data for all crimes,
- 11 correct?
- 12 A. Yes.
- 13 Q. So it's not just --
- 14 A. When a suspect is known.
- 15 Q. When a suspect is known, it's provided for any crime,
- 16 correct?
- 17 A. Correct.
- 18 Q. It's not just violent crimes contained in the merged
- 19 database?
- 20 A. Correct.
- 21 Can you restate that? It's based on suspects who are
- 22 arrested and then matched up to a crime. We discussed this
- 23 yesterday on direct.
- 24 Q. I believe you testified that approximately 63 percent of
- 25 the suspect description data was available from the merged SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO1 Fagan - cross

- 1 database, correct?
- 2 A. Yes.
- 3 Q. Those 63 percent suspect data come from a variety of the
- 4 crime categories, including violent crimes, correct?
- 5 A. Including violent crimes, yes.
- 6 Q. So suspect description data is available from the merged
- 7 database for many crimes in addition to violent crimes?
- 8 A. To varying degrees, sure. We present those results in one
- 9 of our tables in the report.
- 10 Q. I believe it's the seven crimes categorized?
- 11 A. We collapsed crimes into categories.
- 12 Q. Defendants' experts are demonstrating in their alternate
- 13 regressions what the effect of the inclusion of the omitted
- 14 suspect description variable had on your regression analysis,
- 15 isn't that right?
- 16 A. Well, they suggested an alternate model.
- 17 Q. An alternate model that presented the results of the
- 18 inclusion of a variable for suspect description, correct?
- 19 A. It did, yes.
- 20 Q. And you're aware from your review of Exhibit I that
- 21 defendants' experts' alternate regression analysis reports that
- 22 the effect of race on stops is either reduced or becomes
- 23 statistically insignificant, correct?
- 24 A. Well, I don't know that I would call it statistically
- insignificant. In theirs? Yes, they do change it. SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO1 Fagan - cross

1 Q. Because the report for percent black in the alternate regression analysis provided by the defendants' experts is

3 1.93, correct?

A. Yeah.

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5 Q. I'm sorry.

THE COURT: What did you just say? You changed something. What did you say?

MS. COOKE: I was reading the wrong line. THE WITNESS: She is reading from the table.

10 THE COURT: What table?

11 When you corrected yourself, what did you say? 12 Q. I said, the defendants' experts are reporting that the

13 effect of race on stops is either reduced or becomes

statistically insignificant in this regression, correct? And the percent black increasing in the column titled alternative

16 total stop and frisk is a negative .16, correct?

17 A. Correct.

That's what the table says. OK.

19 Q. You co-authored a 1999 report for the attorney general

20 which compared patterns of stops with the population

21 distribution of New York City for the purpose of examining

22 racial disparity, correct?

23 A. Yes.

24 Q. In that report, you used population as a benchmark for your

25 analyses?

D458FL01 Fagan - cross

- A. We used population and crime, both.
- Q. You did not use suspect description as a variable in your
- 3 analysis?
- 4 A. We used arrestees.
- 5 Q. Are you familiar with the 2007 RAND report which analyzed
- 6 data on street encounters in New York City in 2000?
- 7 A. I testified to that yesterday I believe.
- 8 Q. That report addressed issues of whether or not the
- 9 statistics pointed to racial bias in officers' decisions to
- 10 stop pedestrians and whether the officers were particularly
- 11 intrusive when stopping non-whites, correct?
- 12 A. That's what the testimony was, yes. That's what I 13
- testified to.
- 14 THE COURT: You need to keep your voice up.
- 15 Q. The RAND report also made recommendations for addressing
- 16 potential problems that were identified in the analysis,
- 17 correct?
- 18 A. Potential problems identified in what analysis?
- Q. In the RAND analysis and conclusions. 19
- 20 A. I am not following your question.
- Q. They made potential recommendations for addressing any 21
- 22 potential problems with respect to the stops made by NYPD
- 2.3 officers in the course of their review and investigation,
- 24 correct?
- 25 A. They did, yes.

D458FLO1 Fagan - cross

1 Q. The RAND report compared the racial distribution of stops

- 2 to a variety of benchmarks, correct?
- 3 $\,$ A. Well, they compared it to -- there were variations on one
- 4 additional benchmark.
- 5 Q. They compared an officer's stop patterns with the benchmark
- 6 constructed from stops in similar circumstances made by other
- 7 officers, right?
- 8 A. You're referring to the internal benchmark. I was
- 9 referring to the external benchmark.
- 10 Q. The RAND report reflects both internal and external
- 11 benchmarking analyses?
- 12 A. That's what I just said.
- 13 Q. With respect to addressing external benchmarks, the RAND
- 14 report challenged your early work on stop, question and frisk
- 15 where you claim to find racial and ethnic bias in patterns of
- 16 stops in New York City?
- 17 A. They offered their own version of the analysis. They
- 18 actually did not actually perfectly replicate our analysis. So
- 19 it's kind of hard to make a direct one-to-one comparison.
- 20 There were some small differences.
- 21 Q. The RAND report did in fact criticize your 1999 attorney
- 22 general's report's use of racial distribution in the population
- as a benchmark for analyzing racial patterns of stops in New
- 24 York City?
- 25 A. As the sole benchmark, sure.

D458FLO1 Fagan - cross

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Q. Your report concluded that while using more precise benchmarks do not eliminate the observed racial disparities, they do indicate disparities are much smaller than the raw statistics would suggest, correct?

 $\,$ MR. MOORE: Objection, your Honor. I think at this point counsel is reading the RAND report's conclusions into the record.

THE COURT: Questions aren't evidence, only answers. That's what we tell juries. I certainly know the difference. If that's what she is doing, I am not paying attention to the question as evidence. It's not.

 $\ensuremath{\mathsf{MR}}.$ MOORE: I just note that we had objected to the RAND report coming in for its truth.

THE COURT: It's not going to be considered as substantive evidence. I said I would take it solely to show notice what was received by the city. That's all I am going to consider it for. I didn't realize until you told me that her questions were quoting the RAND report. I know she was reading them, which isn't totally helpful. It's hard to follow when people read.

It's hard to follow your questions. They are long. You're reading them. You're speaking too fast. I am having trouble following this whole exam.

MS. COOKE: I will slow down.

Q. I don't believe I got an answer to the last question.

SOUTHERN DISTRICT REPORTERS, P.C.

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D458FL01 Fagan - cross

THE COURT: Why don't you repeat it? 2

- A. With some trepidation, read it again.
 - Q. The RAND report concluded that while using more precise benchmarks do not eliminate observed racial disparities, they indicate the disparities are much smaller than the raw data suggests, correct?

THE COURT: That's the question? You're asking him to say what the RAND report said? Then that is putting into evidence the RAND report. That's not right. By his saying yes, he adopts your question. I am not taking the findings of the RAND report. Now I understand. The objection sustained. Q. You testified yesterday, Professor Fagan, that your overall opinion regarding the conclusions that RAND reached, when

- 13
- 14 reviewed by an experienced police policy analyst, could not 15 have been agreed to, correct?
- 16 A. Right. They used violent crime suspects. I think somebody
- 17 would have looked at those data and seen that those data were
- 18 available only in, according to our analysis, roughly 55
- 19 percent of the cases. So there is a very large body of missing 20 cases.
- 21 Q. You're aware that the plaintiffs' police policy and
- 22 practices' expert Lou Reiter relies on the RAND report for his
- 23 expert report in this case?

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- A. I don't recall reading Mr. Reiter's report. In fact, I 24
- 25 have not read Mr. Reiter's report.

D458FLO1 Fagan - cross

1 Q. The field of criminal justice has discredited use of

- population as a benchmark, correct?
- 3 A. Ms. Cooke, we have had this conversation in several
- 4 hearings. We don't use population as an exclusive benchmark.
- 5 It is one of two benchmarks. We use crime and we use
- 6 population. Population tells us different things than crime
- 7 does, and we use both. So characterizing my analysis as using
- 8 a population benchmark, without qualifying it as having two
- 9 benchmarks, they are covariant, I think is not representing my
- 10 work accurately.
- 11 Q. My question was, the field of criminal justice has
- 12 discredited the use solely of population as a benchmark,
- 13 correct?
- 14 A. I don't think the field has reached a conclusion. I don't
- 15 think this has gone to high-level scientific panels which would
- 16 sort through the evidence, and high-level panels, for example,
- 17 such as the National Academy of Sciences, which often does
- 18 this, where I was a member for six years. So there is no
- 19 consensus on the discreditation of that benchmark. And
- 20 particularly when people use the benchmarks in complicated and
- 21 as one of multiple dimensions or indicia of a benchmark. So I
- 22 think the statement is simplifying a fairly complex dialogue in
- 23 the social science literature.
- 24 Q. You testified two days ago that the use of population alone
- as a benchmark would be disfavored?

D458FLO1 Fagan - cross

1 A. Alone, sure. I still stand by that statement. I just said

- 2 it a couple of seconds ago.
- 3 Q. In 2007, you co-authored a paper with Andrew Gelman and
- 4 Andrew Kiss entitled, "An analysis of the New York City Police
- 5 Department's stop and frisk policy in the context of claims of
- 6 racial bias, " correct?
- 7 A. Yes.
- 8 Q. And in that paper, your aim was to address the question of
- 9 whether police were disproportionately stopping ethnic
- 10 minorities, correct?
- 11 A. Yes.
- 12 Q. In that paper --
- 13 A. Relative to our best understanding of their crime rates
- 14 within particular areas.
- 15 Q. In that paper, you used the prior year's NYPD arrest data
- 16 categorized by ethnic group and crime type, correct?
- 17 A. That was all the data that was given to us. So the answer 18 is yes.
- 19 THE COURT: Again, that data would show that for some 20 people they didn't know the ethnicity of the suspect, is that 21 true or not true?
- 22 THE WITNESS: We used the data on arrests, your Honor, 23 in that study, the attorney general study. Then in a later 24 publication that derived from that study, we used the arrest 25 data because those were the only markers of suspect race that

SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO1 Fagan - cross

1 were available to us.

THE COURT: So that would be 100 percent known?

THE WITNESS: 100 percent known, given whatever the clearance rate was, whatever percentage of crimes resulted in arrests, that was our proxy for overall crime.

- Q. So a percentage of the suspect description was missing from the data you used in that 2007 paper?
- 8 A. No. The arrest data, they knew the suspect race in that
- 9 data because an arrest had taken place. There might have been
- 10 race unknown, a small number of cases where the race was
- 11 unknown. But if an arrest took place, they had the suspect in
- 12 $\,$ front of them, they recorded the race, and it appeared in the
- date that was given to us.
- 14 Q. You had determined that that data you used for your 2007
- 15 paper was the best available measure of local crime, correct?
- 16 A. I think that's accurate. It's the best available at that
- 17 time.

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- 18 Q. In doing so, you were also directly addressing concerns of
- 19 former NYPD Commissioner Howard Safir that stop rates be
- 20 related to ethnicity of crime suspects, correct?
- 21 A. As a policy matter and how we framed the report, we wanted
- 22 to respond to the ongoing political dialogue. This was done
- 23 for the attorney general. This wasn't done for a scientific
- 24 publication. Later we did, but not in the report.
- Q. This is your 2007 paper with Gelman and Kiss? SOUTHERN DISTRICT REPORTERS, P.C. (212) 805-0300

D458FLO1 Fagan - cross

- 1 A. Right.
- 2 Q. You were, in fact, responding to the fact that Commissioner
- 3 Safir's concern was that stop rates be related to the ethnicity
- 4 of crimes suspects, correct?
- 5 A. I believe we quoted him on that, yes.
- 6 Q. In that paper, you also acknowledged that perhaps the more
- 7 relevant comparison is the number of crimes committed by each
- 8 ethnic group, isn't that right?
- 9 A. In an ideal world, we would love to know that as part of
- 10 the research process, sure.
- 11 Q. But you have not included a variable of suspect description
- in your regression analysis here in Floyd, correct?
- 13 A. Suspect description, no, for the reasons we stated on the
- 14 record. We just don't know it in too many cases.
- 15 Q. You are familiar with the concept of clearance rate,
- 16 correct?
- 17 A. Yes.
- 18 Q. That's the ratio of crimes known to the police that result
- in an arrest, correct?
- 20 A. It's the rate at which an arrest is made pursuant to a
- 21 crime complaint.
- 22 Q. You have argued in your Floyd reports that using
- 23 information about race and ethnicity of crime suspects would be
- 24 objectionable because the race of some suspects is unknown,
- 25 correct?

D458FL01 Fagan - cross 1 A. The race of a third of the suspects is unknown, as a 2 percentage of crime. 3 THE COURT: In some crime categories it's more and in 4 some crime categories it's less, right? 5 THE WITNESS: Yes. There is a small percentage of 6 crimes, violent crimes, in those crimes, the suspect race is 7 known more often. 8 THE COURT: In some of the crimes, it's known less 9 often? 10 THE WITNESS: Way less often. 11 THE COURT: That's one of your tables. 12 THE WITNESS: It is. It's in the appendix to 412. 13 THE COURT: Can you direct me to it? 14 THE WITNESS: It's appendix table 2. Unfortunately, 15 we started the numbering on the appendices. So it's the second 16 page of appendix B. 17 THE COURT: Appendix B, second page? 18 It's all three tables in that section. 19 THE COURT: I am not with you. You're at 412 you 20 said? 21 THE WITNESS: 417. 22 THE COURT: You said 412. 417. 2.3 THE WITNESS: She put it up on the screen. 24 THE COURT: The screen is not as useful for me. It's 25 nice that it's there.

D458FL01 Fagan - cross THE WITNESS: Second page 2. Then on page 4 there is 1 2 another table there that we relied on. 3 THE COURT: On page 2, the total says 63.4 percent the 4 race is known. 5 THE WITNESS: Right. 6 THE COURT: For example, the lowest one, the race is 7 only known 22 percent of the time, and that makes up 135,000 8 complaints. 9 THE WITNESS: Correct. 10 THE COURT: Of those 135,000 complaints, the race is 11 only known 22 percent of the time. 12 By contrast, in drug offenses, the race is known 98 13 percent of the time, but that's only 77,000 complaints, 14 correct? 15 THE WITNESS: Correct. And only 12 percent of the 16 total pool of known suspects. 17 THE COURT: Drug offenses are only 12 percent. 18 OK. I just wanted to make sure I was reading the 19 table right. 20 BY MS. COOKE: 21 Q. You acknowledged in that 2007 paper with Gelman and Kiss 22 that your approach indexes stopped behavior to observables 2.3 about the probability of crime or guilt among different racial groups? 24 25

A. Gelman and I say very explicitly that we used arrest as a SOUTHERN DISTRICT REPORTERS, P.C.

D458FL01 Fagan - cross

proxy for crime. So with that qualification, the answer to

- 2 your question is yes.
- 3 Q. That was important because your approach estimated the
- 4 supply of targeted behavior, correct?
- 5 A. Again, it was a proxy of the specific crime rate.
- 6 Q. That 2007 article was published in a peer review journal,
- 7 correct?

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- 8 A. Yes, it was.
- 9 Q. So your peers believed that you were using the correct
- 10 benchmarks for your analysis?
- 11 A. Our peers believed we used the right model for the
- 12 analysis. I don't know that they delved into the substantive
- 13 specifics of the analysis. JASA is interested in whether a
- 14 problem is well articulated, whether there seems to be a sound
- 15 measurement strategy, and in particular, though, whether the
- 16 analytic procedure represents something new and a contribution
- 17 to scientific discourse on how varying models are done.
- 18 Q. Turning your attention to table 5 from Exhibit 411. 19
 - THE COURT: What page is that on?
 - MS. COOKE: It's not numbered. It falls between
- 21 pages -- it looks like it's 33, but it's not numbered.
- 2.2 THE COURT: We spent a lot of time on this yesterday.
- Q. So, Professor Fagan, on table 5 you have listed 2.3
- 24 coefficients for every variable. The variables being listed
- 25 down under the predictors, correct?

SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO1 Fagan - cross

- 1 A. Yes.
- 2 Q. Patrol strength, business precinct, SES, that list?
- 3 A. Yes
- 4 Q. Percent black. Each of those variables has an estimate,
- 5 correct?
- 6 A. Regression coefficient and a standard error.
- 7 Q. That coefficient is a conditional mean estimate that
- 8 reflects the amount that variable contributes to the
- 9 probability of a stop, correct?
- 10 A. Well, if we do some transformation on it, yes.
- 11 Q. For example, when we look at percent black, and we see
- 12 .867, that's the conditional mean coefficient that's telling us
- 13 the probability that an increase in the black population would
- have on the likelihood a black would be stopped, correct?
- 15 A. The likelihood that a stop would take place. The dependent
- 16 variable is the count of stops in this particular model in each
- 17 precinct.
- 18 Q. So the top line, going across the chart, the top line for
- 19 each variable that's above a bracketed number, the top line
- 20 number is an estimate reflecting an estimate of probability,
- 21 correct?
- 22 A. That's the rate of change in one variable predicting the
- 23 rate of change in the response variable, yes.
- 24 Q. Because those coefficients listed in table 5 are
- conditional, that means that the value of each of them depends SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO1 Fagan - cross

- on the variables present in the model, correct?
- 2 A. Yes. Each coefficient is adjusted for the presence and
- 3 weight of the other variables.
- 4 Q. So if you added or subtracted a variable, those estimates,
- 5 for example, the percent black .867, could change, correct?
- 6 A. It depends on the variable. If we added in, for example,
- 7 the number of traffic lights in the police precinct, it
- 8 wouldn't change the estimates at all.
- 9 THE COURT: You did take out some of these to test it, 10 and you removed, for example, business precincts and you tested 11 it?
- 12 THE WITNESS: We removed in some cases and added in others.
- 14 THE COURT: But you tested it by doing it?
- 15 THE WITNESS: We tested the stability under varying
- 16 conditions.
- 17 THE COURT: I remember when you did that yesterday,
- 18 removing business precincts, it made little or no difference.
- 19 THE WITNESS: That's correct.
- 20 Q. Those results are reflected in table 6 following table 5 in
- 21 this report?
- 22 A. Yes.
- 23 Q. But you didn't add the variable of suspect description and
- 24 run your regression analyses, did you?
- 25 A. I am not going to run a variable that only represents 60 SOUTHERN DISTRICT REPORTERS, P.C.

D458FL01 Fagan - cross percent of the cases. All the variables here are fully 1 2 represented in the data set. I am not going to put a variable 3 in where it's missing 60 percent of the time. What am I 4 supposed to do with missing data? 5 THE COURT: Missing 60 percent of the time? 6 THE WITNESS: Ms. Cooke is arguing that I should have 7 included suspect race. 8 THE COURT: You said it's missing 60 percent of the 9 time. 10 THE WITNESS: The suspect race either by case or as a 11 percentage is unknown in 60 percent of the cases. 12 THE COURT: I thought --13 THE WITNESS: Sorry. 38 percent. 14 THE COURT: Thank you. It's known 63 percent of the time. It's missing 37 percent. 15 16 THE WITNESS: Overall. 17 THE COURT: Of course overall. 18 Q. In fact, variables you did include in this regression are 19 drawn from a particular year, correct? 20 A. The variables other than the crime variables, and patrol 21 strength variables, are drawn from one year which is the 22 midpoint of the census period. 2.3 THE COURT: Namely, what year? 24 THE WITNESS: 2006. 25 Q. So you're using one year of data for analysis of data from SOUTHERN DISTRICT REPORTERS, P.C. (212) 805-0300

D458FLO1 Fagan - cross

- 1 2004 through 2009, correct?
- 2 A. We looked at the distributions, and we considered various
- 3 alternative measures and methods for representing the census
- 4 data, and we decided to use the midpoint of the census period.
- 5 I'd be happy to explain the logic. It's in the report. I can explain it again.
- Q. So you were, therefore, missing census data for the entire period of arrest and complaint data?
- 9 A. That's not right. We assumed that the measure for 2006
- 10 would apply equally for each of the years in the panel. So
- 11 there is nothing missing.
- 12 Q. You ran the regressions represented in table 5 by suspected
- 13 crime, correct, so the violent crime column, the property crime
- 14 column, the drugs?
- 15 A. We decomposed them.
- 16 Q. In fact, based on the figure 13 we just reviewed, we know
- much higher rates of suspect description for some of those
- 18 categories is suspected crime?
- 19 A. Yes.
- 20 $\,$ Q. So there would be very little missing data for that
- 21 regression, correct?
- 22 THE COURT: She is right. If you had done drugs, 98
- 23 percent of the race was known.
- 24 THE WITNESS: If we had put in a variable and said
- what percentage of the suspect race is known, we could have SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO1 Fagan - cross

1 used that measure. But I am not sure it would have told us a

- 2 whole lot more than knowing the total volume of crime
- 3 complaints. And also the percentage of the crime complaints
- 4 that represented each of the crime specific categories.
- 5 Q. It would have included the variable of suspect description
 - in your regression, that's what it would have done, correct?
- 7 A. We would have only put in whether or not the suspect was known.
- 9 Q. And for some of those crimes, the suspect is known for a very, very high percent?
- 11 THE COURT: The race of the suspect is known in the 12 drug column 98 percent of the time. That was the highest.
- 13 Q. If the value of the coefficient were equal to zero, so
- 14 again, taking the percent black total stop .867 number, if that
- value for that coefficient was zero, that would mean there was
- 16 no difference --
- 17 A. Start again. I am not seeing where you're plugging in a zero.
- 10 2010:

6

- 19 Q. If it were. Percent black reads .867, correct? If that
- 20 were zero instead of .867, that would mean that that variable
- 21 had no difference on the probability of one group being stopped
- over whites, correct?
- 23 A. That would depend on what the variance was. If the
- 24 variance was way less than zero, .0005, and the coefficient was
- 25 .001, close to zero, then it might still be statistically SOUTHERN DISTRICT REPORTERS, P.C.

D458FL01 Fagan - cross

- significant.
- Q. If the coefficient value were greater than zero, does that
- 3 mean that that group is more likely to be stopped given the
- 4 small change in that group's proportion of the population?
- A. Well, not in terms of the way we expressed the variables,
- 6 no. We are not looking at groups here. We are looking at
- 7 simply changes in the rate of stops relative to the change in
- 8 the racial composition, in this model the police precinct, in
- 9 417 in the census tract, and other units in 412. This is not
- 10 about -- the only thing that's individual in here is simply the
- 11 number of -- we are counting the number of stops.
- 12 Q. So the .867 number represented for the total stops for
- 13 percent black, that coefficient is greater than zero, correct?
- 14 A. Yes.
- 15 Q. And my understanding it's not correct that if the
- 16 coefficient is greater than zero, your table 5 represents if
- 17 there were a change in the percentage of population of percent
- 18 black, that there would be more likely to be stopped?
- 19 A. No. It means the number of stops would increase as a
- 20 function of the increase in the percent black population in the
- 21
- neighborhood. In this table, we made no claims about who is being stopped. That's the subject of the analysis in table 7. 22
- 2.3 Q. Professor Fagan, do you agree that coefficients can be
- 24 affected by zero counts?
- 25 A. Yeah, they can.

D458FL01 Fagan - cross

Q. Coefficients could be affected by excessive zero counts?

- A. If they are wildly excessive, sure. There is no accepted
- 3 threshold. It's the kind of thing that a responsible analyst
- would look at the distribution of zeros and decide, if it's a
- lot of zeros, then we have to make some correction for what is
- 6 known as over dispersion in the data and adjust for over
- 7 dispersion.
- 8 Q. Defendants' February 1, 2013 expert report raised this
- 9 issue of zero counts in your analyses, correct?
- 10 A. Yeah.

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24 25

- 11 Q. The defendants' experts expressed the need to control for
- 12 zero counts when estimating a negative binomial model, correct?
- 13 A. I disagreed with that yesterday. The answer is yes. I
- 14 disagreed, and I said for two reasons. One, there is not that
- 15 many zeros that we have to worry about it. And two, zeros
- 16 matter. I think, to use my baseball analogy, I think Prince
- 17 Fielder would really be happy if we didn't count strikeouts.
- 18 He makes enough money as it is. 19

THE COURT: What are the zeros here?

THE WITNESS: I am not quite sure. I think the zeros are probably placed in census tracts where there weren't stops made so the count of stops would be zero, places where their

2.3 percent black population is zero.

THE COURT: Are those the zeros you're referring to,

Ms. Cooke, the examples he just gave?

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D458FL01 Fagan - cross MS. COOKE: Yes. 2 Q. I have just put on the screen table 7 from defendants' 3 February 1, 2013 expert report, which is marked for 4 identification as H13. 5 THE COURT: I don't know what it means. 6 MS. COOKE: I am going to ask a question. THE COURT: He didn't create this chart. 7 8 Do you know what it means? 9 THE WITNESS: I would have to find out what was done. 10 THE COURT: Do you know what the 20,307 means in the 11 middle column near violence? 12 THE WITNESS: I can guess, but I think it's the job of 13 Ms. Cooke. 14 THE COURT: She can't testify. 15 THE WITNESS: Then I can't really make an 16 interpretation without knowing exactly what was done. 17 Q. My question is, you're aware that this table was presented 18 in the February 1, 2013 report? 19 THE COURT: I am aware of that too. The fact that it 20 was presented is not of interest. Q. My question is, do you have an understanding of table 7? 21 22 THE COURT: Not really. Do you? Do you know how 2.3 those numbers got created, what they mean? 24 THE WITNESS: I do have an idea. 25 THE COURT: I thought you said you could quess. If SOUTHERN DISTRICT REPORTERS, P.C. (212) 805-0300

D458FL01 Fagan - cross 1 you think you know. 2 THE WITNESS: It's an idea. 3 THE COURT: We don't speculative testimony. Do you 4 know or not know? What does the 20,307 represent? 5 THE WITNESS: My interpretation is that the 20,307 6 represents the number of month tract observations where there 7 was a zero violence count in one of our units. We looked at 8 every census tract. 9 THE COURT: Month count? 10 THE WITNESS: We looked at every census tract for each 11 of the 30 months in the latter period. 12 THE COURT: 2010 to '12? 13 THE WITNESS: Yes. I'm imagining that what was done 14 here was to look at, for each one of these observations, each 15 tract -- 2,000 tracts over 30 months so roughly 60,000 16 observations -- this is the number of times when zero showed 17 up. 18 THE COURT: Meaning there were no violent --19 THE WITNESS: No violent crime complaints in a census 20 tract in a given month. 21 THE COURT: What is the percentage rate? 22 THE WITNESS: That I can't tell you. I don't know. I 2.3 think it's the percent of all observations of tracts by month. 24 THE COURT: So in 30 percent of those tracts by month, 25 what you thought was around 60,000, there is no violent crime SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO1 Fagan - cross complaints?

THE WITNESS: Yes.

2.3

Q. Did you control for zero counts in -- for example, for violence, did you control for the zero counts of violence in your regression in table 5?

A. No. I will tell you why. The reason we didn't is because zero matters. Zero matters, in that if there is a zero observation, there is no crime. And it matters not just statistically. Again, we looked at the model's response to the distributions as a way to measure dispersion. We did all of that.

But it also matters because if, in fact, the internal logic of the policing regime that we are studying, we are all studying, is that policing is allocated to where violent crimes are, and there is no violent crimes, then we should imagine that our variables for patrol strength and the stop activity of the individual officers, and some which is captured in that variable, should reflect where that violence is.

So we think that zeros actually matter. There should be fewer police and fewer stops in places with zeros. We kept the zeros in consciously. And negative binomial regression basically accommodates zeros. It's one of the reasons for using that kind of a model.

Q. There are methods to control for zeros in an inflated negative binomial model, correct?

D458FLO1 Fagan - cross

- 1 A. There are options.
- 2 Q. And you didn't use a hurdle rate negative binomial model to
- 3 control for zeros?
- 4 A. We did not because a hurdle rate assumes a particular
- 5 meaning for zero that we weren't willing to assume. We assumed
- 6 zero was a relevant category. We didn't assume it was just
- 7 something that we should dismiss as either anomalous or not
- 8 speaking to some more important distribution of the data.
- 9 Q. Are you aware that the results presented by the defendants'
- 10 experts in their report for the coefficient percent black was
- 11 statistically insignificant after controlling for these zero
- 12 counts?
- 13 A. Yes. As we said yesterday, somebody's batting average goes
- 14 up if you don't count the strikeouts.
- 15 Q. Are you aware that the Department of Justice has set a
- 16 standard for benchmarking that includes quantity, location and
- 17 behavior in disparate impact analysis?
- 18 A. In disparate analyses in which field?
- 19 Q. Criminal justice field.
- 20 A. I have seen reference to this. It's a pretty recent
- 21 report.
- 22 Q. Your benchmark measures quantity by utilizing the estimated
- population by census tract for 2007 estimates?
- 24 A. I don't know how many times we are going to have this
- conversation. We used the crime rate and population rate SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO1 Fagan - cross

1 together. I don't think we are defining the DOJ standards.

- Q. That wasn't my question, Professor Fagan. My question was
- 3 if your benchmark measured quantity using census tract 2007
- 4 data?
- 5 A. Quantity of what?
- 6 Q. The quantity for purposes of your regression.
- 7 THE COURT: He is saying quantity of what?
- 8 Q. Of people by race.
- 9 A. We used racial composition based -- for the latter
- 10 analysis, 2010 estimates, yes.
- 11 Q. For your 2010 report, you used the 2007 estimate?
- 12 A. No. We used 2010.
- 13 Q. For your 2010 report, which covered the period --
- 14 A. Yes. That we used 2007. We used the midpoint.
- Q. But there wasn't a census in 2007, correct?
- 16 A. No. There was the American Community Survey.
- 17 Q. So it was an estimation population?
- 18 A. The American Community Survey uses an imputation procedure
- 19 which they have developed to try and examine how to move the
- 20 2007 -- the decennial census comprehensively forward. And
- 21 their vetting of their own procedures suggests it's quite
- 22 strong. So we relied on the ACS estimates.
- 23 Q. There had been a census from 2000 available at the time of
- 24 that report?
- 25 A. Yes.

D458FL01 Fagan - cross 1 Q. You didn't trend your population data between the 2000 2 census figures and your estimated 2007 survey data, did you? 3 THE COURT: I don't understand the question. 4 MS. COOKE: He didn't trend. 5 THE COURT: What does that mean? 6 MS. COOKE: Trend between two data points, between 7 2000 and 2007 data, to account for the trend of the data over 8 time as opposed to using a point in time. 9 THE COURT: One was the census and one wasn't the 10 One was the estimate. census. 11 Wasn't the 2007 you said the ACS? 12 THE WITNESS: 2007, the ACS. 13 THE COURT: That's just an estimate based on the last 14 census. What more are you saying? By definition, that's a 15 sort of trend. Isn't that what ACS is trying to do, make an 16 estimate based on the last census? 17 THE WITNESS: The ACS is a pretty complicated 18 algorithm. 19 THE COURT: In plain English, using the last census 20 and making certain estimates. 21 THE WITNESS: And projecting. 22 THE COURT: Of course. 2.3 Q. Projecting for the year of 2007? 24 A. They do estimates for most -- I think they have been 25 defunded by the Congress but --SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO1 Fagan - cross

THE COURT: So is everything else.

2 A. They did for each year, and they would do a five-year estimate. So 2006 estimates and then projected forward to 2010.

THE COURT: Then we get a census every decade? THE WITNESS: Yes.

- 7 A. As you know, our report was drafted in October of 2010. 8 The 2010 census data had not been released at that point. So 9 we had to make a methodological choice as to what we would do. 10 Would we extrapolate based on data we were less confident in or 11 would we rely on the geniuses at the census bureau? And they 12 are pretty good, including people who work in the Department of 13 City Planning in the city, Mr. Salvo, Dr. Salvo -- a Columbia 14 University graduate I might add -- who is a very prominent 15 participant in the design of the survey, American Community
- Survey, and the census.

 Anyway, we didn't have 2010 census data. We couldn't
- trend anything.

 Q. When you received the 2010 census data, did you go back and
- 20 rerun your 2010 report's regression with 2010 census data?
- 21 A. No. We weren't asked to.
- 22 Q. You would agree, though, a population in a census tract can
- vary across time, isn't that true?
- 24 A. Yes.

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25 Q. And that time period can even be hour to hour? SOUTHERN DISTRICT REPORTERS, P.C. (212) 805-0300

D458FLO1 Fagan - cross

1 A. Sure. People get up and leave in the morning and come back

- 2 in the evening. We have said that in writing.
- 3 Q. And day to day?
- 4 A. Sorry?
- 5 Q. The population in a census tract can vary from day to day?
- 6 A. Well, that less so.
- 7 Q. Month to month?
- 8 A. Under certain conditions, fairly unusual conditions, sure.
- 9 Q. Season to season?
- 10 A. Only on the Upper East Side and the Upper West Side. And
- in my neighborhood unfortunately.
- 12 Q. So your population from the estimate of 2007 census data in
- your 2010 report doesn't vary across time for any period,
- 14 correct?
- 15 A. Repeat the question, please.
- 16 Q. Your population that you use from the 2007 survey in your
- 2010 report, the population data doesn't vary across time for
- 18 any period, correct?
- 19 A. That's correct. And I will explain the reason why.
- 20 Because we don't know -- we understand that census tract
- 21 populations will vary. We don't know the rate at which they
- 22 vary. So let's say they do change. They are here in 2010.
- 23 They are here in 2012. We don't know if that line peaked early
- 24 in the period, or it peaked later in the period, if it all of a
- 25 sudden shot up in 2008 and 9 and 10, or if it shot up in 2001, SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO1 Fagan - cross

2 and 3. So we don't really know what the shape of the curve

- 2 is that we are interpolating it for. So we use the ACS.
- 3 That's our accommodation to the potential for change within the
- 4 longer period of time.
- 5 Q. So there is also potential for change in the longer period
- of time for observed gender in a census tract, correct?
- 7 A. It's pretty stable. It's highly unusual to be a mass exit
- 8 of one gender or the other, except in high incarceration
- 9 neighborhoods.
- 10 Q. What about the observed racial makeup of the census tract,
- 11 there could be changes in periods of time, correct?
- 12 A. There are a small number of census tracts that gentrify,
- 13 sometimes rapidly, sometimes not, and there will be some
- 14 compositional changes. But, generally, those kinds of changes
- 15 take place over a course of a decade, not within a particular
- 16 vear.
- 17 Q. Your 2010 report was reviewing data from 2004 through 2009,
- 18 correct?
- 19 A. Yes.
- 20 Q. So six years, correct?
- 21 A. Yes.
- 22 Q. Education levels in a census tract could vary over time as
- 23 well?
- 24 A. They would correlate with the same kinds of gentrification
- 25 processes that I just mentioned.

SOUTHERN DISTRICT REPORTERS, P.C.

D458FL01 Fagan - cross Q. Unemployment could also vary in a census tract over time?
A. Sure. If we have to live through 2008 all over again, then yes. (Continued on next page)

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D459flo2 Fagan - cross

1 Q. And homeownership in the census tract could also vary over time?

- A. It could as a function of the kind of gentrification process that we talked about or possibly the construction of new housing.
- Q. And in the six-year period analyzed in your 2010 report there could have been the construction of new housing in the thousands of census tracts in New York City, correct?
- A. In thousands? There's only 2150 census tracts.

So was there construction, I'm sure, in each census tract, there might have been one or two units, maybe a building that came on line.

Was there the construction of a large housing development, for example, like Hudson Yards where -- so within a two-year period all of a sudden there's going to be a couple of thousand housing units to come on line, that's highly unusual and that would probably be confined to one census tract in Hudson Yards.

So out of 2100-some-odd census tracts, I think the possibility of having dozens and dozens and dozens with huge spikes in housing volume and construction of condos that people would buy, not likely. Quite unlikely, actually.

Q. But you would agree that the demographics of New York City, between 2004 and 2009 for your first report, those demographics could have changed, correct?

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D459flo2 Fagan - cross

- A. They could have changed, sure.
- Q. And, in fact --
- 3 A. My friend professor Zimmerman says they didn't but that's a
- 4 different conversation.
- 5 Q. But you're aware that you -- you mentioned I believe the
- 6 market crash in 2008 just a moment ago?
- 7 A. Yeah.
- 8 Q. And that caused significant changes in demographics?
- 9 A. Did it cause changes in demographics to -- I haven't seen
- 10 any credible research that suggests that the crash caused a 11 change in demographics.

12

- It caused foreclosures.
- 13 Q. Resulting increases in unemployment following 2008?
- 14 A. Yes. There were increases in unemployment following 2008.
- 15 Q. Were there resulting increases in homeownership changes
- 16 following the market crash in 2008?
- 17 A. There were a handful of census tracts, mostly in central to
- 18 eastern Queens, where foreclosures shot up, and south Queens in
- the Ozone Park area. But not a whole lot. There weren't --19
- 20 people weren't living in refrigerator boxes in Tribeca after
- 21 2008.
- Q. You didn't take into account that event, the market crash 2.2
- 2.3 of 2008, in your analyses, correct?
- 24 A. No. We felt -- we used a projection that was based on
- 25 census projections -- it's heavily weighted toward births, SOUTHERN DISTRICT REPORTERS, P.C.

D459flo2 Fagan - cross

deaths, and movement, based on the responses to the surveys, to

- 2 come up with their projections. And so we did not update after 3 2008.
- 4 Q. But your SES factor I believe you testified --
- 5 A. However, I think it's important the department of city
- 6 planning didn't see a ton of population shift after 2008
- 7 either.
- 8 Q. Your SES factor I believe you testified was based on a
- 9 number of items but in particular economics, right, poverty?
- 10 A. We -- it weighed heavily on median income, yes.
- 11 Q. And your SES factor was also selected for a particular
- 12 point in time, on population for 2007, correct?
- 13 A. Yeah, we based it on that. Same data source.
- Q. So your SES factor didn't reflect the economic changes over
- 15 the period of 2004 to 2009 for the data in your 2010 report,
- 16 correct?
- 17 A. Yeah, one of the things that we understand about these
- 18 kinds of factors is that in -- and even given I think what we
- 19 understand about the rates of poverty after the crash, is that
- 20 to the extent there were changes, they were particularly
- 21 isolated in a particularly small number of areas.
- 22 And, you know, again, we're dealing with 2150 census
- 23 tracts. And we don't know how many -- we didn't establish a
- 24 threshold for what constitutes measurable change. We don't
- 25 have any theory on which to assume that a measurable change in, SOUTHERN DISTRICT REPORTERS, P.C.

D459flo2 Fagan - cross

for example, homeownership would reflect some kind of change in the unemployment rate.

Those kinds of things were still being worked out by demographers. And that technology was unavailable at the moment in time when we did this analysis.

- Q. Because your population is an estimate of census data for
- 7 2007, you're assuming that the people in a census tract in 2007
- are the people observable to the officers between the periods
- 9 of 2004 and 2009, correct?
- 10 $\,$ A. It's a reflection of the size of the population that is out
- 11 and about in the street during the various hours of the day.
- 12 Q. The size and the demographics of that population, correct?
- 13 A. Yes.
- 14 Q. Your regression analyses attempts to control for the
- probability of encounter by police by including a patrol
- 16 strength variable with population, correct?
- 17 A. Yes.
- 18 Q. You're aware that officers on patrol are generally working
- 19 with a partner, correct?
- 20 A. Yes.
- 21 Q. And you're aware that officers who work in specialty units
- 22 like anticrime or SNEU or conditions would work in a team of
- 23 officers, correct?
- 24 A. Yes.
- Q. And if more than one officer is present at the stop of a SOUTHERN DISTRICT REPORTERS, P.C.

D459flo2 Fagan - cross

person, only one officer completes a UF 250 form, correct?

- A. Right. That's a stop.
- 3 Q. But your estimation of patrol strength only counts number
- $\,4\,$ of officers who completed a UF 250 form for a stop in a census
- 5 tract in that calendar month, correct?
- A. Well let's take this in two separate reports because there were two separate strategies that we used in each of the reports.
- 9 I'd be happy to go through them if the Court wants to 10 hear it. But they're different.

And your statement is -- your statement applies more to the later period than the other. I'm not saying it's correct, but it applies more to the later -- to the second report than to the first report.

- Q. In your second report your patrol strength counts the number of officers that completed at least one UF 250 form in a census tract for a calendar month, correct?
- 18 A. That's correct.

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- 19 Q. And when you counted that officer who made that stop for purposes of patrol strength, you did not count the potential
- 21 presence of other officers with that officer, correct?
- presence of other officers with that officer, corre
- 22 A. Those information was not available to us.

Let me say this though. What we did was -- there was one -- you know, the reason why we changed to the methodology that Ms. Cooke is describing is because in the -- sometime I SOUTHERN DISTRICT REPORTERS, P.C.

D459flo2 Fagan - cross

2.3

think in the middle of 2010 the format in which the data for patrol strength were produced to us changed. And a particularly important group of officers, those who were assigned to I think patrol impact patrols for the boroughs were no longer reported to us specific to each precinct.

So we had no -- as we had done in the earlier months, in the earlier calendar quarters and years, were able to do some fairly precise allocations of officers to each precinct based on assignments in various commands. And we described that methodology in some detail in one of the appendices in 411.

The data were no longer available to us. But it was avail -- I think either the middle of ten, or middle of eleven, I think might have been the middle of eleven, I actually can't recall.

But it was available to us for a period of at least two years where we were able to do a comparison of the two different measures of patrol strength. One based on the number of officers assigned to each of the patrol — to the precincts who were in patrol commands, which would include all of the commands that you listed out before. And our other measure that we had to adopt, because we didn't — we were no longer able to use the old measure, given the limitations of the data, and because the data reported in calendar quarters which, as we've all agreed, is not the most useful way to do it.

SOUTHERN DISTRICT REPORTERS, P.C.

D459flo2 Fagan - cross

1 And we looked at the correlations between our two 2 constructions of the measures. And it was about .95.

So we're real comfortable that our measure captures a

- 4 huge portion of the variance in a measure of patrol strength
- 5 based on number of officers assigned on commands, out and doing
- 6 patrols, possibly doing stops, and the number of officers
- 7 actually doing stops. We're real comfortable with that.
- 8 Q. You're aware that an officer's tour is generally eight
- 9 hours, correct?
- 10 A. Yeah.

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- 11 Q. And you're aware that police officers on patrol do things
- 12 besides make stops, correct?
- 13 A. Of course.
- 14 Q. You're aware that based on the UF 250 data you reviewed the
- average durations of stops are included, correct?
- 16 A. Yes.
- 17 Q. And based on your review of those average duration of
- 18 stops, would you agree that officers on patrol likely spend
 - four of those eight hours doing something other than making
- 20 stops?

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- 21 A. It's quite possible.
- I'm not sure how it bears on our analysis. We were counting the number of stops.
- 24 Q. You didn't use any measure or attempt to measure patrol
- 25 strength using any of these other activities of officers, SOUTHERN DISTRICT REPORTERS, P.C.

D459flo2 Fagan - cross

1 correct?

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2 A. No, we didn't.

We actually -- I remember as part of discovery, I think that plaintiffs asked for patrol strength data. And the patrol strength data that was given to us was a series of patrol strength records.

So my sense is that this is the dataset or the accounting procedure that internally is used to measure patrol strength. So we were happy to use it.

- 10 Q. Is it your understanding that patrol strength is understood 11 by the NYPD to be calculated in how many stops an officer
- 12 makes?
- 13 A. No.
- Q. So the patrol strength data that was provided to you on
- 15 request was really just the numbers of officers in the NYPD and
- their allocation of assignments, correct?
- 17 A. The first set of data on patrol strength, yes, we were
- 18 given officers by assignment, by command.
- 19 Q. Had nothing to do with the officers' activities, filling
- 20 out complaint reports, or arrest reports, or 250s, correct?
- 21 A. That's correct.
- 22 Q. If a census tract had no UF 250s reported for the month,
- 23 your estimate of patrol strength would be zero for that month,
- 24 correct?
- 25 A. Yeah. We didn't find very many of those.

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D459flo2 Fagan - cross

Again, Ms. Cooke, I think it's important to bear in mind we're trying to model trends that we see across 2150 units of observation. There are going to be anomalies in one or two or five or maybe even ten of those observations.

And I think the question is whether or not the analytic procedures and the measurements are sufficient to account for, in a robust way, for those anomalies.

Q. Thank you, Professor Fagan. I just ask that you answer the questions as I ask them.

10 The NYPD does not use census tracts as a unit of 11 management, correct?

- 12 A. Correct.
- 13 $\,$ Q. They don't use census tracts to track or report crime,
- 14 correct?

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- 15 A. Correct.
- 16 Q. As far as you're aware they don't deploy resources based on
- 17 census tracts?
- 18 A. Correct.
- 19 Q. But you are aware that the NYPD deploys resources based on
- 20 patrol sectors in precincts, correct?
- 21 A. Yes.
- 22 Q. And you did include in your analyses larger geographical
- areas other than census tracts such as boroughs, correct?
- 24 A. Well we control for borough trends because there's a
- certain set of management practices that are unique to the SOUTHERN DISTRICT REPORTERS, P.C.

D459flo2 Fagan - cross

- 1 boroughs.
- 2 Q. You controlled for boroughs, you used five boroughs in your
- 3 analysis, correct?
- 4 A. I'd have to go back and look.
- 5 Q. Are you aware that the police department is divided
- 6 administratively into eight boroughs in New York City?
- 7 A. Yes.
- 8 Q. Your analysis didn't control for sector or aggregation of
- 9 patrol strength in these supervisory units, correct?
- 10 A. In supervisory units?
- 11 Q. Yes.

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- 12 A. Which measure?
- 13 Q. Boroughs.
- 14 A. The old one or the new one?
- 15 Q. The new one. The eight boroughs.
- 16 A. We didn't organize by borough.

We measure patrol strength by police precinct in the first report and by census tract in the second.

We used borough as a statistical control to see if there was something unique about the geographic borough, not the administrative construction of borough, given variations that we understand in crime rates and demographics and a lot of other -- a host of variables that distinguish one borough from

24 the next, including density, for example.
25 Q. Did your regression model specifications differentiate
SOUTHERN DISTRICT REPORTERS, P.C.

D459flo2 Fagan - cross

census tracts that were either themselves impact zones or that fell within an impact zone?

A. We assumed that -- based on my understanding of what impact zones are, that because impact zones are places where there are more officers assigned there would be more stops.

So we looked at, in the first construction of patrol strength we did look at the allocations of impact officers.

In the second one we looked at the number of stops that took place in each unit of analysis. And we assumed that more officers assigned to that area by virtue of being an impact area would show up in the data in the form of increased numbers of stops.

- Q. But you didn't differentiate those census tracts in any way, correct?
- 15 A. No. They were not relevant to our measurement strategy.
- 16 Q. Similarly you didn't differentiate census tracts that were
- 17 either entirely a housing -- public housing location or fell
- 18 within a public housing development, correct?
- 19 A. We checked for public housing as one of our sensitivity
- 20 tests in the first set of reports.
- 21 Q. But you didn't differentiate your census tracts that were
- 22 public housing for purposes of your estimation of patrol
- 23 strength, correct?

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- 24 A. For patrol strength.
 - No. Again, it's the same logic. There are housing SOUTHERN DISTRICT REPORTERS, P.C. (212) 805-0300

D459flo2 Fagan - cross

1 bureau officers and other officers who are making stops in

- 2 public housing. And we assume that the volume -- the frequency
- 3 or the number of officers making such stops would show up in
- 4 our data. It would have been -- in other words, it would have
- 5 been redundant.
- 6 Q. Professor Fagan, you're aware that there's a growing
- 7 movement among criminal justice scholars to include observed
- behavior in studies of disparate racial treatment?
- 9 A. A growing movement?
- 10 Q. Mm-hmm.
- 11 A. I'm not quite sure what that means.
- 12 Q. Are you aware that criminal justice scholars include
- observed behavior in studies of disparate racial treatment?
- 14 A. I think are studies where people use observed behavior. I
- don't know if it's a movement.
- 16 Q. You cited in your October 2010 report by Greg Ridgeway and
- John MacDonald methods of assessing racially biased policing,
- 18 correct?
- 19 A. We did look at their report, yes.
- 20 Q. And they include observed behavior in the study of
- 21 disparate treatment, correct?
- 22 A. Yep.
- 23 In Cincinnati. I believe is where they were talking
- 24 about. Some other places too. Cincinnati is a pretty small
- 25 city; a thousand officers, 250,000 people.

SOUTHERN DISTRICT REPORTERS, P.C.

D459flo2 Fagan - cross

I think conducting a robust reliable observational

- 2 study in the city of New York with its eight million people and
- 3 2150 census tracts would have been a pretty expensive,
- 4 daunting, time-consuming task.
- 5 Q. You're aware that observational benchmarks have been
- 6 developed for the study of disparate racial treatment to
- 7 address dissatisfaction with errors in census data, correct?
- 8 A. Yeah. I have seen a few of those.
- 9 Q. In fact, in 2002 you authored an article published in
- 10 Justice Research and Policy where you called for applying
- 11 precisely such methods to Terry stop analysis, correct?
- 12 A. In an ideal world, I would do those studies, yes.
- 13 Q. You would what?
- 14 A. In an ideal world, I would do that. We're living in a
- 15 world that is very heavily constrained in many ways that would
- 16 make such a study very difficult in a city the size of
- 17 New York.
- 18 Q. But that's what you called for in that 2002 article,
- 19 correct?
- 20 A. That's what I endorsed.
- 21 Q. You're aware that the UF 250 form contains detail regarding
- the observed behavior, correct?
- 23 A. I'm sorry. Containing what?
- 24 Q. The observed behavior by the officer.
- 25 A. Repeat the question. I didn't understand. SOUTHERN DISTRICT REPORTERS, P.C. (212) 805-0300

D459flo2 Fagan - cross

1 Q. You're aware that the UF 250 forms contain information

- 2 regarding behavior observed by an officer of the person
- 3 stopped, correct?
- 4 A. Yeah. There's some markers in there.
- 5 Q. Well some of those are like furtive movements, correct?
- 6 It's a behavior observed by an officer indicated on the UF 250 form?
- 8 A. Well if you want to conflate behavior with the -- when you
- 9 say behavior, I'm assume you're suggesting some of the text
- fields available to write out specific behaviors by the -- as in the other category.
- But I'm not aware of something separate from the stop factors, as we call them that -- where behavior is written down or written down systematically.
- 15 $\,$ Q. I'm referring to sides one and two of the UF 250 form and
- the stop circumstances on the front and the additional stop
- 17 circumstances on the back.
- 18 A. Right.
- 19 Q. That the officer is checking those boxes and indicating
- 20 observed behavior leading to the stop, correct?
- 21 A. Well it's a characterization of a very broad heterogeneous
- 22 set of behaviors into a very simple box, yes. In that respect,
- 23 sure.
- 24 Q. But, in fact, you used those check boxes on the front and
- 25 the back of UF 250 form as a proxy for observed behavior in SOUTHERN DISTRICT REPORTERS, P.C.

D459flo2 Fagan - cross

- 1 your Fourth Amendment analysis, correct?
- 2 A. We used it for the revealed preferences of police officers
- 3 with respect to the indicia of suspicion that motivated the
- 4 stop or that justified the stop.
- 5 Q. You relied on the observed behavior indicated by the
- 6 officers represented in check boxes and the other narrative
- 7 populated --
- 8 A. No, Ms. Cooke. We relied on what the officers checked off
- 9 in the box. We have no way of knowing what they were actually
- 10 seeing with respect to the behavior.
- 11 Q. You assumed the UF 250 databases to be complete and
- 12 accurate, correct?
- 13 A. Right. We assumed that officers checked off what they
- 14 checked off.
- 15 Q. And the check boxes are for circumstances leading to the
- 16 stop, correct?
- 17 A. They are -- right. As observed by the officers.
- 18 Q. Correct.
- 19 A. And interpreted.
- 20 Q. And you found this UF 250 data to be reliable enough to
- 21 draw conclusions, correct?
- 22 A. Yeah. I'll say that just for a little -- some -- you know,
- 23 we've expressed our reservations about the data. But the data
- 24 are complete in the sense that we assume -- following the
- 25 recommendation of the Court, to assume the accuracy of the SOUTHERN DISTRICT REPORTERS, P.C.

D459flo2 Fagan - cross

- 1 data.
- 2 Q. In your Fourth Amendment analysis assuming the accuracy of
- 3 the data, you've determined for the period 2004 through --
- 4 June 2012 that 82.23 percent of the stops made were apparently
- 5 justified by reasonable suspicion, correct?
- 6 A. This is what we reported.
- 7 Q. But your regression models, those don't include any
- 8 information on observed behavior as a variable, correct?
- 9 A. Correct.
- 10 Q. So that -- thinking back to table 5, observed behavior
- 11 would be an omitted variable from your regression, correct?
- 12 A. Well I don't think in table 5 it would.
- 13 Q. In table 7?
- 14 A. Perhaps in table 7 if there was going to be any observation
- of behavior -- and I mean observation of behavior, I don't mean
- 16 checking off furtive movement -- then that could conceivably --
- 17 sure. If we had those data, it would be interesting to put in
- 18 there.
- But again, you know, I keep going back to what can be
- done and what can't be done in a study of this magnitude.
- 21 Q. Your ran your regression analyses on the entire population
- of 4.43 million UF 250s, correct?
- 23 A. Well in two separate points.
- 24 Q. Two separate points. But the aggregate set of 4.43 million
- 25 data was run through your regression analyses.

SOUTHERN DISTRICT REPORTERS, P.C.

D459flo2 Fagan - cross

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1 That was so even though you determined that

- 82.23 percent of those UF 250s were supported by apparent reasonable suspicion, correct?
- A. Based on our classification scheme that's how we sorted them, yes.
- Q. So you included in your regression analyses 82.23 percent of those UF 250s which you determined were supported by apparently reasonable suspicion, correct?
- 9 A. We included all of them in our regression analyses.
- 10 Q. And your regression analyses was attempting to establish or 11 predict whether or not race was the reason someone would be 12 stopped, correct?
- 13 A. Well -- no. We never predicted -- no. That's -- that's 14 wrong.

We didn't make any kind of attribution of cause or intent with respect to race on the part of the officers.

We looked at the outcome $\mbox{--}$ the counts of stops in various forms, either the rate of stops, the counts of stops, disaggregated by race.

We have no claim or statement about the intention of an individual officer in using race to make a stop. We are agnostic on that question.

Q. But you were attempting to determine if race -- controlling for all others, if race was the predicting factor in whether a person in New York City was stopped, correct?

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2410 D459flo2 Fagan - cross A. We attempted to determine whether or not the stop rates were higher in neighborhoods as a function of the percentage of 3 the black population in the neighborhood. And within those 4 neighborhoods, whether Blacks were more likely to be stopped 5 than Whites. 6 THE COURT: And you concluded Blacks were more 7 likely --8 THE WITNESS: Blacks were more likely to be stopped 9 than Whites. And the stop rates were higher in neighborhoods 10 with a high percent black population after controlling for 11 crime. 12 THE COURT: And I think you said earlier that even in 13 a primarily white neighborhood Blacks were more likely --14 THE WITNESS: Yeah, we when looked at the white 15 neighborhoods still saw a higher stop rate for Blacks. 16 THE COURT: So both in predominately black areas, 17 white areas, Blacks were more likely to be stopped. That was

your conclusion.

THE WITNESS: Yes. We didn't do any mind reading.

THE COURT: You didn't do any what?

THE WITNESS: Mind reading.

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22 THE COURT: You don't know why. But that's what you 2.3 found.

Q. The defendants' experts, Professor Fagan, have raised many concerns concerning the structure of your regression models, SOUTHERN DISTRICT REPORTERS, P.C.

2411 Fagan - cross

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correct?

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- A. I've read that.
- 3 Q. And you've responded to two of those concerns. The first
- we discussed yesterday was you moved your time period from
- 5 annual to quarterly to calendar month for crime lag?
- 6 A. We never used annual. We moved it from calendar quarter to 7 month.
 - Q. To month. Thank you.

And that was in response to the defendants' experts' criticisms that it was necessary to include the most recent crime data when modeling the NYPD's police practices, correct? A. We used quarters for two reasons. Partly because -- we did take -- we did consider the claims of defense experts on this. But there are other reasons as well.

One was, again, we thought patrol strength was really an important factor to understand. If it's given to us in a quarterly period, we're stuck with quarters.

Second I think most people understand that these data are very spikey, goes up and down, and up and down, and up and down. And we were a little concerned about noise.

We understand there's realtime updating and that allocations are made on the basis of responses to crime trends and shorter periods of time.

But we thought calendars were important for sort of ironing out some of that spikiness in the data that would allow SOUTHERN DISTRICT REPORTERS, P.C.

D459flo2 Fagan - cross

us to make a -- probably a cleaner and less noisy determination of the relationship between the variables.

We did switch to months for all the reasons that we stated. And we're comfortable with months.

- 5 Q. In your regression models you included number of crime 6 which aggregates the total categories of crime, correct?
- 7 A. I don't understand the question.
- 8 Q. You took the detailed crime categories provided to you in
- 9 the crime data from the NYPD and collapsed them into seven
- 10 meta categories, correct?

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- 11 A. First into 20 or 22, I forget the number, crime categories.
- 12 And then into a smaller number of aggregate or what we call
- meta crime categories. And these details are in appendix C3 of 411 and C4.
- 15 Q. These meta categories were more convenient for you to work 16 with in your model, correct?
- 17 A. Well it also reflects, I think, a fairly standard
- 18 aggregation procedure that's used by the Federal Bureau of
- 19 Investigation in reporting crime data nationally and making
- 20 comparisons among cities or states, or years, or whatever.
- So we tended to, I think as most criminologists tend to do, organize our data into categories that is standard practice by the federal government.
- 24 THE COURT: I'm sorry. You referred a moment ago to 25 C3 of 411. Where is that?

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D459flo2 Fagan - cross THE WITNESS: It's right here, your Honor. Well it's 2 appendix C. 3 THE COURT: 411 you said? 4 THE WITNESS: Appendix A is my long CV. Appendix B is 5 the 250s. And all the crime coding procedures. 6 THE COURT: The what? 7 THE WITNESS: The crime coding procedures. 8 MS. COOKE: I think it's C4. 9 THE WITNESS: The first stage is described in C3. The 10 second stage is described in C4. 11 THE COURT: Okay. Thank you. 12 THE WITNESS: And C5 shows a distribution of stops by 13 those categories. And C6. 14 Q. Professor Fagan, your model assumes, therefore, that the 15 police response in terms of stops to a domestic homicide would 16 be the same as a response to stops for a gang homicide, 17 correct? 18 A. Yes. Q. Because domestic homicides and gang homicides have been 19 20 grouped in the same category? 21 A. Right. 22 THE COURT: Which category is that? 2.3 MS. COOKE: Violent crime. On C4. 24 THE COURT: Give me one second. 25 I don't see it.

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D459flo2 Fagan - cross 1 THE WITNESS: It's right in the middle, your Honor. 2 THE COURT: Where it says violent crime? 3 THE WITNESS: Yeah, violent crime is defined as --4 THE COURT: Just says first or second offense listed 5 as either murder or other violent crime. 6 THE WITNESS: These were offenses listed in the 7 suspected crime fields on the UF 250. We did a very long --8 THE COURT: It's just that she said domestic and gang 9 fell in the same. I just didn't know where I'd find that, the 10 listing of the word domestic and gang. Is there a place I 11 would find it? 12 MS. COOKE: If you look at C3. 13 THE COURT: That's what I thought. MS. COOKE: You're not going to see domestic and gang 14 15 necessarily as the words. But you see aggregate categories, 16 and then the list of suspected offenses. 17 THE COURT: Under violent crime. I didn't see either 18 of the words you said. 19 MS. COOKE: No. But it was two differences in the 20 types of murder, your Honor. 21 THE COURT: I'm sorry. I'm not following. MS. COOKE: Two different types of murder, a domestic 22 2.3 homicide and a gang homicide. And he's -- I said his model 24 presents the police response in terms of stops, the number of 25 stops we would conduct in response to a domestic homicide in SOUTHERN DISTRICT REPORTERS, P.C.

D459flo2 Fagan - cross his model would be the same number of stops predicting would 2 occur in response to a gang homicide which is not, my point is, 3 not reflective of the police practice. 4 THE COURT: How often is this happening? Are we getting any stops for domestic homicide? 5 6 MS. COOKE: No. That's the point, your Honor. The 7 crime has been aggregated in Professor Fagan's analyses. 8 THE COURT: I'm wondering how many are in that 9 category at all. Sounds like probably one of the smallest --10 when I looked at some kind of chart here -- there it is, C5. 11 Stop activity. Is there one for -- there's one for murder. 12 THE WITNESS: One-tenth of one percent. 13 THE COURT: I know. So what are we talking about? 14 Why are we spending time with this? One-tenth of one percent 15 of stops. That's not what stops are about. They're not about 16 domestic or gang homicide. They are about weapons and violent 17 trespass -- really about weapons and trespass and drugs and 18 property crimes. 19 MS. COOKE: Grand larceny is a property crime. 20 THE COURT: I understand. Those are the big 21 categories. We're down to a tenth of a percent. I don't have 22 time for it. So, therefore, I'm taking a morning recess. And 2.3 we'll reconvene in ten minutes at approximately 20 of twelve. 24 MR. MOORE: Is it possible to deal with a scheduling

issue because of Mr. Dunn being present?

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D459flo2 Fagan - cross

1 THE COURT: Sure.

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MR. MOORE: It deals with the testimony of Chief Esposito, who is scheduled right now for next Tuesday. So some questions have been raised because of what happened in court the other day where you said if you have a big policymaker everybody -- Ligon counsel should testify. The remedy briefs --

 $\,$ MS. GROSSMAN: Your Honor, I can't hear. And I need to respond.

THE COURT: The reporter said the same thing. She just said she can't. Maybe this isn't the time to take it up then.

(Recess)

THE COURT: Please be seated.

Just before we continue with the cross, there were two matters that folks were trying to discuss when we started the break and it was too noisy for the reporter or for the lawyer to hear. Now one issue had to do with scheduling. Somebody is testifying Tuesday that you're concerned about the scheduled?

MR. MOORE: In light of the fact that the remedies briefs are not due until next Thursday it seemed that —— and we had previously scheduled Chief Esposito, who is the chief policymaking official designated in this case for the city, even though he's retired, that he's testifying on —— he was presently scheduled to testify on the 9th. We wanted to push SOUTHERN DISTRICT REPORTERS, P.C.

2417 D459flo2 Fagan - cross him back to the 15th or the 16th, the 14th or the 2 15th -- 15th and 16, either one of those days. And because 3 he may -- there may be questions to ask. 4 THE COURT: So what's the problem? 5 MR. MOORE: Well the city said they were unable to 6 accommodate that. 7 MS. GROSSMAN: First of all, the witness is retired 8 and has very personal matters that have to be addressed, and 9 there are some health issues. And he is available for 10 Tuesday -- yes, Tuesday. And that's the day that he's ready to 11 testify. He's not available after -- there are some very --12 THE COURT: So he's not available any time after that 13 for the remainder of this trial? I'm saying between April 9 14 and May 9 there's not one other day? 15 MS. GROSSMAN: There may be, but this is the time 16 where there are personal matters. 17 THE COURT: I respect that. I'm just wondering if

there's any other day between April 9 and May 9. We have a whole month.

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MS. GROSSMAN: I don't think there is an issue. This witness is no longer the chief of the department.

THE COURT: Of course, I know he's no longer as of a week ago. I read it in the paper. But he has been all these years. And he's the one with the most knowledge. He's the one designated on this issue. He's been on this issue for years. SOUTHERN DISTRICT REPORTERS, P.C.

D459flo2 Fagan - cross

And the fact he's retired for one week doesn't wipe out the ten

years of knowledge that preceded last week.

MS. GROSSMAN: Your Honor, we have other witnesses -
THE COURT: I'm sure you do.

He's the guy. I've been hearing Chief Esposito for years. I remember he testified at the last trial. He's the man. So he retired a week ago. That's very nice.

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MS. GROSSMAN: Actually, I spoke with Mr. Dunn. He said there was a very narrow issue about an aspect of supervision. We — it's one narrow issue.

THE COURT: Be that as it may, just see if he has any other day between April 9 and May 9.

MR. MOORE: We didn't want to push him back.

THE COURT: That I can't help. He is retired. He has family and health issues let's just see if he has any other free day. It isn't a perfect world. You didn't want to push him back that much. She really would like him, and he would like, April 9, which is what he's scheduled for.

If you want the accommodation of any adjournment, all I ask from Ms. Grossman to do is see if there's any day in the next 30 that he may be able to get here.

It may not be the day you would have liked. The man is retired and has issues, personal issues, which I don't want to go into and don't need to go into. I respect those issues.

MR. MOORE: I'll talk with her. And if we can't agree SOUTHERN DISTRICT REPORTERS, P.C.

D459flo2 Fagan - cross 1 on a date we'll go forward on the 9th. 2 THE COURT: Very good. That takes care of that 3 4 Now Dr. Fagan said I gave him homework to do and he 5 wanted to present results of his homework to me right in the 6 middle of all this. 7 MS. GROSSMAN: I think Mr. Dunn said he's ready to 8 question the witness on Tuesday. 9 THE COURT: I don't want to get into intra-counsel 10 conflicts. Mr. Moore and Mr. Dunn you will work this out, I'm 11 sure. You're all very fine lawyers. You will work it out. 12 Now the homework you did, Dr. Fagan. 13 THE WITNESS: Yes, your Honor. You had asked if we 14 would chart the changes in the classification scheme over time. 15 THE COURT: Classification --16 THE WITNESS: For the Fourth Amendment matter, for 17 check boxes on the UF 250. 18 THE COURT: Okay. 19 THE WITNESS: You had said can you explain to us how 20 these have changed over time. 21 THE COURT: Okay. 22 THE WITNESS: And so we compiled the changes for each 2.3 of the three periods. 24 THE COURT: Three periods being. 25 THE WITNESS: The first report, the Daubert --SOUTHERN DISTRICT REPORTERS, P.C. (212) 805-0300

D459flo2 Fagan - cross

criteria used in opposition to the Daubert motion, and then for the most recent report.

THE COURT: Have you shown these to anybody?

THE WITNESS: No. I'm under a blackout with respect to my lawyers here.

THE COURT: True. But I don't want you to give them to me until you've first given --

MR. HELLERMAN: I would appreciate seeing them first because I haven't seen them.

10 THE COURT: You don't have to discuss with him but 11 could we hand it to him.

THE WITNESS: Sure. I was just observing the

13 blackout.

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THE COURT: That's good. Meantime here you are. Take a look at this. Show it, of course, to the city. After you've both looked at it, if it's acceptable you understand what it is I'll mark it as an exhibit and move on.

All right. With that, Ms. Cooke.

MS. COOKE: Thank you.

CROSS-EXAMINATION CONTINUED

21 BY MS. COOKE:

- 22 Q. Professor Fagan, before the break we were talking about
- 23 your measure of crime in your model and the aggregate measure
- 24 of crime, correct?

25 A. Yeah.

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

D459flo2 Fagan - cross

1 Q. So your models do not account for variable response by

- 2 police to different patterns of crime, correct?
- 3 A. To different patterns -- well, they respond -- they account
- 4 for responses to overall crime in fairly small geographic
- 5 areas.

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- Q. Based on the seven meta categories, correct?
- 7 A. No.
 - We look at police activity and total crime counts.
- 9 And then we aggregate that by specific crime.
- To the extent I understand your question, I think the answer is yes.
- 12 Q. And am I correct in my understanding that your reports,
- 13 your two reports, the two increments, report the average impact
- of race with respect to stops for the period 2004 to 2009 and
- 15 2010 to June 2012?
- 16 A. Well if by average you mean that the regression coefficient
- is adjusted for both time and other factors, to that --
- 18 Q. Yes.
- 19 A. To that extent, yes.
- 20 Q. But your analysis doesn't provide evidence of -- for trends
- 21 or changes over time in the relationship between race and
- 22 stops, correct?
- 23 A. Correct.
- 24 Although I think we actually looked at that and didn't
- 25 find a whole lot of change. I think some of the -- some of the SOUTHERN DISTRICT REPORTERS, P.C.

D459flo2 Fagan - cross

graphs that we show in figures 1 through 4 in the first report tend to speak to change over time in those stop rates by -- at least in terms of the composition of the neighborhoods.

 $\,$ And then I think in 412 several of the graphs there look at changes by race over time in the use of some of the side one and side two factors.

So we do account for $\ensuremath{\text{--}}$ we do look at time in various analyses.

- Q. You didn't include a time variable in your regressions, correct?
- A. Our regressions are panel models. So implicitly by looking at serial correlations for each observation in each month over time we look -- we have an auto regressive trend to account for the influence of the rate in period one on period two and so on.
- So it is structured into the model, yes.
- 17 Q. You didn't control for changes in police process or
- 18 $\,$ training that might have occurred during the period data you
- 19 were reviewing, correct?
- 20 A. No, we did not.
- 21 Q. In your second supplemental report from 2012 which reviewed
- 22 the 2010 through June 2012 UF 250s, you did not use an
- 23 interrupted time series analysis to compare the 2004 to 2009
- 24 data, did you?

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25 A. In the later -- the 2012 report?

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

D459flo2 Fagan - cross

1 Q. Correct.

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- A. Why would we have done that?
- Q. Your reports reviewed data in two sets, correct?
- A. Oh you mean -- well we didn't run a composite model across the two time periods.

Q. Correct.

THE COURT: Is that what you were asking? MS. COOKE: Yes.

THE WITNESS: No. We didn't do that because the measures of patrol strength earlier -- we would have had a measurement discontinuity as opposed to a regression discontinuity. The measurements were different. So we were reluctant to go back and do that -- introduce that kind of discontinuity.

THE COURT: There's not one composite of all the years?

THE WITNESS: We did not run a full twelve-year model.

THE COURT: It wouldn't have been twelve years. It would have been eight.

But you didn't do it?

THE WITNESS: The idea of doing discontinuity implies there's some discontinuity that we'd want to look at in terms of an intervention of some sort or of some dramatic change.

We didn't see -- to the questions posed to us for the litigation and our general understanding of the policing regime SOUTHERN DISTRICT REPORTERS, P.C.

D459flo2 Fagan - cross

1 in the city, we didn't really quite see what -- nothing struck

- 2 me that would motivate me to want to do that.
- 3 Q. You've stated in other reports related to the Davis case
- 4 that there are more than a million possible combinations of
- 5 permutations of stop circumstances and additional stop
- 6 circumstances on the UF 250 form, correct?
- 7 A. I think we did that calculation once, yeah.
- 8 Q. That would be the same millions of permutations for the
- 9 UF 250s at issue in the Floyd reports, correct?
- 10 A. Yes.
- 11 Q. And that estimate I believe you reported in your Davis
- 12 report doesn't even include what an officer might include in
- 13 that narrative for the other check boxes, correct?
- 14 A. In the estimate of the million combinations?

I actually don't recall if it did or it didn't. But a million is high enough. If it went more than a million, kind of proves our point.

Q. But you model didn't control for these millions of permutations, correct?

20 A. No.

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This is the reason why we went to a classification system. The classification system was to help sort out in a kind of rational basis -- not the legally -- legal meaning of rational basis, but a rational, logical basis, categories of thinking and perception into articulated categories. Again the SOUTHERN DISTRICT REPORTERS, P.C.

D459flo2 Fagan - cross idea of revealed preferences is what we were after. Q. But nowhere in your analysis did you take into account the 3 real world complexity of the officer completing the UF 250 4 form --5 THE COURT: What does that mean, real world complexity 6 of the officer? What does that mean, his brain? 7 MS. COOKE: The real world complexity of completing 8 those UF 250 forms with millions of permutations when an 9 officer is observing a stop, correct. 10 THE COURT: I'm sorry. That built into the question 11 things I don't understand. 12 Forget the millions of permutations. What is it he 13 didn't consider, what the real world officer --14 MS. COOKE: The complexity that the form presents for 15 the officer completing the stop with the potential permutations 16 of check boxes. 17 THE WITNESS: And complexity with respect to what? 18 Can you help me a little bit on the question. 19 THE COURT: I think this is an objectionable question. MS. COOKE: I'll move on. 20 21 THE COURT: The form is what it is. 22 Q. Before you can estimate any model, Professor Fagan, you 2.3 have to specify the data, correct? A. Well we -- I don't know what you mean by specify the data. 24 25 Q. That means turning a concept into numbers, right? SOUTHERN DISTRICT REPORTERS, P.C.

D459flo2 Fagan - cross

1 A. Yes. We have constructs that we operationalize into data.

- 2 Q. If you don't operationalize data properly, it could lead to
- 3 bias in your estimates; is that correct?
- 4 A. It could lead to measurement error. Measurement error
- 5 leads to bias, sure.
- 6 Q. In your model your operationalize crime by using a log of
- 7 crime counts; is that correct?
- 8 A. Which -- oh, in general, yeah, we do that. We log the
- 9 crime counts.
- 10 Q. And you operationalize population by using a log of
- 11 population counts, correct?
- 12 A. That's correct.
- 13 Q. Am I correct in my understanding that to log means, for
- 14 example, you're using a base of three, the log of crime, three
- 15 crimes would be one and the log of nine crimes would be two and
- 16 the log of 27 crimes would be three? Is that --
- 17 A. If you use a base three.
- 18 Q. Base of three, yes.
- 19 A. We didn't use a base of three.
- 20 Q. What was your base for logging?
- 21 A. Natural log.
- THE COURT: What?
- 23 THE WITNESS: Natural log.
- 24 THE COURT: Natural log?
- THE WITNESS: Yeah.

SOUTHERN DISTRICT REPORTERS, P.C.

D459flo2 Fagan - cross

1 MS. COOKE: Which is 2-point what?

- 2 THE WITNESS: Close enough.
- 3 Q. It's close enough to three though, right?
- 4 A. Yes.
- 5 Q. And you've stated that you logged crime in order to move
- 6 the spikes in the crime data, correct?
- 7 A. We wanted to eliminate the -- what we call the undue
- 8 leverage and influence of outlier observations.
- 9 Q. Is that what you're referring to when you refer to as noise
- 10 earlier, noise in the data?
- 11 A. No. Noise are inconsistencies, abrupt rise, and spikes and
- 12 falls.
- 13 Q. Do you understand that logging this crime data obscures or
- 14 suppresses those spikes in crime that the policemen focus on in
- 15 making stops, correct?
- 16 A. Well, I think it's a little bit of apples and oranges which
- is saying -- we're looking at the distribution of crime counts
- 18 over time and places. And if we see -- well, let's put it this
- 19 way. It will reduce the tyranny of the outlier. It won't
- 20 eliminate the elevated observation. It just simply reduces its
- 21 undeserved leverage on the data.
- 22 Q. It smooths it? Is that correct?
- 23 A. Well it can smooth it. It can -- if we, you know, sort of
- 24 beat it into a linear form, it smooths it. We can also specify
- 25 it as exponential, even with preserving that within a log SOUTHERN DISTRICT REPORTERS, P.C.

D459flo2 Fagan - cross

- 1 distribution. There's lots of ways to do it.
- 2 Q. You could have used, but you did not use, crime rates in
- 3 your analysis, correct?
- 4 A. Well then we'd have to use population, which God forbid.
- 5 Q. So you didn't use crime rates?
 - A. We did not use crime rate. We used -- we did have a
- 7 measure of population, as you know. And we used crime. And so
- 8 the crime rate is somewhat implicit in those models.
- 9 Q. But if you used crime rates, those wouldn't have needed to
- 10 be logged, correct?
- 11 A. No. You can still have the same kind of outliers.
- 12 Q. You lagged crime by a calendar month in your first and
- 13 second supplemental reports, correct?
- 14 A. Yes.

6

- 15 Q. So that means if it's the 31st day of March, the crime in
- 16 your regression analysis is considering the crime from the
- month of February; is that correct?
- 18 A. Yeah. But we -- you know, again, you do that over a period
- 19 of 30 observations on one hand -- and whatever six times four
- 20 is -- 24 observations on the other hand. So, certainly there
- 21 is.
- 22 This is the reason -- there are two -- yes, that
- 23 happens. We assume that in a trend that gets basically ironed
- out. And it's the reason for using a spatial -- no, I'm
- 25 sorry -- an auto regressive component to try and capture that SOUTHERN DISTRICT REPORTERS, P.C.

D459flo2 Fagan - cross

1 kind of -- the consistency of those -- exactly that kind of

- 2 phenomenon over a longer period of time.
- 3 Q. So the 31st day of March, no crime from the month of
- 4 March is being considered for stops on the 31st, correct?
- 5 A. Yeah. Yeah.
- Q. Because you're only looking at crime from the prior calendar month which would be February?
- 8 A. Well in the first report I think we used a running average.
- 9 I'd have to go back and look.

And a running average would take that -- would sort of -- would address some of that issue.

- Q. But the second report you didn't use a running average?
- 13 A. No, we didn't. We used months.
- Q. So the second report, the 31st day of March would only be considering the crime from the month of February, correct?
- 16 A. Correct.

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But that -- so there's a -- what you raise is the kind of phenomenon that invariably happens in a measurement strategy. And in that measurement strategy, this is a source of error. And the concern we have in estimating models is whether or not that particular source of error is not randomly distributed.

And in our case we have no reason to believe that, for example, looking at stops in the first day of the month, which would account for crimes that took place in the entire SOUTHERN DISTRICT REPORTERS, P.C.

D459flo2 Fagan - cross

preceding month, or the 15th, or the 31st. Because that

- 2 happens over a large number of tracks, over a lengthy period of
- 3 time, that that particular form of bias or error wouldn't be
- 4 randomly distributed. We had no reason to believe it wouldn't

5 be

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- 6 Q. Professor Fagan, I'm going to ask that you try and limit
- 7 your responses to my questions so we can continue to move
- 8 along. Your counsel can ask questions that afford you the
- 9 opportunity to provide additional detail my questions don't

10 call for. Thank you.

With respect to the merge file, two files produced by the city to plaintiffs in this case which you have access to, the merge files cover the year of 2010 and the year of 2011, correct?

15 A. Yes.

- 16 $\,$ Q. And those merge files are for arrests and complaint data
- 17 for those respective years, correct?
- 18 A. Yes.
- 19 Q. And they've merged it to identify, in addition, suspect
- 20 descriptions for arrests that were clear, correct?
- 21 A. There are suspect descriptions and arrestee descriptions.
- 22 Q. And suspect descriptions are approximately 63 percent of
- 23 all the crimes reported in those merge files, correct?
- THE COURT: What?

MS. COOKE: Suspect descriptions are represented in SOUTHERN DISTRICT REPORTERS, P.C.

D459flo2 Fagan - cross

1 63 percent of the crimes in those two years.

THE COURT: You mean race is known in 63 percent?

3 MS. COOKE: Yes.

THE WITNESS: Yeah. Again, the terms that we

5 developed for talking about and the language we have for

- talking about the merge files, that's a combination of arrestee
- 7 and crime suspect -- reports from the crime complaints and
- 8 arrest reports. So what you call suspects, we call arrestees.
- 9 Q. Professor Fagan, you're aware that crime is not evenly
- 10 distributed across New York City, correct?
- 11 A. Yes.

4

6

- 12 Q. Neither are stops, correct?
- 13 A. Yes.
- 14 Q. In fact, both crime and stops are not evenly distributed
- across boroughs in New York City, correct?
- 16 A. That's why we had a borough control.
- 17 Q. Or precincts?
- 18 A. That's why we did the analysis for precincts.
- 19 Q. Or neighborhoods?
- 20 A. Yes. We found all of them the same.
- 21 Q. Or even census tracts, correct?
- 22 A. That's the objective of doing a model -- a regression model
- is to account for those variations.
- 24 Q. And, in fact, it's true your analysis confirms this unequal
- 25 distribution exists for the apparently unjustified stops as SOUTHERN DISTRICT REPORTERS, P.C.

D459flo2 Fagan - cross

- 1 well, correct?
- 2 A. I don't recall doing an analysis of the distribution of
- 3 unjustified stops by neighborhood.
- 4 Q. Let me direct your attention to Exhibit 414.
- 5 A. Oh, yes. We did that in the class cert motion. You're
- 6 right. Stand corrected.
- 7 Q. Table 1.
- 8 A. Yes.
- 9 Q. So looking at Plaintiffs' Exhibit 414, table 1, this table
- 10 represents the 76 NYPD precincts sequentially numbered,
- 11 correct?
- 12 A. Correct.
- 13 Q. This is page one of a two-page table on the screen?
- 14 A. Yes.
- 15 Q. And you've reflected the total stops. And at this point
- 16 this is only your first report period. So there's 2.8 million
- 17 total stops, correct?
- 18 A. Yes.
- 19 Q. And then you've identified the total number of stops for
- 20 each precinct for that period, correct?
- 21 A. Yes.
- 22 Q. And then represented in the table is the percentages of and
- 23 number of unjustified stops in each of those precincts,
- 24 correct?
- 25 A. Correct.

D459flo2 Fagan - cross

1 Q. And we can tell by looking at this table that the

- distribution of unjustified stops, according to your analysis
- 3 in your first report, is not evenly distributed across the
- 4 city, correct?
- 5 A. Yes.
- $\ensuremath{\text{Q}}.$ In fact, looking at precinct -- the 22nd precinct, we see
- 7 the 22nd precinct had 217 in the apparently unjustified
- 8 column, correct?
- 9 A. Yes.

12

- But as you know, we excluded the 22nd precinct from our regression models for the Fourteenth Amendment analysis.
 - THE COURT: That was because what?
- 13 THE WITNESS: Extremely low population.
- 14 THE COURT: Central Park?
- 15 THE WITNESS: Yes.
- 16 Q. Turning to the second page of the table, the 123rd
- 17 precinct. In the number of apparently unjustified stops for
- 18 this period was 280, correct?
- 19 A. Yes.
- 20 Q. And that precinct had reported 15,193 stops for this 2004
- 21 to 2009 period, correct?
- 22 A. Correct.
- 23 Q. So the percentage of those apparently unjustified stops
- 24 attributable to that precinct was only 1.8 percent, correct?
- 25 A. That's what's in the table, yes.

SOUTHERN DISTRICT REPORTERS, P.C.

D459flo2 Fagan - cross

1 Q. And looking up at the 75th precinct number in this table,

- the 75th precinct had 169,727 stops, correct?
- 3 A. Yes.
- 4 Q. And the total number of stops in the second column over,
- 5 10,710, that's the total number of stops you identified in your
- 6 analyses that were apparently unjustified for that reason,
- 7 correct?
- 8 A. Correct.
- 9 Q. And that percentage is 6.2 -- or 6.3 percent of the stops
- 10 made by that precinct you determined were apparently
- 11 unjustified, correct?
- 12 A. Yes. That's in the table.
- 13 Q. Turning back to the first page of the table, looking at the
- 46th precinct, which you identified had 35,152 stops, and you
- determined 6,085 of them were apparently unjustified. That
- 16 represented 17.3 percent of that precinct's stops, correct?
- 17 A. Yes.
- 18 Q. And the 46th precinct, Professor Fagan, that's located in
- 19 the Bronx, correct?
- 20 A. Yes.
- 21 Q. And the 75th precinct, that was located in Brooklyn?
- 22 A. Yes.
- 23 Q. And the 123 precinct, 123rd, that's in Staten Island,
- 24 correct?
- 25 A. Yes.

D459flo2 Fagan - cross
Q. You're aware that the total number of UF 250s you analyzed in 2012 had declined from the first two quarters of the prior year, correct?

MR. HELLERMAN: Object to the form of the question.

THE WITNESS: I'm sorry. Could you state --

Q. You reviewed the first two quarters of 2012 UF 250 data, correct?

MR. HELLERMAN: I withdraw the objection.

THE COURT: I guess she's just saying that the number of stops went down, she's saying.

 $\ensuremath{\mathsf{MR}}.$ HELLERMAN: I withdraw the objection. Counsel rephrased the question.

THE COURT: That's all you're asking. The number of stops were declined.

THE WITNESS: Yes. We're aware the number of stops went down in the second quarter of 2012.

THE COURT: Okay.

- Q. And the rate at which stops were determined to be
- 19 apparently justified by reasonable suspicion in your Fourth
- 20 Amendment analysis for stops made in 2012 increased, correct?
- 21 A. For 2012? I don't think we broke it out by year.
- 22 Q. For the period 2010 to 2012 increased, correct?
- 23 A. Yes, that's true.

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24 THE COURT: What did it go up to, the apparently

25 justified? It went up from 88?

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D459flo2
                               Fagan - cross
               THE WITNESS: Both went up.
 2
               THE COURT: Both?
               THE WITNESS: I'm sorry. Both the apparently
 3
 4
      justified and apparently unjustified.
 5
               THE COURT: Both went up?
 6
               THE WITNESS: The apparently justified went up by a
 7
      small percentage and the apparently unjustified went up by a
 8
      couple percentage points.
9
               THE COURT: So from 88 to 90 maybe?
10
               THE WITNESS: 87, 88. We have a demonstrative.
11
               THE COURT: From 87, 88 to 89?
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               THE WITNESS: Roughly about that, yeah.
13
               MS. COOKE: This, your Honor, is the 2004 to 2009
               And the percentage is 78.92, 14.93, and 6.15.
14
15
               And for the 2010 to 2012 period, it's 878.95, 6.15 and
16
      5.89.
17
               THE WITNESS: Okay. So they went up.
18
               THE COURT: Those two exhibits you showed, those are?
19
               MS. COOKE: These are demonstratives.
               THE COURT: Do they have numbers?
20
               MS. COOKE: They were admitted yesterday, I believe
21
22
      when Mr. Hellerman used them; is that correct?
2.3
              MR. HELLERMAN: I didn't move their admission, but I
24
      plan to.
25
               THE COURT: Let's get them in and mark them as
                     SOUTHERN DISTRICT REPORTERS, P.C.
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D459flo2 Fagan - cross 1 something. 2 MS. COOKE: He has a glossier copy. 3 THE COURT: As long as we have a number so the record 4 is clear. What are we calling these two? 5 MR. HELLERMAN: Let us call the chart for 2004 to 2009 6 Plaintiffs' Exhibit 417B. And the chart for January 2010 to June 2012, let us call 417C. 7 8 THE COURT: Okay. I have a vague recollection we used 9 417C already. 10 MR. HELLERMAN: We used 417A. 11 THE COURT: So you don't object? 12 MS. COOKE: No. 13 THE COURT: So 417B and C are received. MS. COOKE: There's one more. 14 15 MR. HELLERMAN: For the combined period June 2004 to 16 June 2012 we would mark as Plaintiffs' Exhibit 417D. 17 THE COURT: D as in dog. 18 MR. HELLERMAN: And I move their admission. 19 THE COURT: 417B, C, and D are all received. 20 (Plaintiffs' Exhibits 417B, C, and D received in 21 evidence) 22 Q. Professor Fagan, yesterday you testified with respect to I 2.3 believe it's Plaintiffs' Exhibit 413 which is your affidavit submitted regarding the burglary of the stop -- the stop of 24 25 David Floyd and the burglary you identified in the two-month SOUTHERN DISTRICT REPORTERS, P.C.

D459flo2 Fagan - cross 1 period for two census tract areas.

2 Do you recall that?

3 A. I do, yes.

(Pause)

5 MR. HELLERMAN: Let's just call it Plaintiffs' Exhibit

6 439.

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MS. COOKE: Your Honor, this is the map.

THE COURT: Yes. I know what it is. You want to

offer it in evidence so it's in the record?

MR. HELLERMAN: I offer it in evidence.

THE COURT: No objection? All right, 439 received.

(Plaintiffs' Exhibit 439 received in evidence)

13 Q. Professor Fagan looking at your declaration which is

14 Plaintiffs' Exhibit 413, paragraph 12.

15 A. Yes.

16 Q. This is a paragraph you are identifying that the area --

you said, "The area encompassed by census tract 66 and 214 runs

nine city blocks from east to west with Beach Avenue exactly in

the middle and four city blocks from north to south."

20 Did I read that correctly?

21 A. Yes.

22 Q. On this map which is Plaintiffs' Exhibit 439 placed on the

23 screen, this map identifies those two census tracts, 66 and

24 214, correct?

25 A. Yes.

D459flo2 Fagan - cross Q. Well, Professor Fagan, I don't see nine city blocks 2 identified in the red square on the map so could you tell me if 3 you see nine city blocks? 4 A. It's the composite area. 5 For the both of them are nine. You can sort of count 6 from right. 7 THE COURT: How many do you see, out of curiosity? 8 THE WITNESS: One, two, three --9 THE COURT: No, you, Ms. Cooke. 10 MS. COOKE: I see seven. 11 THE COURT: Funny. I saw eight. What do you see? 12 THE WITNESS: I see eight. 13 THE COURT: Oh, well, two of us see eight. Nobody 14 sees nine. Be that as it may. 15 Q. I don't see four city blocks from north to south. 16 A. I confess that we $\operatorname{--}$ there is one very long city block on 17 the border of Rosedale and we probably --18 THE COURT: I see at least five. Depends at the 19 widest part or the narrowest part, where are you looking? At 20 the north/south part at the longest, I see at least five. 21 Obviously the end of that $\ensuremath{\text{--}}$ what are these things called, a 22 trapezoid or something. At the end of it I see only two. But 23 at the widest part I see five. 24 THE WITNESS: I think it's a rhombus, your Honor. 25 THE COURT: That's better. Thank you. SOUTHERN DISTRICT REPORTERS, P.C. (212) 805-0300

D459flo2 Fagan - cross

Now there you go, a mathematician engineer $\mbox{--}$ with engineering background. Be that as it may. We now know what it is.

(Continued on next page)

D458FLO3 Fagan - cross

MS. COOKE: I am just trying to confirm, your Honor.

- Q. In paragraph 12, the next sentence identifies that the area 2
- 3 is in the 43rd Precinct and is bounded by the north Cross Bronx
- 4 Expressway on the west and White Plains Road -- I'm sorry,
- 5 north Cross Bronx Expressway on the north, south on Westchester 6 Avenue, Noble Avenue on the west, and White Plains Road.

I don't see Noble Avenue on the west.

- 8 A. Rosedale Avenue.
- 9 Q. Rosedale. Is the map correct or is the declaration 10 correct?
- 11 A. There is a street that's not identified on the map, and
- 12 that might have been the one where we confused Rosedale and
- 13 Noble. But we would have to blow the map up and see exactly
- 14
- what that street is. But it should be Rosedale.

 Q. Professor Fagan, how many census tracts are there in the 15
- 16 Bronx, do you know?
- 17 A. Off the top of my head, no.
- 18 Q. But I think you mentioned there are 2,156 in New York City?
- 19 A. That's the analysis. That's what we used. There are more
- 20 than that, but some are not usable for analytic purposes.
- 21 Q. Looking at the placement of the red bubble, the dot with
- 22 the A on the map, you understand that to be the location of
- 2.3 Mr. Floyd's stop, correct?
- 24 A. Yes.

7

25 Q. Would you agree with me that doesn't fall in the center of SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO3 Fagan - cross

1 the area you have drawn for the two census tracts, correct?

- 2 A. Right.
- 3 Q. It falls pretty close to the north border?
 - A. Well, it falls in the northeast quadrant of the census
- 5 tract.

4

- 6 Q. You didn't include any census tract on the other side of
- 7 that northeast quadrant to provide for that stop to be in the
- 8 middle of the census tract area, correct?
- 9 A. We didn't look across the other side of the Cross Bronx
- 10 Expressway?
- 11 Q. Correct.
- 12 A. No, we didn't, because we understand it's a very robust
- 13 sociological fact that when you have physical barriers such as
- 14 this, it tends to severely constrain ingress and egress of
- 15 people into neighborhoods. And so this natural barrier
- 16 basically circumscribes people's natural movements. I will be
- 17 happy to supply numerous citations about everyday movements
- 18 with respect to the built environment.
- 19 Q. What you just explained to me is not your understanding of
- 20 everyday movements with respect to crime patterns, is it?
- 21 A. No.
- 22 Q. And you selected the two months prior to Mr. Floyd's stop
- 23 for the period of your review for burglaries, correct?
- 24 A. Yes. Let me correct my last statement. It does actually
- 25 bear on the criminal activity. There's plenty of studies that SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO3 Fagan - cross

1 show that criminals aren't going to be leaping over the service

- 2 roads of expressways and crossing railroad tracks and so on.
- 3 There's tons of criminology on these routine movements.
- 4 Q. Have you published articles or papers on that subject
- 5 matter?
- 6 A. I'd have to recall. I have published a lot of articles. I
- 7 probably did look at movements of people from one movement to
- 8 the next.
- 9 Q. Sitting here today you cannot identify any?
- 10 A. We did address the issue in at least one study that was
- 11 published in the late 1990s.
- 12 Q. Was that a study of New York City?
- 13 A. Yes, it was New York City. In fact, it encompassed the
- 14 South Bronx neighborhood and East New York.
- 15 Q. The approximate length of your two census tracts
- 16 represented in Plaintiffs' 439 is just under half a mile,
- 17 correct?
- 18 A. Taken together?
- 19 O. Yes.
- 20 A. I think it's a little bit more. Between a half and three
- 21 quarters, depending on where you measure, from the narrowest to
- 22 the longest. It's a little bit longer.
- 23 Q. Are you aware that in a half mile radius of the red dot,
- 24 which I will represent to you is 1359 Beach Avenue, included in
- your declaration was the address, within a half mile of the SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO3 Fagan - cross

1 radius of that dot, in the same two months that you reviewed

2 for your analyses, there were 28 burglary complaints filed with

3 the NYPD?

4

- A. I'd have to see -- in order to see whether that's a
- 5 meaningful distribution -- I am not aware of it is the answer.
- 6 If it's meaningful, I would have to see where that -- if that
- 7 radius encompassed the area on the other side of the
- 8 expressway, it wouldn't be meaningful to me.
- 9 Q. Are you aware that within a one mile radius of that
- 10 location, 1359 Beach Avenue, in the same two months you
- 11 reviewed for your analysis, there were 62 burglary complaints
- 12 filed with the NYPD?
- 13 $\,$ A. We were not asked to look beyond the census tracts where
- 14 Mr. Floyd was stopped.
 15 MS. COOKE: J
 - MS. COOKE: Just one moment, your Honor.
- No further questions at this time.
- 17 THE COURT: Mr. Hellerman.
- 18 REDIRECT EXAMINATION
- 19 BY MR. HELLERMAN:
- 20 Q. Professor Fagan, Ms. Cooke asked you a couple of questions
- 21 about the text string analysis you did in the Davis case. Do
- 22 you recall that?
- 23 A. Yes, I do.
- 24 Q. Do you recall the size of the universe from which you drew
- 25 the sample of text strings in the Davis case?

SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO3 Fagan - redirect

1 A. Approximately 1800 -- the total sample was about 1800. The

- 2 text strings were drawn from 1100.
- 3 Q. I am asking you about the Davis case.
- 4 A. In Davis. Davis was a couple hundred thousand stops, and I
- 5 think the text strings were a much smaller number. I don't
- 6 recall off the top of my head the exact number.
- 7 Q. Was it approximately 206,000?
- 8 A. Yeah. As I said, it was a couple of hundred thousand
- 9 stops.
- 10 Q. It was not 500,000 as Ms. Cooke represented yesterday, is
- 11 that correct?
- 12 A. No.
- 13 Q. Some of Ms. Cooke's questions yesterday concerned a coding
- 14 error that resulted in your having reported in your first
- 15 report some stops as non-generalizable rather than apparently
- 16 justified?
- 17 A. Yes.
- 18 Q. What was that coding error?
- 19 A. Again, this is the kind of thing that I really had to write
- 20 out and look at while I was doing it. So I don't recall off
- 21 the top of my head. I would have to go back and consult our
- 22 papers and I'd be happy to give an answer later.
- 23 Q. Was it a particular combination of boxes checked on --
- 24 A. I think it was multiple conditional circumstances. I think
- 25 that might have been it. Which we eventually coded to SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO3 Fagan - redirect

- 1 apparently justified.
- Q. Was it one or more conditionally justified stop
- 3 circumstance and one or more additional circumstances?
- 4 A. That was it. As I said, the multiple conditional stop
- 5 circumstances.
- 6 Q. The code that you used to assign that category of stops was
- 7 to apparently unjustified, is that correct?
- 8 A. Yes.
- 9 Q. We gave the city your coding instructions, right?
- 10 A. Yes.
- 11 Q. When they ran your coding instructions, they discovered the
- 12 error?
- 13 A. Yes, they did.
- Q. And they brought it to your attention?
- 15 A. Yes.
- 16 Q. Did you fix it?
- 17 A. Yes.
- 18 Q. Did you report the fact that you fixed it to the city?
- 19 A. I think we submitted reports -- actually, I don't recall.
- 20 Actually, I think we did report it when we submitted the
- 21 analysis for the March 2013 Daubert hearing or February -- I'm
- 22 sorry, 2012.
- 23 Q. Now, the effect of the coding error was to increase the
- 24 number of -- I'm sorry. I misspoke. I have to go back to a
- 25 question I just asked.

D458FLO3 Fagan - redirect

1 The coding error caused the category of stops that you 2 just mentioned to be assigned to what classification?

- 2 just mentioned to be assigned to what classification?
 3 A. I think the coding error assigned them as being
- 3 A. I think the coding error assigned them as being 4 unjustified, and I think we moved them into the not
- 5 generalizable -- we made them apparently justified. We moved
- 6 them from not generalizable to apparently justified.
- 7 Q. As a result of that, the percentage of not generalizable
- 8 stops decreased, correct?
- 9 A. Yes.
- 10 Q. Would you take a look at Exhibit 415, which is your
- 11 February 2, 2012 declaration?
- 12 A. This was in response to the Daubert motion.
- 13 Q. I direct your attention to paragraph 4E -- 4F.
- 14 A. Yes. This is where we made the change.
- 15 Q. That's where you reported it?
- 16 A. Yes.
- 17 Q. Did the result of that coding error carry on or affect in
- 18 any way any of your subsequent classification analyses?
- 19 A. No. We incorporated this revision to the coding scheme
- 20 into subsequent analyses.
- 21 Q. Once defendants brought it to your attention and you fixed
- 22 it, it stayed fixed?
- 23 A. Yes.
- 24 Q. Did this coding error have any effect on the number of
- unjustified stops you reported in your first report? SOUTHERN DISTRICT REPORTERS, P.C.

2448 Fagan - redirect

D458FLO3

A. No.

1

- 2 Q. Now, you submitted papers for peer review?
- 3 A. Yes.
- 4 Q. Typically, when you submit a paper for peer review, are you
- 5 operating under a deadline?
- 6 A. No. Occasionally. For example, if it's a special issue of
- 7 a journal, where they want to round up all the papers by a
- 8 particular point of time, there will be deadline. But
- 9 generally these are -- they give you anywhere from nine to
- 10 twelve months, sometimes more, to submit your paper.
- 11 Q. When you submitted your first report in this case, were you
- 12 operating under a deadline?
- 13 A. Yes.
- Q. Was that, as far as you know, a deadline that was set by 14
- 15 the Court?
- 16 A. To the best of my knowledge.
- 17 Q. I think you said that one doesn't generally submit coding
- 18 instructions in the peer review process, correct?
- 19 A. It's not a standard procedure, no.
- 20 Q. But in this case, you did submit the coding instructions to
- 21 the city?
- 22 A. We were, I believe, perfectly transparent in what we did.
- 2.3 THE COURT: Was that a yes?
- 24 THE WITNESS: Yes. That's a long way of saying yes.
- Q. Because the city had your coding instructions, they were 25 SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO3 Fagan - redirect

- 1 able to point this out?
- 2 A. Yes.
- 3 Q. I believe you testified in response to one of Ms. Cooke's
- 4 questions yesterday when she was asking you about the period of
- 5 time in which an officer observed a person before he stopped
- 6 that person?
- 7 A. Yes, I recall.
- 8 Q. You testified, I believe, that in about 75 percent of all
- 9 stops, the period of observation was one or two minutes?
- 10 A. Two minutes or less.
- 11 Q. Do you have any opinion as to whether a lengthier period of
- observation, or even a considerably lengthier period of
- observation wouldn't have made a difference in your analysis?
- MS. COOKE: Objection.
- 15 THE COURT: Sustained.
- 16 Q. Were there longer periods of analysis?
- 17 THE COURT: Observation?
- 18 Q. Longer periods of observation?
- 19 A. Yeah. The other 25, 24 percent -- I am recalling the
- 20 distribution off the top of my head, it was in the 20s -- were
- 21 longer periods of time.
- 22 Q. Do you believe there is any correlation between the period
- 23 of observation and whether or not a stop is made with
- 24 reasonable articulable suspicion?
- 25 A. We have no reason to believe that. We have looked at that SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO3 Fagan - redirect

and, again, casually inspecting the data ourselves, we found no

- 2 particular trend with respect to that question.
- 3 Q. Professor, did any of the stops that you categorized as
- 4 unjustified, did any of them have the first page stop
- 5 circumstance other checked?
- 6 A. I think a handful did, a very small number.
- 7 Q. How small a number?
- 8 A. In our analysis, I -- actually, a very, very small number.
- 9 Again, this is the kind of detail that I didn't internalize,
- 10 but I do recall it being an extremely small number.
- 11 Q. In the 2004 to 2009 period, were any of the stops that you
- 12 classified as unjustified have the first page stop circumstance
- 13 other checked?
- 14 A. Probably, yes. If that was -- in the first analysis, I
- 15 think if that was the only box checked, I think we would have
- 16 classified that as unjustified. I have to go back and look at
- 17 our coding. There were some differences.
- 18 Q. Professor, would you take a look at page 50 of Exhibit 411? 19 THE COURT: Which one?
- MR. HELLERMAN: 411.
- 21 A. Yeah. We categorized those as indeterminate using the
- 22 language of the first report.
- 23 Q. Does that refresh your recollection?
- 24 A. Yes. This is how we did it.
- 25 Q. There were no UF-250s with the "other" box on the first SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO3 Fagan - redirect 1 side? 2 THE COURT: Other was the only box that were 3 categorized as apparently unjustified. 4 THE WITNESS: By definition, we would have moved this 5 to indeterminate. Q. Moved it? 6 A. Classified it as indeterminate. 7 8 MR. HELLERMAN: Can I take a moment to look at the 9 homework that the professor did? 10 THE COURT: Did you have to prepare those overnight or 11 you found them in the file? 12 THE WITNESS: I took them out of different files and 13 put them into --14 THE COURT: You prepared new documents? 15 THE WITNESS: I cut and pasted from reports to create 16 a new document. 17 Q. Did your reports accurately reflect which combinations --18 combinations can conclude just one -- you classified as apparently unjustified, non-generalizable and apparently 19 20 justified? A. Almost always. We did, I recall, have one instance where 21 22 what we actually did didn't match up with the text, and that was corrected. 2.3 24 Q. That was corrected? 25

Was that corrected in your subsequent analyses? SOUTHERN DISTRICT REPORTERS, P.C. (212) 805-0300

2452 Fagan - redirect

D458FLO3

- A. Yes.
- Q. Do you recall what that one correction was?
- 3 A. I'm sorry. I don't.
- 4 Q. Did it concern one or more side one stop circumstances that
- you considered conditionally justified?
- 6 A. Yes. That's what we just discussed.
- Q. With that change, the descriptions on Exhibit 411, page 50 7
- 8 are accurate?
- 9 A. Yes. We corrected and the redacted report is correct.
- 10 Q. Are the categories that are set forth in your second
- 11 supplemental report, Exhibit 417, at page 25 accurate?
- 12 A. Yes. We sort of figured it out by now.
- 13 Q. I am putting up Exhibit 417B. That's a chart prepared
- 14 under your supervision?
- 15 A. Yes.
- 16 Q. Do the figures for the 2004 to '09 period reflected on this
- 17 chart reflect changes that you made as a result of the Court's
- 18 April 16, 2012 decision?
- 19 A. Yes. Footnote B explains the reclassification based on
- 20 correcting prior mistakes.
- 21 Q. This chart was given to the city, right?
- 22 A. Oh, yeah. I believe it's a demonstrative that we used
- 2.3 here.
- 24 Q. It was given to the city before yesterday, right?
- 25 A. To the best of my knowledge.

D458FLO3 Fagan - redirect

1 Q. How many times did the city take your deposition in this

2 case?

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- 3 A. Just once to my recollection.
 - Q. Did you make yourself available for a second deposition?
- 5 A. I did.
- 6 Q. Do you recall making yourself available for a deposition on
- 7 March 7th or 8th of this year?
- 8 A. Yes, I did.
- 9 Q. Do you know if that was reported to the city?
- 10 A. I don't know. I believe it was.
- 11 Q. Are you aware of the fact that the city decided not to take
- 12 your deposition?
- 13 A. Yes.
- 14 THE COURT: Mr. Hellerman, I don't know if you are
- 15 close or not close, but, sadly, I have to take a luncheon break
- 16 now.

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- MR. HELLERMAN: I am very close.
- 18 THE COURT: I have to be somewhere in eight minutes.
- 19 I can tell you're close.
- I don't know if you have more, Ms. Cooke. Lawyers say
- 21 that and it goes on.
- 22 THE WITNESS: The witness keeps giving long answers.
- 23 THE COURT: I am trying to get you out before lunch,
- 24 but I don't think I can do this unless we pick up the pace.
- 25 MR. HELLERMAN: I think I am very, very close to done, SOUTHERN DISTRICT REPORTERS, P.C.

Fagan - redirect D458FL03 but I would like the opportunity to consult with my colleagues. THE COURT: So you have to stick around. I'm sorry. We will reconvene at 2:00, but you will be out quickly from what the lawyers are telling me. (Luncheon recess)

D458FLO3 Fagan - redirect

AFTERNOON SESSION

2:00 p.m.

MR. HELLERMAN: Just one moment, your Honor.

BY MR. HELLERMAN:

O. Professor Fagan, this morning Ms. Cooke asked you some

- 5 Q. Professor Fagan, this morning Ms. Cooke asked you some questions about the alternative analysis performed by Dr.
- 7 Smith, the results of which appear in Appendix I to Dr. Smith's
- 8 December 19, 2011 declaration, which is part of Defendants'
- 9 Exhibit H13 marked for identification. Do you recall that?
- 10 A. Yes. I have a copy in front of me.
- 11 Q. In particular, she asked you a question about the negative
- 12 0.16 figure that appears on the percent black and precincts
- 13 line. Do you recall that?
- 14 A. Yes.
- 15 Q. Is that number statistically significant?
- 16 A. Not in this table, no.
- 17 Q. Do you have an opinion as to whether that negative .016
- 18 figure on that line is reliable?
- 19 A. No. I believe it's not reliable. Do you want me to go
- 20 into the details?
- 21 Q. Yes, please.
- 22 A. In part, because of the construction of the suspect
- 23 categories. We know, as we have said before and gone over in
- 24 court quite a bit, during this period of time, suspect race was
- 25 known in a very high percentage of the cases -- or a high SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO3 Fagan - redirect

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percentage of the cases. And the model -- first of all, it doesn't accurately reflect an alternative to what we did because many of control variables that we put in don't seem to be in this model, and I don't believe there is information in the accompanying text that suggests that the same control variables were introduced. So whatever this is, it's not a replication of what we did. That's the first point.

Second, in lieu of using the racial composition of the police precinct, this alternative model uses -- appears to be, again, it's not well described, but counts the suspects broken out into one, two, three, four racial groups or ethnic groups, and I believe those are designed to map on to the groups that we used. Again, I am assuming. There is not much documentation. But what is curious about it is that when you do a regression like this, and you kind of have a perfect universe, meaning you know all of the black, white, Hispanic, and other suspects, as well as the race unknown suspects, you have got to leave something off, otherwise the model won't converge, it won't estimate. You need a reference group, in other words, an omitted category. There is no information here as to what the omitted category is. The only thing we can conclude that they could have done to keep this thing from collapsing, this model, was to use the race unknown as the reference group. And I think that doesn't respond to the question of disparate treatment.

D458FLO3 Fagan - redirect

So it's just simply not responsive to the questions that are at issue in this litigation.

Quite honestly, as somebody who has done a lot of peer reviews, I probably would be a bit -- I would worry as a reviewer over the lack of information and detail that was provided to accompany this regression -- this table.

- Q. During your cross-examination, you stated the approximate numbers or percentages of stops that your classification system assigned as apparently justified. Do you recall that?
- 10 A. Yes.

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- 11 Q. Does the fact that your classification analysis assigns 12 stops to the apparently justified class mean that you believe 13 those stops were made with reasonable suspicion?
- 14 A. No. The answer is no.
- 15 Q. Why not?

A. As we said earlier, yesterday or the day before, many of the factors that are used to construct or that would sort a case into reasonable suspicion are factors that we believe to be unreliable in terms of their use because they are used in such extraordinarily high rates, or unusually high rates, and apparently somewhat indiscriminately. That's one reason.

Another reason is that the number of factors that are checked off seems to have increased steadily over time. So it's almost what we could call factor inflation. And, of course, the more factors you check off, the more likely it is SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO3 Fagan - redirect

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for you to be able to claim reasonable suspicion, or by our sorting mechanism and classification mechanism, they would fall into the apparently justified category. So inflation is a fact of life. We all suffer inflation at the marketplace. But here is factor inflation that I think is contributing to generally elevating the level of reasonable suspicion stops.

The other reason is generally because the hit rates are so low. So whatever the basis is for forming reasonable suspicion seems to be so off, in terms of the number out of the 4.43 million stops that lead to arrests or contraband or weapons seizures, all of these combined together suggests things aren't always what they seem.

THE COURT: When you get that rate of apparently justified of 88 percent, you think it would actually be much lower if you were permitted to, say, discount all the checkmarks or half the checkmarks on furtive movements and half the checkmarks on high crime area, if you discounted them because they are overused, that 88 percent figure would then decrease?

THE WITNESS: Yes. If we were to take these apparently justified categories and break it up into different parts — there are three categories that are facially justifiable, and there is no contest about those, and nobody has any dispute about those: Violent crime, drug transaction and CSE. If we broke those out and said there is no SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO3 Fagan - redirect disagreement, and then looked at the rest, which is much more 2 subjective, in terms of evasive actions, furtive movements, 3 clothing, and things like that --4 THE COURT: And high crime areas. 5 THE WITNESS: And high crime areas. If we looked at 6 all those other combinations, I think we might actually more 7 profitably create a maybe justified category as a fourth 8 category. 9 So the answer to counselor's question is no. 10 THE COURT: My question. It would reduce the 88 11 percent? 12 THE WITNESS: It would reduce it quite a bit. 13 MR. HELLERMAN: No further questions. 14 THE COURT: Ms. Cooke. 15 RECROSS-EXAMINATION 16 BY MS. COOKE: 17 Q. Professor Fagan, what rate of known suspect description 18 would be reliable for you to include that data in your 19 regression analysis? 20 A. I would have to answer that question by having some 21 benchmark against which to compare. So I can't give you that 22 answer right away. 2.3 THE COURT: But you thought 67 percent known was not 24 sufficient? 25 THE WITNESS: It wasn't sufficient to make assumptions SOUTHERN DISTRICT REPORTERS, P.C. (212) 805-0300

D458FLO3 Fagan - recross 1 that that 67 percent applied to the rest. 2 THE COURT: So it would have to be some number greater 3 than 67? 4 THE WITNESS: Yes. 5 THE COURT: Percent? 6 THE WITNESS: Yes. 7 THE COURT: You're not prepared to say what. 8 THE WITNESS: I can't. I would have to do some 9 simulations and try and do some -- just a variety of different 10 mathematical exercises to figure out if there is some tipping 11 point where we would actually get to some greater probability. 12 Q. With respect to the "other" check box on UF-250 form, I am 13 correct that there is an "other" check box on the front and the 14 back? 15 A. Yes. 16 Q. And you can include a narrative section on the front and 17 the back for the checks? 18 19 Q. How many stops that had other and a handwritten narrative 20 checked on the back did you include as apparently unjustified 21 in your first report? 22 A. I don't have that number off the top of my head. 2.3 Q. But there is some number that fall into apparently 24 unjustified that have other and a narrative? 25

A. Yes. My recollection is that it's an extremely small SOUTHERN DISTRICT REPORTERS, P.C. (212) 805-0300

D458FLO3 Fagan - recross number. Q. The same question for the number in your second report. 3 A. I don't have that number in my head. Sorry. 4 MS. COOKE: No further questions. 5 THE COURT: That was really nice and short, like you 6 said it would be. 7 MR. HELLERMAN: Just a moment. 8 Nothing further, your Honor. 9 MR. CHARNEY: Plaintiffs wish to call Eli Silverman. 10 ELI SILVERMAN, 11 called as a witness by the plaintiffs, 12 having been duly sworn, testified as follows: 13 THE COURT: State your full name for the record, first 14 and last, spelling both. 15 THE WITNESS: First and last and what? 16 THE COURT: Spelling both first and last. 17 THE WITNESS: Eli Silverman, E-L-I, Silverman, 18 S-I-L-V-E-R-M-A-N. DIRECT EXAMINATION 19 20 BY MR. AZMY: Q. Good afternoon, Professor Silverman. 21 22 THE COURT: Would you remind me of your name? 2.3 MR. AZMY: Baher Azmy, A-Z-M-Y.

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

Q. Professor Silverman, are you currently employed?

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D458FLO3 Silverman - direct

- 1 Q. Were you previously employed?
- 2 A. Yes.
- 3 Q. In what position?
- A. I was a professor in the department of law and police
- 5 science at John Jay College of Criminal Justice and the
- 6 graduate school of City University of New York.
- 7 Q. What period were you employed at John Jay?
- 8 A. I arrived 1971 and retired 2003.
- 9 Q. Do you maintain any status still with John Jay?
- 10 A. My current status is title of professor emeritus.
- 11 Q. While you were at John Jay, what courses did you teach?
- 12 A. I taught mostly courses in policing, police management,
- 13 police administration, seminar in police problems, community
- 14 policing, and courses in policy analysis.
- 15 Q. Did you engage in research and scholarship while you were a
- 16 professor?
- 17 A. Yes, I did.
- 18 Q. In what general areas?
- 19 A. Most of the work was in the area of policing.
- 20 Q. Do you still engage in research and scholarship?
- 21 A. Yes, I do.
- 22 Q. Since your retirement I mean.
- 23 A. Since my retirement, yes.
- 24 Q. As part of your research, generally speaking, have you had
- occasion to study the use of CompStat by the NYPD?
 SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO3 Silverman - direct

1 A. Yes, I did. I prepared and published several articles on

- 2 it, and then I authored a book entitled, "NYPD Battles Crime;
- 3 Innovative Strategies in Policing," which many considered the
- 4 first exploration of the origins and development of CompStat.
- 5 Q. Briefly, what is your understanding of what CompStat is?
- 6 A. CompStat is basically a performance management
- 7 accountability system which holds commanders accountable for
- 8 crimes in their area and utilizes up-to-date crime statistics
- 9 and crime mapping.
- 10 Q. Can you describe your educational background?
- 11 A. I have a BA in political science. I have an MS in public
- 12 administration. And I have a Ph.D. in public policy and
- 13 criminology.
- 14 Q. Where is your Ph.D. from?
- 15 A. Penn State University.
- 16 Q. When did you obtain the Ph.D.?
- 17 A. Around 1971.
- 18 Q. Did you have during your graduate studies any training in
- 19 statistical analysis?
- 20 A. All graduate students are required to have it so I also
- 21 did, yes.
- 22 Q. What is your basic understanding of what statistical
- 23 analysis is?
- 24 A. Statistical analysis basically deals with relationships
- among variables to assist in doing a number of things, SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO3 Silverman - direct

- 1 including probabilities.
- 2 Q. What basic tools of statistical analysis were you
- 3 instructed on during your graduate studies?
- 4 A. The type of tools that I as a social scientist would be
- 5 exposed to are statistical tools that are basically designed
- 6 for social science, in terms of research, research design, and
- 7 research analysis.
- 8 Q. Since graduate school, have you had additional training on
- 9 statistical analysis?
- 10 A. I have sat in on colleagues' classes who actually teach
- 11 this subject just to keep myself up-to-date and see what else
- is happening.
- 13 Q. When you taught courses at John Jay, did you teach the
- 14 basic tools of statistical analysis?
- 15 A. We had to use some of that, A, in the policy analysis
- 16 course. I was also a reader on many of the Ph.D.
- dissertations, so I had to work with students on that and try
- 18 to facilitate their work.
- 19 $\,$ Q. Have you used statistical analysis in any of your research
- 20 or scholarship?
- 21 A. Yes. I used it -- before I completed my degree, I was a
- 22 fellow in the Department of Justice, and I was assigned to the
- 23 assistant attorney general for administration. My title was
- 24 special assistant. And in that capacity, I was asked to do
- 25 some surveys in statistical analysis.

D458FLO3 Silverman - direct

1 Q. Since that position, have you used statistical analysis in any of your scholarship?

- 3 A. Yes. I used it when I then -- after that I worked for the
- 4 National Academy of Public Administration in D.C., I had to.
- 5 On two occasions I was a visiting professor and scholar at the
- 6 Police Staff College in Bramshill, England, and we were engaged
- 7 in survey analysis and research design for police forces in the ${\tt UK.}$
- 9 Q. I would like to show you a copy of your resume.
 - MR. AZMY: What plaintiffs' exhibit are we up to? Can we mark this as Plaintiffs' Exhibit 440.
- 12 Q. Professor Silverman, do you recognize this document?
- 13 A. Yes.

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- 14 Q. What does it appear to be?
- 15 A. It's my resume.
- 16 Q. Can you look through it briefly and let us know if you
- think it is a complete and up-to-date copy of your resume?
- 18 A. It's virtually complete. I don't think I have every single
- 19 thing I have written in there that's been published, but from
- 20 what I can tell it has the vast majority of my publications.
- 21 MR. AZMY: I move Professor Silverman's resume into
- 22 evidence as Plaintiffs' Exhibit 400.
- 23 MR. KUNZ: I object. It seems like they are moving to
- qualify him as an expert. I don't see what relevance his
- 25 resume would have.

D458FLO3 Silverman - direct

1 THE COURT: Just to understand his qualifications to 2 do this work.

MR. AZMY: That's all. We are not attempting to qualify him as an expert. Just as background.

MR. KUNZ: I maintain our objection.

THE COURT: I will take his resume.

(Plaintiff's Exhibit 440 received in evidence)

- Q. We are going to be discussing survey analysis you conducted in 2008, 2012 in some detail. Before we get to that, prior to 2008, did you have any experience using opinion survey
- 11 analysis?

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- 12 $\,$ A. Well, the opinion survey that I was most engaged with was
- 13 the opinions of residents in particular police forces in the
- ${\tt UK}$, and most of these were what we would call customer kind of
- 15 surveys. First, we had to design who the recipients of these
- 16 surveys should be, what areas, how many areas. Then we had to
- design these surveys. Some of the forces were interested in
- 18 how they were viewed in the community, some were just paper.
- 19 Q. What periods did you conduct those surveys?
- 20 A. The first time I did that, it was 1984, when I was a
- 21 visiting professor. And I returned there in 1998, and we did
- 22 some follow-ups.
- 23 Q. Did you ever publish the results of either or both of these
- 24 opinion surveys?
- 25 A. We didn't because the customer -- the client that we did it SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO3 Silverman - direct

1 for was the police force, but I did do an article, which is on

- 2 not on here, but I did do an article there in '84 which was
- 3 based on this. It was a published article in a UK journal
- 4 called Policing.
- 5 Q. Is that a peer reviewed journal?
- 6 A. Yes, it is.
- 7 Q. Are you familiar with the social science literature and
- 8 methodology surrounding the construction analysis of competent
- 9 surveys?
- 10 A. Yes, I am.
- 11 Q. How have you become familiar with that literature?
- 12 A. Well, A, you're exposed to it because most -- the major way
- 13 that material is gleaned by most social scientists are
- 14 research, surveys, different kinds of surveys, but surveys is a
- 15 predominant method of garnering information from people in
- 16 terms of their perceptions and intensity of their views. So
- you're exposed to that and then you work with that.
- 18 Q. You work with that research?
- 19 A. Yes. You work with that research because it informs the
- 20 design of your own survey instrument.
- 21 Q. So you have relied on that research in constructing survey
- 22 instruments?
- 23 A. That's correct.
- 24 Q. Have you attempted to keep up-to-date on the literature
- 25 regarding opinion surveys?

D458FLO3 Silverman - direct

- 1 A. Yes.
- 2 Q. Based on your experience and review of this literature,
- 3 what are the attributes of a good opinion survey construction?
- 4 A. It has to be concise. It has to be clear. You can't have
- 5 too many variables or too many questions contained in one
- 6 single question. It has to be valid. It has to capture the
- 7 phenomena you're trying to observe.
- 8 Q. Can I stop there? What do you mean by clear?
- 9 A. Well, you need it clear so when you write a sentence, you
- 10 don't have too many possibilities for the respondents to react
- 11 to. You want to make it clear what you're trying to extract
- 12 from the respondent. You don't want them to not be clear on
- 13 what exactly this question is about.
- 14 Q. What do you mean by concise?
- 15 A. Concise, you want it as short as possible to capture the
- 16 major point you want. And also the survey, you try to make the
- 17 survey as concise as possible. You don't want an overly long
- 18 survey. Otherwise people may tend to tune out and not want to
- 19 fill it out.
- 20 Q. What other attributes of a good survey?
- 21 A. The data should be valid. What you're trying to capture
- 22 should represent the -- the words you use should try to capture
- the phenomena you're trying to examine. It should be reliable.
- 24 The statistics should reflect what you're trying to measure and
- 25 it should lend itself to replication. So someone else can also SOUTHERN DISTRICT REPORTERS, P.C.

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- 1 use that same survey or you can use that same survey again.
- 2 Q. What about selecting a sample, is that important?
- A. Absolutely. You want a sample that's representative of the population that you're trying to measure, and you want it to be a good cross-section.
- Q. What about the question of bias, is that relevant to constructing a survey?
- A. You try your best to rule out any bias one way or the other, and you do the best you can in trying to rule out any bias. You look for that.

(Continued on next page)

D459flo4 Silverman - direct

1 Q. Any other attributes of good opinion survey construction or 2 results?

- 3 A. You want the actual wording or the instrument to, if
- 4 people -- if you're trying to measure intensity of a view or a
- 5 perception, then you try to give ranges of gradation where
- 6 people can respond.
- 7 Q. And what about the question of anonymity?
- 8 A. Very important. An anonymity is essential especially in a
- 9 sensitive influence. And you try -- and that influences the
- 10 kind of survey instrument you design. You want to ensure, at
- 11 all possible, that the respondent has anonymity so the
- 12 respondent, as a social science literature strongly suggests,
- 13 the respondent is more likely to be candid and forthcoming
- without any possible fear of repercussions or simply wants to remain anonymous.
 - Q. So let's turn to the 2008 survey you conducted.
- 17 In general terms, what was the purpose of this survey?
- 18 A. The purpose of this survey was to -- the original purpose
- of the survey was to find out to what degree, if any, personnel
- 20 in the NYPD were feeling pressure in terms of downgrading
- 21 crimes, misrepresenting or not taking reports or downgrading
- 22 crimes or reclassifying crimes that had sprung out of earlier
- 23 work I had done and John Eterno, Dr. John Eterno was also
- 24 involved.

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25 Q. Who is Dr. John Eterno?

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1 A. John Eterno is a retired captain from NYPD. He's also a

2 Ph.D. He's now the associate dean and professor of criminal

3 justice at Molloy College.

Q. Other than trying to capture information about the possible pressure of downgrading crime, does the survey attempt to

answer any other questions?

A. Yes. The survey goes into the whole issue of pressure.

That was the main focus of the survey.

9 So we included not only the crime downgrading but we 10 also included other pressures that had come to our attention. 11 And those were to increase summonses, increase arrests and stop 12 and frisks.

MR. AZMY: Put up Plaintiffs' 300.

Q. Professor Silverman, I'm showing you what's been marked Plaintiffs' Exhibit 300 with a Bates number Plaintiff 001208 through 001211.

I can hand you a copy in case you also prefer to look at it on paper.

THE COURT: Thank you.

MR. AZMY: Would you like one to, your Honor?

THE COURT: It's easier than the screen.

- 22 Q. Do you recognize this document?
- 23 A. Yes, I do.

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- 24 Q. What is it?
- 25 A. It's the survey instrument that Dr. Eterno and I designed SOUTHERN DISTRICT REPORTERS, P.C.

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for the New York City Police Department retiree survey.

- Q. So you were involved in constructing the survey?
- 3 A. Yes, I was.
- 4 Q. And briefly -- we'll get into more detail about the
- population -- but briefly to whom was the survey sent?
- 6 A. This was sent to retired captains and above.
- Q. Of the --7
- 8 A. Of the New York City Police Department, yes.
- 9 Q. Looking at the instructions there at the top, what basic
- 10 instructions did you give to recipients of this survey?
- 11 A. We asked them not to put their name or any identifying
- 12 information on the survey. And we indicated this was entirely
- at their voluntary consent. And we also mention that it would 13
- 14 only take a few minutes to complete.
- 15 Q. Did you indicate the reason you were sending out the
- 16 survey?
- 17 A. We indicated we wanted more information about the middle
- 18 management of NYPD and were asking them to help us acquire that
- 19 information.
- 20 Q. Can you look at question one on the first page of this
- 21 document.
- 2.2 A. Yes.
- 2.3 Q. Can you read it for the record, please.
- A. "With respect to the following criteria and based on your 24
- 25 personal experience, on a scale of one to ten with one being SOUTHERN DISTRICT REPORTERS, P.C.

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1 the least and ten the most, how much pressure was there from

- 2 management/supervisors to."
- 3 Q. Okay. So in asking this question what variables were you
- 4 hoping to compare ultimately?
- 5 A. We divided the retirees into two periods, pre- and
- 6 post-CompStat.
- 7 Q. And was that -- how was that information ascertained on
- 8 this survey?
- 9 A. I think it was question 23. It says, "Did you serve on
- 10 NYPD after 1994?"
- 11 Q. And that individual circled either yes or no?
- 12 A. Yes. That would indicate whether they --
- 13 Q. And why did you pick 1994 as a demarcation?
- 14 A. 1994 virtually the middle was -- of the year, actually it
- 15 was late April, April, was the introduction in New York City
- 16 Police Department of the CompStat system.
- 17 Q. So you wanted to measure certain pressures experienced by
- 18 individuals who served prior to the introduction of CompStat as
- 19 compared to those who served after the introduction of
- 20 CompStat?
- 21 A. That's right.
- 22 Q. And what were the criteria, the dependent variables you
- were comparing those time periods against?
- 24 A. The items listed on the left-hand column are those, the
- dependent variables. We were interested, and to what extent, SOUTHERN DISTRICT REPORTERS, P.C.

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1 the period of retirement may have influenced increased

- 2 summonses, increased arrests, stop and frisks, etc., the
- 3 pressure to do these things. I should be clear.
- 4 Q. What is going across the page here, these ordinal numbers,
- 5 the scale of one to ten?
- 6 A. Actually this would be considered a scale. And it's a
- 7 scale that goes from least pressure, one, to most pressure, 8 ten.
- 9 Q. Why did you use that scale?
- 10 A. This is a -- what's called a modified version of a Likert 11 scale. Like -- shall I explain that?

THE COURT: Yes.

MR. AZMY: Please.

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THE WITNESS: It's named after a very famous social psychologist who wrote in the 1930s. His name was Rensis R-E-N-S-I-S. His last name was Likert L-I-K-E-R-T. And he was the first to develop the Likert scale. And there have been numerous versions of the Likert scale. And it's very well --very deeply discussed in the literature. And it especially lends itself to measuring intensity. And we felt that this would be appropriate for this instrument.

- 22 Q. Why did you have a scale that ranged from one to ten as
- 23 opposed to some other series of numbers?
- 24 A. For two reasons. Intuitively people are asked generally to
- 25 rate their preferences one to ten. But there's also work in SOUTHERN DISTRICT REPORTERS, P.C.

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the literature by Preston and Coleman who did an article in 2000 which asks respondents which scale would they most prefer, one to what? One to ten was the most preferred, followed by one to nine, and one to seven.

Q. And why did you use the term pressure along the scale? A. A number of reasons.

One is that -- one is that in all of the articles that are written, particularly since 2004, 2005 when there has been example of increased summons activity or increased stop and frisk or a downgrade in crime, the word is often used, pressure.

And secondly, in both the social science and the economic literature, the word pressure has a long heritage. In criminal justice, for example, way back in the '30s, '32, '33, the Wickersham Committee referred to pressure on police. The very famous presidential crime commission under Lyndon Johnson in 1967 discussed pressure. And in all of the social sciences this word, pressure, is used in reference to numerical goals. And there's a famous -- it's called Campbell's rule after -- I forget his first name. His last --

MR. KUNZ: I think I'm going to have to object I think we're getting a little far afield from what --

 $\,$ THE COURT: We may be. I think we is should have a new question.

Q. So how would individuals sort of mechanically mark their SOUTHERN DISTRICT REPORTERS, P.C. (212) 805-0300

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1 answers on this survey?

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2 A. They would circle it.

3 MR. AZMY: Your Honor, at this time I would like to 4 move Plaintiffs' Exhibit 300 into evidence.

MR. KUNZ: No objection your Honor.

THE COURT: 300 is received.

(Plaintiff's Exhibit 300 received in evidence)

- 8 Q. Did you have any assistance in constructing or reviewing
- 9 the composition of the survey? 10 A. Yes, we did.
- 11 Q. Did you seek that assistance out?
- 12 A. Oh, definitely we sought it out.
- 13 Q. Why did you do that?
- 14 A. Because when you construct a survey you want to make sure
- that it's clear, it captures what you're trying to do. And it
- may be clear to you in looking at it, but you may miss
- 17 something. So we did seek assistance.
- 18 Q. And from whom did you seek assistance in reviewing or
- 19 constructing the survey?
- 20 A. We sought assistance from academics in this field. And we
- 21 sought assistance from practitioners, current and former, in
- 22 the police department.
- 23 Q. And in what way did you seek assistance from practitioners?
- 24 A. Well, we shared the instrument with practitioners. And we
- 25 sat in a round table with them.

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- 1 Q. Can you clarify what you mean by practitioners?
- 2 A. Those who are current or former members of the police
- 3 department.
- 4 Q. Okay.
- 5 A. And we sat around with them and we went over every single
- 6 question.
- 7 Q. For what purpose?
- 8 A. To make sure that it was clear to them, and to make sure
- 9 that we -- this instrument would capture what we're trying to
- 10 capture.
- 11 Q. Did you seek any other forms of assistance?
- 12 A. Yes. We used academics to go over it. And we also did a
- 13 pilot study of it.
- 14 Q. Can you briefly describe the pilot study.
- 15 A. Well we sent it to about 20 individuals who -- current or
- 16 former members of the police department. And we asked them to
- fill it out and then give us our response.
- 18 Q. Any other entities you sought review of this?
- 19 A. Well the instrument had to be reviewed by the Molloy
- 20 College institutional review board. It's called IRB.
- 21 Q. What's Molloy College again?
- 22 A. Molloy College is where Dr. Eterno is employed.
- 23 Q. What's the function of an IRB?
- 24 A. An IRB is a panel that every institution that gets any
- federal supervision or money like a college or a hospital has SOUTHERN DISTRICT REPORTERS, P.C.

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1 to establish an IRB. And this IRB reviews the documents for

- 2 its ethical content and its scientific content. And unless the
- 3 IRB approves it, it can't then be used.
- 4 Q. And did the Molloy College IRB approve this instrument?
- 5 A. Yes, it did.
- 6 Q. As a result of this assistance and inputs from these
- 7 various entities, did you make any modifications to the survey?
- 8 A. We made small modifications. Nothing major.
- 9 Q. Who did you elect to send this survey to? What population?
- 10 A. This population were those who were affiliated with the
- 11 captains endowment association, retirees.
- 12 Q. And who constitutes the captains endowment association as
- 13 of 2008?
- 14 A. It constitutes all captains and above which would in this
- 15 case -- which captures captains, deputy inspectors, inspectors
- 16 and deputy chiefs.
- Q. Why did you choose this population to send the survey to?
- 18 A. First of all, if there's pressure these individuals who are
- 19 intimately involved, middle and senior managers of the police
- 20 department, would be aware of it as a recipient or may
- 21 participate in it.
- 22 Q. Does this group include any patrol or line police officers?
- 23 A. No, it does not.
- 24 Q. Why not?
- 25 A. Why it doesn't include them?

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1 Q. Yes. Why doesn't it include them?

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- 2 A. Because they never achieve the rank of captain or above.
- 3 Q. How did you get access to this group?
 - A. John Eterno. Dr. Eterno is a retired captain, approached
- 5 the president of the CEA, captains endowment association, and
- 6 asked if they can mail out a questionnaire that we devised --
- 7 actually we devised it and then we also added -- he wanted
- 8 three questions, Roy Richter who was the president wanted three
- 9 questions to help him with his membership issues.
- 10 Q. And about how many individuals did you send the survey to, the 2008 survey to?
- 12 A. I think the number it was sent to was 1,197, I believe.
- Q. And earlier you mentioned the notion in the construction of survey interests, the notion of bias as something you want to avoid.

In your judgment is it possible that this particular group might be biased in one direction or the other towards the NYPD or the questions contained in the survey?

MR. KUNZ: I'm going to object to this, your Honor. I think this would call for total speculation on his part.

 $\mbox{MR. AZMY:} \;\;\mbox{It goes to the proper construction of the survey, your Honor.}$

THE COURT: Let me read the question again.

I'm going to sustain the objection. It's a bad question. It says is it possible. The answer is it's always SOUTHERN DISTRICT REPORTERS, P.C.

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possible.

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Q. Let me rephrase.

Professor Silverman, do you have any reason to think that this group would have any bias towards the questions contained in the survey?

MR. KUNZ: Objection.

THE COURT: Sustained. Sustained. It's the same 7 8 question.

- 9 Q. How did you physically send the survey instrument out?
- 10 A. The survey instrument was mailed out by the CEA. We paid
- 11 for the mailing.
- 12 Q. And were you aware of the names of the recipients of the 13 survey?
- 14 A. No, we were not.
- 15 Q. And were they -- did you -- were there measures taken to
- 16 assure that the responses would be kept anonymous from you and
- 17 Dr. Eterno?
- 18 A. Yes. The names were anonymous. We don't know who returned
- 19 them. They were just -- and we asked them not to. They were
- 20 returned without names. They were just returned.
- 21 Q. So you mentioned that was sent to 1,197 members of the CEA.
- 22 How many ultimately responded?
- 2.3 A. 491.
- 24 Q. What is the -- what is that percent response rate?
- 25 A. It's about a 41 percent response rate.

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1 Q. In the realm of social science data, what is considered a good response rate?

MR. KUNZ: I'm going to object to that. I think that calls for an expert opinion.

THE COURT: It doesn't call for an expert opinion.

6 This is his experience. He can testify based on experience. 7 Go ahead.

THE WITNESS: Generally the literature says that if you have 20 to 30 percent response rate, that is pretty good.

- 10 Q. Did you consider 41 percent --
- 11 A. Yes. We were very pleased with the response.
- 12 Q. Let's talk about the breakdown of the respondents.

13 About how many of the respondents had retired 14 pre-CompStat, that is pre-1994, as compared to those who 15 were --

- 16 A. My recollection is about one-third retired before and two-thirds after. Pretty close to that.
- 18 Q. And were you able to breakdown the respondents by rank?
- 19 A. Yes, we were.

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- 20 Q. And what was that breakdown of the respondents? If you
- 21 need something to help refresh your recollection --
- 22 A. Oh, how many in each category?
- Yeah, I don't recall exactly how many were in each category.
 - Q. Is there something that would refresh your recollection?

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D459flo4 Silverman - direct A. Yeah, I think the article that we. 1 2 MR. AZMY: Showing the witness Plaintiffs' Exhibit 3 291. 4 THE WITNESS: I found it. 5 THE COURT: Does reviewing that refresh your 6 recollection? 7 THE WITNESS: Yes. I have it. Yes. 8 THE COURT: Go ahead. 9 Q. Can you tell us the breakdown by rank of the respondents? 10 A. Yes. We had 54 percent were captains, 54.1 were captains. 11 20.2 were deputy inspectors. Sixty-three -- I'm sorry 12 13 percent were inspectors. 5.8 were deputy chiefs. 13 Q. 5.8 percent? A. Yes. 5.8 percent, sorry, were deputy chiefs. And 14 15 7 percent others. 16 Q. In your experience and understanding the New York police 17 department, is that roughly a fair distribution of the 18 managerial positions that are in the department? A. My understanding, this pretty well comports --19 20 MR. KUNZ: I'm going to object and move to strike. I 21 think that would call for speculation on his part. 22 $\mbox{MR. AZMY:}\ \mbox{Your Honor, he's authored books about the}$ 2.3 managerial systems of the New York police department so I think 24 it goes to the representative sample. 25 THE COURT: I think so. I think it's part of his SOUTHERN DISTRICT REPORTERS, P.C.

D459flo4 Silverman - direct

1 academic experience. I'll allow it in.

2 So is that about the breakdown of the department? 3 THE WITNESS: I think it pretty well comports with the 4 distribution in the department.

THE COURT: In other words, more captains and then more deputy inspectors.

THE WITNESS: Yes. Obviously, the higher you go -- THE COURT: Right.

THE WITNESS: -- the less number in that category.

- 10 Q. Did the -- going back to the 2008 survey, Plaintiffs' 11 Exhibit 300, did the survey contain a section in which
- 12 respondents could provide a written narrative?
- 13 A. Yes, there was. At the end we offered them the opportunity 14 to write anything really that came into their mind.
- 15 Q. Was that question 24?
- 16 A. That's question 24.

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- 17 Q. Can you read that?
- 18 A. "Please make any comments that you feel are important to
- 19 understanding the NYPD based on your experiences as a manager
- 20 (attach other pages if necessary)."
- 21 Q. Why did you include something like this?
- 22 A. Well we thought it was important to permit those who wanted
- 23 to express their views on particular issues. It adds to the
- 24 substance if someone feels strongly one way or the other about
- any of these items.

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Q. Once the survey responses were returned to you, how did you

- count or tabulate the responses mechanically speaking?
- 3 A. They were all coded and entered into an SPSS system at
- 4 Molloy.
- 5 Q. Was an SPSS --
- 6 A. That's software program that many social scientists use
- 7 called statistical program for the social sciences.
- 8 Q. This Likert scale of one to ten in tabulating the results,
- 9 did you attempt to tabulate or calculate the responses --
- 10 A. Yeah, one of the reasons we did $\ensuremath{\text{--}}$ an additional reason
- 11 that we did one to ten is because when you want to display data
- 12 and make it more clear, you can collapse these numbers into
- 13 categories. And that's what we did.
- Q. And how did you collapse the numbers? 14
- 15 A. We collapsed 1 through 3 as low.
- 16 Q. Low?
- 17 A. Low pressure.
- 18 Four, five, six and seven as medium pressure. 19
 - And eight, nine, ten as high pressure.
- 20 Q. And did you undertake a statistical analysis of any kind of
- 21 the responses you received?
- 22 A. Yes, we did.
- 2.3 Q. What kind of statistical analysis?
- 24 A. Well we did a few things.
- 25 The first thing we did was compare the means. SOUTHERN DISTRICT REPORTERS, P.C.

D459flo4 Silverman - direct Q. The means of --A. The means of the pre- and post-CompStat --3 Q. In terms of? 4 A. In terms of pressure prior to and after CompStat. MR. KUNZ: Your Honor, I'm just going to object to this line of questioning. I think once he gets into his 6 statistical analysis, just like the plaintiffs had to qualify 7 8 Professor Fagan as an expert to do that work, I feel like they 9 would. 10 THE COURT: He wasn't retained to do any work. This 11 is a survey he did in his professional capacity, as you know, 12 and now he's reporting on it. 13 MR. AZMY: He is simply going to report the results. 14 THE COURT: I know. MR. KUNZ: The raw numbers we have no problem with. 15 16 But he's going to go and say that the statistical -- the change 17 in numbers was statistically significant according to his 18 regression analysis. 19 THE COURT: Is that all in his article? 20 MR. AZMY: Yes, your Honor. 21 THE COURT: He did all that. He didn't do it for this 22 case. 2.3 What year was this article? 24

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THE WITNESS: Two thousand --THE COURT: Several years ago. He wrote this article. SOUTHERN DISTRICT REPORTERS, P.C. (212) 805-0300

D459flo4 Silverman - direct 1 MR. KUNZ: I understand, your Honor. 2 THE COURT: It's all presented. 3 MR. KUNZ: But there's been lots of discussion about 4 how he's not here as an expert. 5 THE COURT: I know that. He's not. He's reporting 6 the survey he did, which includes the analysis of it, and the 7 article that came out of it. I have no problem with that. 8 MR. KUNZ: The article itself won't be coming in. 9 There's lots of stuff in the article that is not coming into 10 this case. 11 THE COURT: Because it's not relevant to this case, I 12 assume. 13 MR. KUNZ: Right. Exactly. 14 THE COURT: But this portion, how he calculated, using 15 the numbers, is fine. Doesn't turn him into an expert witness. 16 MS. GROSSMAN: Your Honor, may I be heard? 17 I don't know that the regression has anything to do 18 with the actual tallies of the numbers. So to the extent there 19 are questions about regression, what's done, I just don't know 20 that that's relevant for the purpose of his testimony. 21 MR. AZMY: I think that there are two levels of 22 analysis, your Honor. First, there is a standard comparison of 2.3 the numbers in the median. There's also a regression, which is 24 fairly basic, in order to demonstrate that the mean analysis is 25 statistically significant. It's very basic. And I've already

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1 established that he's minimally competent to do that.

2 THE COURT: I'm going to overrule the objection.

3 Go ahead.

- Q. Did you ever have occasion to publish an analysis of the --
- 5 some of the data you received?
- 6 A. Yes.

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- 7 Q. Plaintiffs' 291. You have that in front of you already?
- 8 A. Yes, I do.
- 9 Q. Do you recognize this exhibit?
- 10 A. Yes.
- 11 Q. What is it?
- 12 A. It's an article that was published in --
- 13 MR. KUNZ: Take it off the screen. It's not in
- 14 evidence yet.
- 15 THE COURT: You're right. It shouldn't be on the
- 16 screen.
- 17 THE WITNESS: It was published in -- volume 12, number
- 18 three, in April of 2010.
- 19 Q. And who authored the article?
- 20 A. John Eterno and Eli Silverman.
- 21 Q. Is this a peer review journal?
- 22 A. Yes, it is.
- 23 MR. AZMY: Your Honor, I'd like to enter this,
- 24 Plaintiffs' Exhibit 300 into evidence.
- MR. KUNZ: We object to this, your Honor. There's SOUTHERN DISTRICT REPORTERS, P.C.

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lots of information in this article that is not relevant to this case. The professor is here to testify about a very narrow subset of the questions on the survey. I could go on but we do not believe it's appropriate to admit this article.

MR. AZMY: Your Honor, just briefly, if I may be

6 heard.

 We agree most of the article is not relevant. There is a table that we'd like him to talk about. So we can either redact the rest of the article. But for today's purposes we'd like to have him talk about the table and make sure that this table is entered into evidence and I can --

THE COURT: So I didn't know what you were going to say. I was going to agree with Mr. Kunz that the article should not come in wholesale because much of it is not relevant. He's just focusing on a few of the issues that are covered about this survey.

So I agree. But, apparently this table they want to work with is - is what they do want to offer here. It does relate to the questions we talked about pretrial. So I'll allow him to use the table.

MR. KUNZ: Which table is it?

MR. AZMY: It's on page 435 of the article, table one, or Plaintiffs' 00573.

MR. KUNZ: My observation about the table is that there are questions in here that we requested the raw data to SOUTHERN DISTRICT REPORTERS, P.C.

D459flo4 Silverman - direct and the plaintiffs refused to give it to us.

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THE WITNESS: I'm sorry. I'm sorry.

MR. KUNZ: That's absolutely correct. We only have limited data for a certain subset of these answers. So I think that the ones that we don't have data for should be redacted from any table that gets used.

And in addition I would just renew our previous objection. Obviously your Honor has overruled it. But we don't believe that the professor should be permitted to talk about the statistical analysis.

THE COURT: So taking the second point first, you're renewing an objection as to which I've already ruled. So I maintain my earlier ruling.

With respect to the table, we have that same conundrum of a nonjury trial. I'm not looking at the table until I make the decision. So I'm a little hampered because I don't know what parts of it incorporate questions as to which I did not allow discovery. I'm really quite hamstrung in that sense. Either I look at it or I don't. Once I look at it, I know what it says.

MR. AZMY: So, first of all, we did provide the raw data which -- as your Honor ruled on. Second --

THE COURT: For all of the items of this particular table?

MR. AZMY: I think it was six of them.

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D459flo4 Silverman - direct 1 THE COURT: How about the ones that --2 MR. AZMY: We're only going to be talking, for this 3 table, about three of them. And those -- we provided the raw 4 survey data for those three, yes. 5 THE COURT: So while the table shows more than three 6 data points they won't be discussing them and I'm sure I can 7 ignore them because I probably won't understand them anyway 8 unless there's testimony about it. 9 MR. KUNZ: That's fine. Perhaps the version that we 10 put into the record we could redact. 11 THE COURT: That's true. Well maybe. Depending on 12 how the table looks. I don't know what the table looks like. 13 When we put the final version in the record, maybe it could 14 just have the three data points that are discussed. 15 MR. KUNZ: There's a few in there that we'll actually 16 try to use. But, yes, we'll figure it out between ourselves. 17 THE COURT: So I'm going to look at that table now so 18 I can follow the testimony. 19 MR. AZMY: So that's Plaintiffs' 300. 20 THE COURT: Where is it -- it's in this article? 21 MR. AZMY: The page number of the article is 435 and 22 the --2.3 THE COURT: What Bates number is it? 24 MR. AZMY: Plaintiffs' 00573. 25 THE COURT: Okay. I've got 573. And there is I guess SOUTHERN DISTRICT REPORTERS, P.C. (212) 805-0300

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1 a table called table 1, yes?

2 MR. AZMY: Yes, your Honor.

I believe your Honor ruled that he could testify about increased summonses, increased arrests and, in the middle, increased stop and frisks, and not the others.

THE COURT: Okay.

MR. AZMY: So we're going to focus on those three. (Plaintiffs' Exhibit 300 received in evidence).

- 9 Q. Professor Silverman, if you're looking at table 1 there on Bates number 00573, what is this table?
- 11 A. This table compares the responses from pre-CompStat to 12 CompStat era; CompStat era to non-CompStat era managers.
- 13 Q. Against what dependent variables?
- 14 A. The dependent variables are the ones on the left-hand
- 15 column, increased summonses, increased arrests, etc.
- 16 Q. Including increased stops and frisks, right?
- 17 A. Yes, sir.

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- 18 Q. So let's just go through this table so we understand the structure.
- The first column under variable, what does that signify?
- 22 A. The first -- increased summons is the first --
- Q. No just the general, that column, what information is that
- 24 trying to capture?
- 25 A. It's trying to capture the dependent variable, the extent SOUTHERN DISTRICT REPORTERS, P.C.

D459flo4 Silverman - direct

- 1 to which managers experience pressure to do -- I'm sorry,
- 2 pressure to do these items listed there.
- 3 Q. And the next column, CompStat era, what does that mean?
- 4 A. That's compares whether they served or did not serve in the
- 5 CompStat era.
- 6 Q. So if the answer is no, that means they retired pre-'94.
- 7 If the answer is yes, they retired post-'94?
- 8 A. Yes.
- 9 Q. The next column?
- 10 A. The next column gives the mean.
- 11 Q. Before the M, the N column?
- 12 A. The N is the number who answered in each category.
- 13 Q. And then the next column?
- 14 A. The next column is the mean.
- 15 Q. What does the mean represent?
- 16 A. The mean represents the average from 1 to 10.
- 17 Q. Of?
- 18 A. Of those who responded in each category.
- 19 Q. Along that scale from 1 to 10?
- 20 A. Yes. The original Likert scale from 1 to 10.
- 21 Q. And the next column?
- 22 A. The next column just shows you the standard deviation of
- 23 each item.
- Q. And the next column, mean difference?
- 25 A. The mean difference is the difference between the CompStat SOUTHERN DISTRICT REPORTERS, P.C.

D459flo4 Silverman - direct

1 versus the non-CompStat era in terms of the pressure that they

- 2 felt, the mean difference.
- 3 Q. And some of these have three asterisks next to the mean
- 4 difference. What does that refer to?
- 5 A. The asterisks refer to the -- right at the bottom of the
- 6 chart where it says notes, and that -- the asterisks indicate
- 7 the level of how significant it is and the likelihood that any
- 8 of this could result in chance.
- 9 Q. And if there is a triple asterisk, what is the likelihood
- 10 that the mean difference could occur --
- 11 A. If there's a triple asterisk, it means there's a likelihood
- 12 of one -- the likelihood of this result emerging is less than
- one in a thousand.
- 14 Q. Emerging by chance?
- 15 A. Ten thousand, I'm sorry.
- 16 Q. The likelihood of it emerging by chance?
- 17 A. By chance, yes.
- 18 Q. So we're going to look at three of the variables. The
- 19 first one, increased summonses. Do you see that?
- 20 A. Yes.
- 21 Q. What is the mean response for those who served pre-CompStat
- in terms of feeling pressure?
- 23 A. The mean difference?
- 24 Q. The mean?
- 25 A. Of increase?

D459flo4 Silverman - direct

- 1 Q. Yes.
- 2 A. Yes. Would be 5.48.
- Q. What is the mean for those in the CompStat era?
- 4 A. 6.94.
- 5 Q. And what is the mean difference?
- 6 A. The mean difference is 1.461.
- 7 Q. Again, using the example of pressure to increase summonses
- 8 what does that mean difference signify?
- 9 A. It means that the likelihood --
- 10 Q. Not the statistical. What does the mean of that number
- 11 1.461 signify?
- 12 A. It signifies the difference between the two means.
- 13 Q. Of which two means again?
- 14 THE COURT: Well pre-imposed CompStat. I see that.
- 15 Q. So the next category is increased arrests?
- 16 A. Correct.
- 17 Q. What is the mean for those in the pre-CompStat era in terms
- 18 of pressure?
- 19 A. 4.94.
- 20 Q. Post CompStat?
- 21 A. 6.78.
- Q. What's the mean difference?
- 23 A. 1.839.
- 24 Q. And then moving down to the middle, pressure to increase
- 25 stop and frisk reports?

D459flo4 Silverman - direct

- 1 A. Yes.
- Q. What is the mean for pre-CompStat?
- 3 A. 3.57.
- 4 Q. And post-CompStat?
- 5 A. 5.77.
- 6 Q. And what is the mean difference?
- 7 A. 2.205.
- 8 Q. Are each of those results statistically significant?
- 9 A. Yes, they are, because we ran the result of a T test which
- 10 compares medians between two variables -- I mean means between
- 11 two variables and all of them are statistically significant.
- 12 And the likelihood of any of those three that I just identified
- occurring by chance is very, very slim.
- 14 Q. Professor Silverman, I'm going to show you on the ELMO here
- 15 a demonstrative.
 16 Do you
 - Do you recognize this document?
- 17 A. Yes.
- 18 Q. Did you -- what is this document?
- 19 A. This document is a display based on the data that we
- 20 retrieved from our 2008 survey.
- 21 Q. By we, who were you referring to?
- 22 A. John Eterno and I.
- 23 Q. Did you prepare this demonstrative?
- 24 A. We both did. We both prepared it.
- 25 Q. So can you describe what this chart -- what information SOUTHERN DISTRICT REPORTERS, P.C.

D459flo4 Silverman - direct this chart attempts to capture and present? A. It attempts to capture, in more perhaps graphic terms, the 3 pressure that the recipients felt in this case to increase 4 summons. 5 Q. In what periods? 6 A. This is again the pre- and post-CompStat period. Q. So, working through this chart, there are three rows, low, 7 8 medium and high. Can you explain what each of those rows 9 generally is attempting to capture? 10 A. This, again, is what I referred to before, collapsing the 11 ten point Likert scale into three categories, low, medium and 12 high. 13 Low represents anyone who responded from 1 to 3. 14 Medium represents anyone who responded -- all -- I 15 shouldn't say anyone -- all who responded 4, 5, 6, and 7. 16 And high represents respondents who provided 8, 9 or 17 10. Q. So looking at the low column, how many total number of 18 recipients pre- and post-CompStat responded that they felt low 19 20 pressure to increase summonses? 21 A. Sixty-eight. 2.2 THE COURT: Where is it? 2.3

24 25 THE WITNESS: Where is says total.

THE COURT: Sixty-eight people.

MR. AZMY: Total people, yes. Thank you, your Honor. SOUTHERN DISTRICT REPORTERS, P.C. (212) 805-0300

D459flo4 Silverman - direct

1 Q. And what is the percentage breakdown of those respondents

- 2 pre-CompStat and post CompStat?
- 3 A. Pre-CompStat has a response rate of low -- for low of 27.7.
- 4 And for yes, 9.3 percent.
- 5 Q. What is the difference between the pre- and post-CompStat?
- 6 A. The post is approximately one-third less who felt -- who
- 7 experienced low pressure to increase summons.
- 8 Q. Looking at the third row, the high row. What is the total
- 9 absolute number respondents?
- 10 A. 177.
- 11 Q. And what's the percentage breakdown of those who felt high
- 12 pressure to increase summons?
- 13 A. That's total on the last column, your Honor.
- 14 THE COURT: I see that. I'm just trying to understand
- 15 what is the 39 percent?
- 16 THE WITNESS: That's the -- who answered -- from the
- 17 total amount, you have thirty-nine forty-six, from the --
- 18 39 percent answered high.
- 19 THE COURT: 39 percent of all the people who answered
- 20 that question?
- THE WITNESS: Yes. Yes, your Honor.
- 22 THE COURT: I see.
- 23 Q. And of that --
- 24 THE COURT: Is that right, what I just said?
- 25 39 percent of the people who answered that question answered SOUTHERN DISTRICT REPORTERS, P.C.

D459flo4 Silverman - direct 1 high? Is that what you mean? 2 MR. CHARNEY: Yes. 3 THE WITNESS: Yes. 4 THE COURT: Okay. 5 Q. And of those 177, which represents 39 percent who answered 6 high, who is the percentage breakdown of pre- versus 7 post-CompStat who felt high pressure to increase summons? 8 A. 25.5 answered, who were pre, answered high pressure. And 9 45 percent in the CompStat era answered high pressure. 10 Q. What is that difference over time? 11 A. It's a rather large difference, not twice as much but still 12 a very significant difference. 13 Q. And how would you generally compare the changes over time 14 between those who felt low pressure to those who felt high 15 pressure pre- and post-CompStat? 16 A. Strongly suggests that those who felt pressure to increase 17 summonses increased after the CompStat period was introduced --18 after CompStat was introduced. Q. Showing you another demonstrative. Do you recognize this? 19 20 THE COURT: These two should be marked with numbers so 21 the record knows what they are. Even if they're not offered 22 they should be marked. 2.3 MR. AZMY: Can we mark the one we just saw as 24 Plaintiffs' 441 and then this would be Plaintiffs' 442.

THE COURT: Okay. SOUTHERN DISTRICT REPORTERS, P.C.

25

D459flo4 Silverman - direct 1 Did you prepare these demonstratives? 2 THE WITNESS: Yes. 3 THE COURT: You did? 4 THE WITNESS: With John Eterno, your Honor. 5 THE COURT: Okay. That's fine. THE WITNESS: I just need to make it a little 6 7 straighter, sir. MR. AZMY: Of course. 8 9 THE WITNESS: My eyesight isn't too good. 10 THE COURT: Mine too. 11 THE WITNESS: That's fine. Thank you. 12 Q. What does this table depict? 13 A. This table -- this is another cross tab, which depicting 14 the pressure to increase arrests. 15 THE COURT: So this is the same as the last 16 demonstrative but it's arrests rather than summons. 17 THE WITNESS: That's correct, your Honor. 18 THE COURT: But it's laid out the same way? 19 THE WITNESS: Exactly. 20 Q. So let's again, now that we're familiar with the format, 21 let's look at the low row? A. Yes. 22 2.3 Q. Of the 69 total of respondents who responded low pressure what is the percentage breakdown pre- and post-CompStat? 24 A. Pre was 30.9. And post was 8.3. 25 SOUTHERN DISTRICT REPORTERS, P.C.

D459flo4 Silverman - direct

- 1 Q. And what's that difference over time?
- 2 A. It's over -- it's almost four times less.
- 3 Q. Who felt low pressure?
- 4 A. It's over three times as less. That is the pressure --
- 5 those who experienced low pressure significantly declined about
- 6 a third -- more than a third.
- 7 Q. Let's look at the high row. Of the 157 total respondents,
- 8 what is the percentage breakdown pre- and post-CompStat in
- 9 terms of high pressure to increase arrests?
- 10 A. It went from 16.5 in pre-, those who experienced high
- 11 pressure. To 42.5, those who experienced high pressure in the
- 12 post-CompStat era.
- 13 Q. And what is that, a difference over time?
- 14 A. That's a very substantial difference. It's over three
- 15 times. Not quite three times. But close to it.
- 16 Q. And what is the difference over time between those who
- 17 registered low pressure to increase arrests versus those who
- 18 registered high pressure to increase arrests?
- 19 A. Well they both went in the opposite direction. The low
- 20 pressure went down from one period to the next, and the high
- 21 pressure went up from the first period to the second period.
- 22 So they reversed positions, so to speak.
- 23 Q. I'm going to show you another demonstrative which we'll
- 24 mark Plaintiffs' 443.

25 THE COURT: And this is the same chart a third time SOUTHERN DISTRICT REPORTERS, P.C.

D459flo4 Silverman - direct

1 but this time measuring stop-and-frisk activity.

THE WITNESS: That's correct, your Honor.

- 3 Q. Did you prepare this as well?
 - A. Yes, we did.
- 5 Q. Looking at the low row, again, of the 146 total
 - respondents, what was the percentage breakdown of those who
- 7 felt low pressure to increase stop and frisks pre- and
- 8 post-CompStat?

2

4

6

- 9 A. The low pressure in the first period was 54.7. And it
- declined more than half to 22.5 in the second period.
- 11 Q. And what about with respect to high pressure to increase stop and frisks?
- 13 A. High pressure went from 5.1 in the first period to 28.3 in the second period. So it increased over five-fold.
- 15 Q. And what is the -- what was the change over time between
- those who experienced low pressure to increase stop and frisks and those who experienced high pressure?
- A. This is another example of it just switching places. It was turned on its head so to speak, the low went down and the high went up.
- MR. AZMY: Your Honor, we move these demonstrative exhibits into evidence.
- MR. KUNZ: No objection.
- THE COURT: All right. 441, 442, 443 are received. (Plaintiffs' Exhibits 441, 442, 443 received in

SOUTHERN DISTRICT REPORTERS, P.C.

D459flo4 Silverman - direct

- 1 evidence)
- 2 Q. Did there ever come a time when you did another opinion
- 3 survey of NYPD officials?
- 4 A. Yes.
- 5 Q. When?
- 6 A. 2012.
- 7 Q. Who did you do that with?
- 8 A. Dr. Eterno.
- 9 Q. And why did you choose to do another survey?
- 10 A. Well, good social science strongly believes in
- 11 triangulation which is simply a word we mean to try to get the
- 12 same kind of phenomenon in a different way, see if you
- 13 replicate or confirm your earlier findings. And also provide a
- 14 pathway for others who may want to use the same kind of -- do
- 15 the same kind of research.
- 16 Q. So what basic question or questions were you trying to
- answer with the 2012 survey?
- 18 A. The basic questions, again, were very similar to the first
- 19 survey. And we mainly were, again, examining their experiences
- with pressure.
- 21 Q. Did you include some of the same categories of pressure
- that were in the 2008 category?
- 23 A. Yes. We again used the 1 to 10 Likert scale.
- Q. In terms of the -- the dependent variables?
- 25 A. Yes, the various bulk are the same.

D459flo4 Silverman - direct

1 Q. And did you structure in any way the survey different or,

- 2 rather, did you change the independent variables in any way?
- 3 A. We added a third independent variable.
- 4 Q. Can you explain.
- 5 A. Yes. What we did is we broke up the CompStat period
- 6 from -- we went from 1995 to 2001. And then we -- and we
- 7 stopped there. And then we added 2002 to 2012.
- 8 Q. So now there were three periods?
- 9 A. That's correct.
- 10 Q. Measured -- you measured pressure across the three periods?
- 11 A. That's correct.
- 12 Q. And what were the three periods again?
- 13 A. The pre-CompStat period, the early CompStat period, 1995 to
- 14 2001, and the third period was 2002 to 2012.
- 15 Q. And why did you add that additional variable?
- 16 A. We added the additional variable because there was a major
- 17 change in the police department that time. There was a new
- 18 mayor, a new commissioner.
- 19 Q. At what time?
- 20 A. 2002 that came into office, I believe.
- 21 And we also added, because much of the comments on our
- 22 first survey and other comments we have heard suggest that
- 23 there might have been an intensification during this new
- 24 period.
- 25 Q. Sorry?

D459flo4 Silverman - direct

1 A. There might have been more intense pressure during this --

- 2 Q. During this third period?
- 3 A. That's correct.
- 4 Q. So prior to distributing this survey, again, did you
- 5 solicit any feedback or review of the survey instrument?
- 6 A. We went -- yes. We basically mimicked the first procedure
- 7 where we got advice. We pretested it. We had to go again
- 8 through the IRB because it's -- even though it's very similar,
- 9 it's another survey and they have to approve of every single
- 10 survey. So we had --
- 11 Q. Did the IRB approve this survey?
- 12 A. Yes, they did.
- 13 Q. Did you also do a pilot sample?
- 14 A. Yes. We did pilots.
- 15 Q. Were there any changes to this survey as a result of this
- 16 review process?

2.3

- 17 A. There was one major change. And that is one of the
- 18 individuals who reviewed it, who happened to be a former high
- 19 ranking police official, suggested that we add the item that's
- on there. I think it's maybe the last one. Which says
- 21 pressure to obey constitutional legal dictum.
- 22 Q. We'll look at that in a few moments.
 - What population did you send this survey to?
- 24 A. This was sent to all members, active retired members of the
- 25 New York City Police Department.

D459flo4 Silverman - direct

1 Q. Who constitutes that group of active retired members of the

- 2 NYPD?
- 3 A. These are individuals who are willing and eager, in most
- 4 cases, to be included in the active retiree list of the New
- 5 York police department. And active means -- by active it means
- 6 you are willing to be included on a list that would respond to
- 7 an emergency if there were in New York, such as hurricane or
- 8 terrorist or something, and that you are labeling yourself as
- 9 an active retired member.
- 10 Q. And what ranks are included in this population?
- 11 A. All ranks are included.
- 12 Q. Including patrol or line police officers?
- 13 A. Yes.
- 14 Q. Why didn't you send the survey to the same population that
- 15 you used in 2008, the captains endowment association?
- 16 A. Well we wanted to get a broader cross view of the entire
- 17 police department. We wanted to get the views of all ranks.
- 18 And we wanted to get the review -- the views of patrol officers
- 19 since they are the ones on the street and they constitute the
- 20 largest percentage of numbers in the actual police department.
- 21 Q. And how mechanically was this survey sent to this
- 22 population?
- 23 A. This was done through a computer software program that's
- 24 pretty sophisticated. It's called SNAP. And which we recently
- 25 acquired or through John's university. And it's e-mail survey. SOUTHERN DISTRICT REPORTERS, P.C.

D459flo4 Silverman - direct

1 So it's sent to all members of the department with e-mails.

Q. How did you get access to the e-mail addresses of members

3 of the --

- 4 A. This is on the website of the police department, the city
- 5 of New York. One can link onto it. But one can't enter it
- 6 unless one has a password or a code unless one is an active
- 7 retired member. And Dr. Eterno, as an active retired member,
- 8 was able to access that list.
- 9 Q. Were you aware of the identities of the survey recipients or respondents?
- 11 A. The identities are listed on the website. But they were -
- 12 the way we set it up is they were sent the responses by e-mail,
- were sent to an administrator at Molloy College. And that administrator received them. And began the coding of them in
- 15 this system.
- So the answer to your question is we personally are not aware of who responded individually and, again, we promise anonymity.
- 19 $\,$ Q. So the recipients of the survey were they made aware that
- 20 if by returning the survey that they would remain anonymous?
- 21 A. Yes, they were. It was in the cover note and it's on the
- 22 survey itself.
- 23 Q. About how many active retired NYPD police members received
- 24 the survey to the best of your recollection?
- 25 A. I think the number was like 4,069.

D459flo4 Silverman - direct

- Q. Do you know if -- that's the number who responded?
- A. That's correct.
- 3 Q. Sorry. That's number -- sorry. Excuse me. Strike that. 4

That's the number who you know received the survey?

- 5 A. That's the number that we received back.
- 6 Q. Are you sure about that?
- A. No. 7
- 8 Q. Is there something that would refresh your recollection?
- 9 A. I thought it was 4,000 --
- 10 MR. KUNZ: Your Honor, we stipulate that it was sent
- 11 to 4,069 and 1962 responded back.
- 12 THE COURT: That's great.
- 13 THE WITNESS: Didn't I say that?
- MR. CHARNEY: We got it straightened out. THE WITNESS: All right. 14
- 15
- 16 Q. And so what was the response rate?
- 17 A. The response rate was about 48 percent.
- 18 Q. Was that good?
- 19 A. Excellent. Excellent. Most people get a survey on their
- 20 computer just, you know, delete it. But this was a survey that
- 21 you had to go from one step to another.
- 22 Q. Did the survey ask individuals what their rank was?
- 2.3 A. Yes.
- 24 Q. And were you able to tabulate the ranks of the respondents?
- 25 A. Yes.

D459flo4 Silverman - direct

- 1 Q. Do you remember currently the breakdown of the ranks?
- 2 A. (No response).
- 3 Q. As you sit here?
- 4 A. On that survey, I don't remember the numbers.
- 5 Q. Is there something that --
- 6 A. I know -- I think there were about over 10,000 police
- 7 officers, patrol.
- 8 Q. The question is in terms of the respondents, the breakdown
- 9 of the ranks, as you sit here today, do you remember the
- 10 breakdown?
- 11 A. Of each rank?
- 12 Q. Yeah.
- 13 A. No.
- 14 Q. Do you --
- 15 A. It's on the summary that we provided.
- 16 Q. Would that refresh your recollection?
- 17 A. Yes, it would. My memory was about 10,000 patrol but I
- 18 could be wrong. I mean 1,000.
- 19 Q. Take a look at this.
- Does that refresh your recollection of the breakdown?
- 21 A. Yes, it does.
- 22 Q. So, how many chiefs, inspectors, captains, etc., can you
- 23 walk us through that?
- 24 A. Ten chiefs, 36 inspectors, 63 captains, 262 lieutenants,
- 25 382 sergeants, 1,154 police officers detectives, 3 other.

SOUTHERN DISTRICT REPORTERS, P.C.

D459flo4 Silverman - direct Q. And were there any who didn't indicate their rank? A. There were 52 who did not indicate their rank. 3 Q. Going to show the witness what's been marked plaintiffs' 4 293. 5 Do you recognize this document? 6 A. Yes, I do. Q. What is it? 7 8 A. This is the New York City Police Department survey we 9 prepared for the active retirees. 10 Q. And to be clear this survey, Plaintiffs' Exhibit 293 starts 11 at Bates number plaintiffs 000597 through 00610, correct? 12 A. You're asking me? 13 Q. Yes. 14 A. The last page I have is 609 -- 610, I'm sorry. 15 THE COURT: Did you give a copy to my clerk? 16 This is 293 and you're moving this into evidence? 17 MR. AZMY: Yes, your Honor. 18 MR. KUNZ: No objection. 19 THE COURT: 293 is also received. 20 (Plaintiffs' Exhibit 293 received in evidence) 21 Q. So, looking there at the first page, can you read the 22 directions that were included in the survey? 23 A. All responses are voluntary. You do not have to answer questions. You may skip questions you feel unsure about or do 24 25 not wish to answer. You indicate your voluntary consent by SOUTHERN DISTRICT REPORTERS, P.C.

D459flo4 Silverman - direct answering the survey. The survey is anonymous. There is no way for us to know your identity.

Q. Just so mechanically can you explain how this survey 3

4 instrument, this electronic survey instrument worked. 5

A. If someone, a retiree uses it, he links onto it. He fills 6 it out. 7

THE COURT: On the computer?

THE WITNESS: It's all on the computer, your Honor.

9 All on the computer. And then it's sent to --

10 Q. How do you register an answer to a particular question

11 for --

8

19

2.3

25

12 A. Big your pardon?

13 Q. How does one register --

A. You click on yes or no. You just click on the choices you 14

15 have.

16 Q. An it goes to the next page?

17 A. That's correct.

18 Q. And look at question two.

THE COURT: Are we just going to do summons, stop and

20 frisk, and arrest?

MR. AZMY: We're also, per your Honor's instruction, 21 22 also going to do the last one, obey legal constitutional rules.

THE COURT: Okay. So we're going to do four of these

24 categories.

> MR. AZMY: Four of these categories, correct. SOUTHERN DISTRICT REPORTERS, P.C. (212) 805-0300

D458FLO5 Silverman - direct

1 THE COURT: These are pretrial rulings I made? 2 MR. AZMY: Yes.

- 3 Q. Can you read question 2?
- 4 $\,$ A. "With respect to the following criteria and based on your $\,$
- 5 personal experience and knowledge, on a scale of 1 to 10 (with
 - 1 being the least and 10 the most), how much pressure did
- 7 precinct patrol personnel receive from management/supervisors
 8 to?"
- 9 Q. Is this question different from the question asked in 2008?
- 10 A. Somewhat.

6

- 11 Q. What is different?
- 12 A. The first thing is we added the word knowledge.
- 13 Q. Why did you do that?
- 14 A. We added the word knowledge because when our first survey
- 15 emerged, critics -- actually, it was really directed at the
- crime manipulation part, but critics said, well, these
- individuals might have responded that they heard there was
- 18 pressure, but it might have been just general knowledge out
- 19 there in the atmosphere and not knowledge that they personally
- 20 perceived.
- 21 Q. Any other variations in this question?
- 22 A. Well, we also said "how much pressure did precinct patrol,"
- We added that.
- Q. So it's not just managers?
- A. Managers could comment on that because managers are there; SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO5 Silverman - direct

- 1 they know it one way or the other.
- 2 Q. To save the Court's time, it's basically the same Likert
- 3 structure from 1 to 10?
- 4 A. Yes.
- 5 Q. Is there a place on the survey where you would be able to
- 6 identify the independent variable, i.e., what year they
- 7 retired?
- 8 A. Yes. Can I just add that we also added the last item.
- 9 Q. Obey legal/constitutional?
- 10 A. Yes.

19

25

- 11 Q. And that was on the recommendation from one of your
- 12 consultants?
- 13 A. One of the retired, former high-ranking police official.
- 14 Q. How did this survey record the independent variable the
- 15 time individuals retired?
- 16 A. They had a place to fill out what year did you retire.
- 17 That's question number 15.
- 18 Q. Question 15 on Plaintiffs' 608?
 - THE COURT: You were on page 608?
- 20 MR. AZMY: Yes, your Honor. We just established that
- 21 question 15 is how he is able to identify whether or not
- 22 someone retired pre-CompStat, or the second period, which is
- 23 '95 to 2001, or the third period, which is 2002 to 2012.
- I don't remember. Have we moved this into evidence?
 - Q. Did you ever do a statistical analysis of the data you SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO5 Silverman - direct recovered from this survey?

- 1 ICCOVERED IIOM CHIES S
- 2 A. Yes, we did.
- 3 Q. What kind of analysis did you do?
- 4 A. It was basically the same, comparing the three periods as
- 5 an independent variable and the dependent variables were these
- 6 different activities.
- 7 Q. Did you write about the results in any form?
- 8 A. We prepared a summary statement of the initial results.
- 9 Q. Is that what you have before you that is marked Plaintiffs'
- 10 Exhibit 292?
- 11 A. Yes. I have it before me.
- 12 Q. Can you explain what this document is?
- 13 A. This is a document that we prepared on June 4, or
- 14 distributed June 4, 2012, which provides the overall findings
- 15 from this 2012 survey.
- Q. Was this document published anywhere?
- 17 A. No.
- 18 Q. Does this document contain any tabulation or a chart of
- 19 certain findings?
- 20 A. Yes. We did one chart -- actually, two charts, one of
- 21 which is relevant here I assume. We just looked at the high
- 22 pressure.
- 23 MR. AZMY: I move Plaintiffs' Exhibit 292 into
- 24 evidence.
- 25 MR. KUNZ: We have the nature of the same objection as SOUTHERN DISTRICT REPORTERS, P.C.

D458FL05 Silverman - direct 1 the last one. 2 THE COURT: We should resolve it the same way. We 3 should just use the table and redact it at the end of the day 4 after you're both done questioning. 5 So that's the ruling. What is the number of this 6 exhibit? 7 MR. AZMY: 292. 8 THE COURT: 292 is received in the limited fashion as 9 just stated. 10 (Plaintiff's Exhibit 292 received in evidence) 11 THE COURT: Do you have this table in hard copy? 12 MR. AZMY: Yes, your Honor. For the record, 292 is Bates Plaintiffs' 588 through 13 14 596. 15 Q. You have a copy? 16 A. Yes, I do. 17 THE COURT: Thank you. 18 Q. Turning to Bates Plaintiffs' 592, do you recognize this 19 chart? 20 A. Yes. Q. Did you prepare it? 21 22 A. I prepared it in conjunction with Dr. Eterno. 2.3 Q. What data is it based on? 24 A. It's data from the second survey we just discussed. 25 Q. Was that data tabulated as well by SPSS program?

SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO5 Silverman - direct A. Yes. Q. What does this chart measure? 3 A. This measures just the high pressures. In other words, the 4 numbers in the cells are those who answered either 8, 9 or 10. 5 Q. For various categories --A. For the categories of 8, 9 or 10, in terms of their 6 7 experience with pressure to do certain --8 THE COURT: I just jumped ahead of you. 9 For summons, stop and frisk and arrest, it goes up 10 depending on how long ago the person retired. So the more 11 recently retired got more pressure, right? 12 THE WITNESS: That's correct. 13 THE COURT: With respect to the last category, obeying 14 legal/constitutional restrictions, it went in the other 15 direction, namely, the most recently retired felt the least 16 pressure and the ones further back felt more pressure? 17 THE WITNESS: Yes, your Honor. 18 MR. AZMY: Is that enough, your Honor? 19 THE COURT: I think it's enough for the record, plus 20 the exhibit, to save time. 21 MR. KUNZ: The one thing I would note is on obey 22 legal --2.3 THE COURT: I see that. It is 44 to 46 to 35. So 24 going from left to right, it certainly decreases. 25

MR. AZMY: Just a few more demonstratives that SOUTHERN DISTRICT REPORTERS, P.C. (212) 805-0300

D458FLO5 Silverman - direct 1 replicate the others. 2 THE COURT: And the numbers will be? It's going to be 3 444, 445 and 446? Do you offer all three of them? 4 MR. AZMY: Yes. 5 MR. KUNZ: No objection. 6 THE COURT: They are all received. 7 (Plaintiff's Exhibits 444, 445 and 446 received in 8 evidence) 9 MR. KUNZ: My only hesitation, as you can see on the 10 bottom here, it has got "Gamma" and "Kendall's tau b." I don't 11 know what that is. I wasn't in the other one. 12 THE COURT: If we don't ask, we won't know. We will 13 just stick with the chart. 14 Q. Do you recognize this? 15 A. I have it now. 16 Q. Do you recognize this demonstrative? 17 A. Yes, I do. 18 Q. Did you prepare it? 19 A. Yes. 20 Q. Is it based on data from the 2008 survey? A. We prepared it based on the data we retrieved from the 21 22 second survey. 23 Q. So what is depicted on this chart?

A. We again broke it down into three categories, the pressures 24

25 to increase summonses based on low, medium, high, primarily SOUTHERN DISTRICT REPORTERS, P.C.

D458FL05 Silverman - direct based -- not based on -- categorized low, medium and high, and based on the period that they retired. 2 3 Q. Looking at the low row out of --4 THE COURT: I think we can go faster. 5 So the low to the medium both went down over time. 6 But high, as we just saw, the three figures went up over time, 7 right? THE WITNESS: Yes. 8 9 THE COURT: The pressure decreased for medium people 10 over time, but it increased for those who answered high 11 pressure? 12 THE WITNESS: That's correct. 13 MR. AZMY: Plaintiffs' 445. THE COURT: The first one was summonses. This is 14 15 arrests. And the arrests show the identical pattern. 16 Decreasing over time for the medium respondents, but those who 17 said pressure was high, it increased over time. 18 THE WITNESS: Yes. 19 THE COURT: One could say somewhat dramatically from 20 the pre-'95 people to the post-2002 people. 21 THE WITNESS: That's why we put this other material in 22 to show how significant it is. 2.3 THE COURT: I see it. 24 MR. AZMY: 446. 25 THE COURT: This one is stop and frisk. SOUTHERN DISTRICT REPORTERS, P.C. (212) 805-0300

D458FLO5 Silverman - direct pattern? No. It's not the same pattern. 1 2 THE WITNESS: It is the same. 3 THE COURT: The low pressure decreased, but the medium 4 actually increased from the earliest period. The other two, 5 with respect to arrests and summons, it decreased, but medium 6 here increased, at least from the pre-'95 people to the post 7 2001, and then it dropped off a bit in the most recent group. 8 But it's not the same pattern in the medium as with arrest and 9 summons. And with respect to the people who felt high 10 pressure, there was a steady increase, about three-fold, for 11 pre-'95 to post 2002. 12 THE WITNESS: It's almost four-fold. THE COURT: OK. That's the idea. 13 MR. AZMY: This is 447. 14 15 THE COURT: We already saw the column on high, which 16 was on your earlier chart. So we know that that decreased, the 17 pressure. Those who answered low, it stayed pretty steady. 18 But those who answered medium, it increased somewhat. 19 THE WITNESS: May I add a comment? 20 THE COURT: Sure. 21 THE WITNESS: It's the only one that has a negative 22 association. 2.3 THE COURT: What does that mean? 24 THE WITNESS: It means that as the years progressed, 25 the pressure declined. In other words, all the others, as the SOUTHERN DISTRICT REPORTERS, P.C. (212) 805-0300

D458FLO5 Silverman - direct

1 years progressed, the pressure increased.

2 THE COURT: But that's not true. For those who 3 thought it was a low or medium amount of pressure, it actually 4 increased.

THE WITNESS: Statistically that overcomes that. It's a modest -- all I am saying is it is a modest association, but it's statistically significant.

THE COURT: I don't quite see that, but that's OK. Certainly it's true for those who felt high pressure. But the other two groups, which outnumbered the third group collectively, they went the other way. They felt pressure increased slightly. And that group of the total respondents is larger.

 $\,$ THE WITNESS: When you do association, it comes out as a negative, slight.

MR. AZMY: I have no further questions unless you would like to ask about the other demonstratives. I am not sure we moved 447 into evidence.

THE COURT: We moved the group at once.

MR. KUNZ: My understanding is they were all admitted.

THE COURT: Mr. Kunz, your cross-examination.

22 CROSS-EXAMINATION

23 BY MR. KUNZ:

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24 Q. Good afternoon. Professor. Good to see you again.

25 A. Good afternoon.

D458FLO5 Silverman - cross

1 Q. You testified on direct that one of the purposes of the

- 2 survey was to find out what degree, if any, people felt
- 3 pressure to downgrade crime, that was the primary goal of the
- 4 survey?
- 5 A. Yes.
- 6 Q. And you told me at the deposition that one of the major
- 7 impetuses for the survey was conversations with former and
- 8 current NYPD officers that you had had about concerns they had
- 9 with the CompStat process, is that correct?
- 10 A. That was one of the factors. It wasn't just with the
- 11 CompStat process. It was what they felt as pressure.
- 12 Q. You designed the survey to get at those issues, is that
- 13 correct?
- 14 A. Yes.
- 15 Q. You also said on direct that one of the main goals in
- 16 designing the survey is to make it clear so it gets at the
- issues that you're trying to test?
- 18 A. Could you repeat that?
- 19 Q. You said during direct examination that one of the
- 20 hallmarks of a good survey is that it's clearly designed to get
- 21 at the questions that you're trying to answer?
- 22 A. Yes.
- 23 MR. AZMY: Objection. I don't think that was his
- 24 testimony. What needs to be clear is the question itself.
- 25 A. That's what I did say.

D458FLO5 Silverman - cross

1 THE COURT: But the reason you want clear answers is 2 to get clear answers I assume.

THE WITNESS: You want to capture the phenomena that you're trying to examine.

- Q. When you were designing the survey, you had a theory about what the results would be, isn't that correct?
- 7 A. I don't know if I had a theory. I had an inquiry. I didn't know what the results would show.
- 9 Q. Well, you told me at your deposition that you had in mind
- the null hypothesis of your survey would be that there was no pressure felt by officers, right?
- 12 A. Yes.

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- 13 Q. What is a null hypothesis?
- 14 A. A null hypothesis is a hypothesis that you posit to guide
- your research and the idea is you either confirm or reject the null hypothesis.
- 17 Q. If the null hypothesis was that there was no pressure,
- 18 that's what the survey was designed to get at, your theory was
- 19 that the survey would show pressure?
- 20 A. That's not correct. You have to pose your research in a
- 21 form of a null hypothesis. And I didn't have a preconceived
- 22 notion of what would emerge. I knew this was a question that
- 23 we need to look at because it had been raised so repeatedly,
- not only by us, it was raised repeatedly by the mayor's own
- commission to combat police corruption trying to get that SOUTHERN DISTRICT REPORTERS, P.C.

D458FL05 Silverman - cross

information and it was rejected. I am aware that The New York

- Times tried to get this information.
- 3 Q. It sounds like the answer to my question then is that you
- 4 did have a theory about what the results of the survey would 5
- 6
- A. I don't think that's a fair characterization. I don't have a theory of what comes out. I am trying to do social science 7 8 research, and I am not out to prove anything.

9 THE COURT: Maybe he is saying did you have an 10 expectation or a guess or did you have your own sense?

11 THE WITNESS: I had no real sense. I had a sense that 12 this had been raised by numerous people.

THE COURT: You didn't know --

14 THE WITNESS: How it would come out. I have to admit 15 the response we got flawed us.

- 16 Q. Let's talk about the 2008 survey. You said this was only 17 with retirees, correct?
- 18 A. Yes. CEA retirees, Captains Endowment Association.
- Q. You told me at the deposition that you used retirees 19
- 20 because that was the people you had access to, correct?
- 21 A. That was one reason, yes.
- Q. There were also managerial retirees? 22
- 2.3 A. They are in a managerial rank, if that's what you're

24 asking.

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THE COURT: That was their role when they left? SOUTHERN DISTRICT REPORTERS, P.C. (212) 805-0300

D458FLO5 Silverman - cross

- 1 THE WITNESS: Yes.
- 2 Q. You said at your deposition that you believe that upper
- 3 level managerial retirees are the ones most involved in the
- 4 CompStat process, is that correct?
- 5 A. They are the most -- they are most involved in the sense
- 6 that they are the ones at the CompStat meetings. They are the
- 7 ones who have to act out and follow through on what emerges
- 8 from a CompStat meeting. They are the ones who have to
- 9 ensure --
- 10 Q. So the answer is yes, they are the ones who are most
- involved, in your view, in the CompStat process?
- 12 A. Yes.
- 13 Q. And the ranks included, I believe you said on direct, was
- 14 inspector, deputy inspector, deputy chief, and were there any
- 15 other ones that were included?
- 16 A. Captains.
- 17 Q. Were chiefs included?
- 18 A. Just deputy chiefs.
- 19 Q. How about assistant chiefs?
- 20 A. Assistant chiefs and chiefs are not members of the Captains
- 21 Endowment Association.
- 22 Q. How about former commissioners, were they included?
- 23 A. No. Former commissioner is -- no.
- 24 Q. The 2008 survey did not include officers, sergeants or
- 25 lieutenants, that's correct?

D458FLO5 Silverman - cross

- 1 A. That's correct.
- 2 Q. So it's fair to say then that the managers you surveyed in
- 3 2008 are not people who are on the streets on a day-to-day
- 4 basis conducting enforcement activity?
- 5 A. I wouldn't say that all the time. You have captains or
- 6 deputy inspectors. They are not the majority of them, they
- 7 don't do that regularly, but they are involved.
- 8 Q. I think you said on direct that this survey did not include
- 9 the rank and file?
- 10 A. Can I finish?
- 11 THE COURT: You shouldn't interrupt him. He is in the 12 middle of an answer.
- 13 A. The captains are often on the streets if they feel that
- 14 things are not going right. They are far more involved than
- 15 they used to be, because they are responsible for what happens
- in their areas. So I wouldn't say they are excluded from being
- 17 on the street.
- 18 Q. Are you aware of the number of officers of all ranks that
- 19 the NYPD employs in any given year?
- 20 A. Any given year?
- 21 Q. Right.
- 22 A. It varies on the year.
- 23 Q. If I told you that there was 37,000 about people employed
- 24 by the NYPD at any given point in time, would you accept that?
- 25 A. Those who are sworn members of the police department? SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO5 Silverman - cross

- 1 Q. Yes.
- 2 A. I thought the number now is closer to 33 or 35 than 37.
- 3 Q. Between 35 and 37,000 people?
- 4 A. I have seen 35. I have seen 33.
- 5 Q. OK. So you said that you gut the list of people from the
- 6 Captains Endowment Association, correct?
- 7 A. Yes, sir.
- 8 Q. And they put three questions on the survey?
- 9 A. Yes.
- 10 Q. The membership of the Captains Endowment Association is
- 11 voluntary, correct?
- 12 A. Yes.
- 13 Q. So once a person retires, they sign up to become a member
- of the association?
- 15 A. That's correct.
- 16 Q. So then there are former members of the NYPD ranked captain
- and above who are not sent the survey, correct?
- 18 A. Correct.
- 19 Q. And you have no idea what percentage of officers ranked
- 20 captain or above received the survey, correct?
- 21 A. That's correct.
- 22 Q. You attached a cover letter to the 2008 survey, correct?
- 23 A. Yes.
- 24 Q. The cover letter included a sentence that said, "Your
- participation will help us to provide a policy feedback to the SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO5 Silverman - cross

1 NYPD and this Captains Endowment Association, " correct?

- 2 A. That's correct.
- 3 Q. So A person taking the survey, having read that letter
- 4 first, would think that they are providing policy feedback,
- 5 correct?
- 6 THE COURT: That's an objectionable question. He
- 7 doesn't know what they think.
- 8 Q. I am going to show you what has been entered into evidence
- 9 as Plaintiffs' Exhibit 300. This is the first page. Is that
- 10 large enough?
- 11 A. Yes, sir.
- 12 Q. Now, the first question says, "With respect to the
- 13 following criteria and based on your personal experience, on a
- scale of 1 to 10 (1 being the least and 10 being the most), how
- much pressure was there from management/supervisors to?"
- 16 That's what it says, correct?
- 17 A. Yeah.
- 18 Q. Now, the people answering this survey were themselves the
- 19 management/supervisors, correct?
- 20 A. Right.
- 21 Q. So is the question asking how much pressure the managers
- 22 felt or how much pressure the managers gave on their officers?
- 23 A. It says, "How much pressure was there from
- 24 managers/supervisors to?" Yes. How much pressure did they
- 25 experience?

D458FLO5 Silverman - cross

Q. Is it fair to say that one manager, one captain/manager reading this would think that the question asked, how much pressure did I as a manager place on my officers, whereas a different manager could think the question is asking, how much pressure did my bosses place on me?

MR. AZMY: Objection.

THE COURT: Sustained. It calls for speculation.

- Q. When you read the question, is the question asking for pressure that the managers felt from their supervisors? When you designed it, is that the question you were aiming to get at?
- 12 A. Yes.

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- Q. You were aiming to get at how much pressure these managers felt from their supervisors?
- 15 A. How much pressure -- it doesn't have to be their 16 supervisor. It could be from someone else. How much pressure 17 did they experience or have knowledge of?

THE COURT: Or have knowledge? That's fine if that's what you were trying to get at, whether or not you asked it that way. Since these people were managers themselves, you may have been trying to bring out how much pressure was there from management/supervisors, period. That may be from you.

THE WITNESS: It could be from you. It could be from your colleague. A colleague could explain to you, look, I am being pressured to do X, Y or Z.

D458FLO5 Silverman - cross

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THE COURT: You're still looking for the recipient of the pressure, not the pressure producer, so to speak? Your survey says captains and up.

 $\,$ THE WITNESS: A captain could get it from a deputy inspector.

THE COURT: For sure. He just wants to know which were you trying to get at, the recipient of pressure or the producer of pressure?

THE WITNESS: It didn't matter really. Because how much pressure were they experiencing, or were they aware of from someone, or you experience it when a colleague says to you, look, I have got to get X number of this or X number of that, I am expected to get it. That to me falls under the lingo of pressure, and it's very consistent when people who have written surveys have used that word pressure to mean it in that way, all the way back into the 70s, the famous cynicism scale that Arthur Niederhoffer did, who was a retired police officer, got a Ph.D. and wrote a survey and used that word. Q. Professor, I don't mean to cut you off. I do intend to talk about the word pressure and what you meant when you put it in the survey, but we will get to that in a second.

When you look at the last three questions here -- detect victims of domestic violence, detect victims of rape, and detect victims of child abuse -- do you see those?

A. Yes, I do.

Silverman - cross D458FL05 Q. You think that a high rating on those questions, 8, 9 or 2 10, you would consider that a good thing, correct? 3 A. That's what I answered in the deposition, correct. 4 MR. AZMY: I just want to raise an objection. I 5 thought we were supposed to focus on the three primaries of 6 pressure. THE COURT: That's what you chose to do, but I thought 7 8 in the pretrial order the defense told me they were going to go 9 into the downgrading of crime, right? 10 MR. KUNZ: No. 11 THE COURT: Which one were you going to go into? 12 MR. KUNZ: I am going to go into decrease index crime, 13 decrease other crime. THE COURT: I didn't say that? That's different? 14 15 MR. KUNZ: You were talking about pressure to change 16 crime statistics I thought. 17 THE COURT: What is the difference? I am getting 18 confused. 19 MR. CHARNEY: It's a big difference. 20 MR. KUNZ: It's not in this question. It's a different question in the survey that I haven't talked about. 21 22 THE COURT: Which question is that? 2.3 MR. KUNZ: I believe it's question 4. THE COURT: Downgrade index crime to non-index crime? 24 25 THE WITNESS: It's also the fourth one, your Honor. SOUTHERN DISTRICT REPORTERS, P.C. (212) 805-0300

D458FL05 Silverman - cross THE COURT: Decrease other crime? 1 2 THE WITNESS: The one right after that. 3 THE COURT: Downgrade index crime to non-index crime? 4 That's different from what? 5 MR. CHARNEY: Decrease. 6 THE COURT: Anyway, I told them they could go into it. 7 When you talk about decrease other crime or index 8 crime, you're talking about crime fighting? 9 MR. KUNZ: Absolutely. 10 THE COURT: Not to downgrade. 11 MR. KUNZ: I do intend to talk about that, but I am 12 actually doing something different right now. I am exploring 13 the survey instrument itself. 14 THE COURT: OK. 15 Q. Professor, I think you just agreed with me that you feel 16 that a high rating on the last three -- detect victims, detect 17 victims, detect victims of various crimes -- you feel a high 18 rating there is a positive thing, correct? 19 MR. AZMY: Objection. Relevance. His opinion of the 20 response. 21 THE COURT: Rephrase it. 22 Q. Professor, you believe that a high rating of 8, 9 or 10 in 2.3 those last three categories --24 THE COURT: Last three categories? 25 Q. -- detect victims of domestic violence, detect victims of SOUTHERN DISTRICT REPORTERS, P.C. (212) 805-0300

D458FLO5 Silverman - cross

1 rape, detect victims of child abuse --

2 THE COURT: I didn't think we were going into those 3 three categories.

MR. KUNZ: I'm not going into the numbers. I am exploring the survey instrument itself and its reliability to test what the professor was testing.

MR. AZMY: My objection is to his subjective impression of whether or not pressure is good or bad.

THE COURT: That's not what he is asking. He is still talking about the design of the survey.

Let me hear the question one more time now that I know what you're focusing on?

Q. In designing the survey, you felt that a high rating there would be considered a positive thing?

MR. AZMY: That's my objection. His impression is not relevant.

THE COURT: I guess that's right. That's sustained. It doesn't have anything to do with the design of the survey, whether he thought it was positive or not. It's irrelevant. I am really not interested in his personal opinion. It's a survey.

MR. KUNZ: That's fair enough, your Honor. Q. Now, when you wrote the survey, you had a particular meaning in mind for the word pressure in the first question,

25 correct?

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D458FLO5 Silverman - cross

1 THE COURT: How much pressure? What do you mean by 2 pressure?

- A. Pressure, I didn't have a particular meaning in mind.
 - Q. You did?

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A. I did not. Pressure can be viewed by different people.

THE COURT: However they took it, in other words? However the recipient took it?

THE WITNESS: Yes. It's known in the police literature and it's known by police. But I am not going to say that everyone interprets that word exactly the same.

THE COURT: However the respondent interpreted it, that was fine.

THE WITNESS: Yes. If I could add, that is one reason that we made a self-administered survey, your Honor, because if it was one to one on an individual, then the individual may react to a particular tone I had of one survey versus another. That's one of the beauties of a self-administered survey, and that you leave out the bias that may come from the interviewer. Q. So just to follow up on that, I guess what you're saying is that the individual person taking the survey brings their own subjective meaning to that word when they fill it out, correct? A. That's always possible. Anyone, when you have any survey, if you ask someone if they are strongly democratic or strongly Republican, they enter their own meaning, yet we devise surveys with those words.

D458FLO5 Silverman - cross

1 Q. So then, in essence, there is a level of subjectivity in

- 2 the responses to this question, right?
- 3 A. A survey research design -- a survey, by definition, has an
- 4 element of subjectivity because people respond to words based
- 5 on themselves, their own basis. This is no more subjective
- 6 than asking someone if they are strongly democratic or strongly
- 7 Republican. It's no more subjective than any of that. By
- 8 definition, any survey has an element of subjectivity because
- 9 people are not all the same and they respond differently to
- 10 words.
- 11 Q. OK. Your scale on this survey, it goes from most pressure
- 12 to least pressure, right?
- 13 A. No.
- 14 THE COURT: No. See where it says least pressure?
- 15 Q. The other way. It goes from least pressure to most
- 16 pressure, is that correct?
- 17 A. Yes.
- 18 Q. So there is no spot on this question for someone to report
- 19 no pressure?
- 20 A. That's correct. But we find that most people do not
- 21 respond from a zero to ten. Most people, if you ask them what
- 22 kind of range, if they feel very little, they will put one.
- 23 Most people respond and prefer one to ten. And the literature
- 24 supports that. So we were comfortable using that range.
- 25 Q. I appreciate that, Professor, but an individual survey SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO5 Silverman - cross

1 taker, sitting down taking this survey, who felt no pressure,

- 2 would not be able to answer this question?
- 3 THE COURT: He can't answer that. That's an
- 4 objectionable question.
- 5 Q. I believe you also told me at the deposition that you agree
- 6 with me that question 1 here says nothing about the quality of
- 7 the summonses or arrests that are being issued, correct?
- 8 A. Correct.
- 9 Q. Now, when you look at the categories that you included --
- 10 increase summons, increase arrests, etc., and increase stop and
- 11 frisks -- those are three types of police activity that a
- 12 police officer can undertake in their daily duties, correct?
- 13 A. Yes.
- 14 Q. But there are many, many other activities that a police
- 15 officer can take in their daily duties that you did not include
- in this survey?
- 17 A. Yes.
- 18 Q. Such as vertical patrols, directed patrols, aided reports,
- 19 domestic violence?
- 20 A. I didn't hear. Could you repeat that, please?
- 21 Q. Vertical patrols, directed patrols, aided reports, domestic
- 22 violence reports, juvenile reports, radio runs, community
- 23 visits, removing dangerous conditions from a precinct, in other
- 24 words, there's lots of categories of police activity that you
- 25 did not test in this survey, correct?

SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO5 Silverman - cross

 ${\tt 1}$ A. There are categories that we did not test. However, when

- 2 you mentioned domestic violence, we do have detect victims of
- domestic violence. If you were going to put every activity
- 4 that a police officer engages in, you would have maybe a 15- or
- 5 20-page survey. So this was a two-page survey, back to back, 6 and one of the purposes of a survey is to get people also to

and one of the purposes of a survey is to get people also to complete them.

THE COURT: Is it true that the longer it is, the

THE COURT: Is it true that the longer it is, the lower the response rate is?

THE WITNESS: Yes. That's true of all surveys.

THE COURT: Because it takes more time to fill out.

THE WITNESS: People don't like it. The fact that we

had this high response we found very pleasing.

Q. I just asked you that question 1 doesn't say anything about the quality of the stops.

THE COURT: We covered that.

MR. KUNZ: I understand, your Honor.

THE COURT: We are not going to have it twice.

- Q. It also says nothing about the legality of the summons,
- 20 arrests, or stop, question and frisks, correct?
- 21 A. That's correct.
- 22 Q. Now, you testified on direct that CompStat is a performance
- 23 management and accountability system?
- 24 A. Yes.

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25 Q. So is it at all surprising to you that people reported SOUTHERN DISTRICT REPORTERS, P.C.

D458FL05 Silverman - cross 1 feeling pressure as a result of CompStat? It should not be 2 surprising, correct? 3 MR. AZMY: Objection. 4 THE COURT: I don't understand the question. 5 MR. KUNZ: I can rephrase. 6 THE COURT: You want to rephrase? 7 MR. KUNZ: Yes. 8 Q. So you said that CompStat is a management and 9 accountability system. So if that's the case, isn't it true 10 that people reporting to feel pressure as a result of it is not 11 a surprising result? 12 MR. AZMY: I renew my objection, your Honor. 13 THE COURT: I will allow it. 14 Did you find the results surprising or not surprising? 15 I guess that's what he is asking. Before you said you were 16 flawed by it. 17 THE WITNESS: I have two reactions to that, your 18 Honor. One is that we didn't expect this level of pressure that people would respond, and, also, when people comment in 19 20 the open-ended parts of the survey, they claimed that the 21 pressure sometimes was for the sake -- can I finish? 2.2 THE COURT: Yes, you can. You asked this. I am going 2.3 to take the answer. 24 THE WITNESS: They said that the pressure often was 25 for the sake of pressure. So while we didn't ask about the SOUTHERN DISTRICT REPORTERS, P.C.

D458FL05 Silverman - cross 1 quality of these, many of the respondents raised the issue of 2 quality in terms of quotas and in terms of making numbers. 3 MR. KUNZ: I am going to move to strike that answer. 4 THE COURT: I am going to grant that. His guestion 5 was only, did you expect the results or were you surprised by 6 them, something like that. 7 THE WITNESS: Was that the question? 8 THE COURT: I think it was. 9 A. I was surprised by the extent and the intensity of the 10 responses. 11 THE COURT: That's the answer. 12 Q. Now, you were asked some questions on direct about the 13 possibility of bias getting into a survey, is that correct? 14 A. I think so. 15 Q. Now, question 2 of the survey -- I will put it up in a 16 second -- says, "On a scale of 1 to 10 (1 being very poor and 17 10 being excellent), what is your overall opinion of CompStat 18 with respect to, " and then it lists a number of categories, 19 correct? 20 MR. AZMY: I am going to object on relevance. It has 21 to do with the construction of the earlier question. That was 22 the focus of direct and this Court's ruling about the relevance 2.3 of his testimony. 24 THE COURT: I don't understand the question.

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MR. KUNZ: I just asked that that was the question, SOUTHERN DISTRICT REPORTERS, P.C. (212) 805-0300

D458FL05 Silverman - cross 1 that is number 2, and I intend to make a point. 2 THE COURT: Number 2. 3 MR. KUNZ: I do not intend to get into the responses 4 themselves. 5 THE COURT: So you read the question. Yes. That's 6 correctly read. 7 Q. Isn't it true, Professor, that you did not consider the 8 bias that would have been reflected in this question in your 9 analysis in any way? 10 MR. AZMY: Objection. 11 THE COURT: Sustained. What do you mean by that? 12 Q. If someone on this, for example, wrote that they had a very low overall opinion of CompStat, that would affect their 13 answers on the other questions, it would establish the bias of 14 15 the survey? 16 THE COURT: What do you mean the other question, like 17 question 1? 18 MR. KUNZ: Yes. 19 THE COURT: Do you agree with that? 20 THE WITNESS: No. People have opinions and they 21 reflect it. 22 THE COURT: What he is saying is, if you circled 2.3 number 1 on the scale of 1 to 10, with respect to all the 24

number 2 questions, that would show you didn't have a very good opinion of CompStat. He is then saying, that person who had a SOUTHERN DISTRICT REPORTERS, P.C.

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D458FLO5 Silverman - cross

1 poor opinion of CompStat, how do you correlate that with their 2 answers to number 1 with respect to pressure?

THE WITNESS: I don't see that.

- Q. That's actually my point, Professor. You didn't do any work to correlate the answers to question 2 with the other questions, correct?
- 7 A. We didn't correlate it because the data speaks for itself. 8 If someone had a poor or high, it may mirror what they did on 9 the first. There were many who had a high view. Are you going
- to ask me, did the people who had a high view of CompStat, did that affect their question on number 1?

12 THE COURT: That's what he wants to know.

THE WITNESS: I hear the question just in terms of a poor view.

THE COURT: Either way.

THE WITNESS: If someone had a high view, they may

like the system, but they may not like one part of the system.

THE COURT: You chose not to correlate the responses

to question 2 with the responses to question 1.

Q. Moving on to the 2012 survey, this one also went out with a

20 Q. Moving on to the 2012 survey, this one also went out with a 21 cover letter, correct?

22 A. Yes.

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- 23 Q. The cover letter for this one also indicated that the
- 24 results of the survey would be used to influence policy

decisions, correct?

D458FLO5 Silverman - cross

- 1 A. Yes.
- 2 Q. And they went out by e-mail?
- 3 A. Yes.
- 4 Q. It was this e-mail list that Dr. Eterno got access to,
- 5 correct?
- 6 A. Correct.
- 7 Q. For a retired NYPD officer to join this e-mail list, they
- 8 have to actually sign on to the Web site and sign up for this
- 9 e-mail list, correct?
- 10 A. Yes.
- 11 Q. Were you aware that when an NYPD officer signed up for this
- 12 list, they agreed to assist the NYPD during an emergency?
- 13 A. Yes.
- Q. You used this list of people -- withdrawn.
- 15 I believe you said it was 4,069 people that the e-mail
- list went out to, correct?
- 17 A. Yes.
- 18 Q. And I believe you told me at your deposition that you don't
- 19 know the percentage of retirees that that number represents,
- 20 but you believed it was a very substantial percentage, is that
- 21 correct?
- 22 A. No. It's a representative sample. It doesn't reflect --
- 23 if you're asking me if it reflects the total number of
- 24 retirees?
- 25 Q. You gave a deposition in this case on March 25, 2013? SOUTHERN DISTRICT REPORTERS, P.C. (212) 805-0300

D458FLO5 Silverman - cross

1 A. Yes.

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2 MR. KUNZ: I will take my page out and give it to him.

Q. Directing your attention to page 87, line 16 through 20, you can just read it to yourself if you would.

MR. AZMY: What is the page?

MR. KUNZ: 87, 16 through 20.

- Q. So then at your deposition, did you give the following answer to the following question:
- 9 "Q. So I guess my question is, do you know what percentage of retired NYPD officers that number reflects, 4,069?
- "A. I don't have the percentage. I'm just told that it's a very substantial percentage."

Did you give that answer to that question?

- A. I did. But I also, when I received that document, I made corrections on it and I said -- and I gave it to the attorney, and I said it was a substantial portion. It was a representative.
- 18 Q. I don't have that correction.
- 19 A. I don't have anything to do with that, but all I can tell you is that's what I said, and I still believe it's a very

21 substantial given what survey research numbers use.

- THE WITNESS: Can I expound on that, your Honor?
- 23 Q. I actually have some other questions on that topic, and I believe if your attorney wants, he can ask those questions.

Would it surprise you to learn that as of June 30, SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO5 Silverman - cross

- 1 2012, there were 43,564 retired NYPD officers?
- 2 A. No. It doesn't surprise me because I checked it.
- 3 Q. So is that number correct then?
- 4 A. I have seen two numbers, 36 and 43, but I will accept
- 5 either one.
- 6 Q. So then, if your mailing went out to 4,000, it actually
- 7 went out to under 10 percent, a little over 9 percent of
- 8 retirees, correct?
- 9 A. Right.
- 10 Q. So then with a response rate of 1962, you actually only
- 11 received responses from about 4.5 percent of active retirees,
- 12 correct?
- 13 A. Correct.
- 14 Q. You testified on direct that you believed or that the
- 15 literature says a 30 to 40 percent response rate makes for a
- 16 good survey?
- 17 A. No. It depends on the type of survey. Most surveys that
- 18 look at a large population actually receive a very, very small
- 19 percentage. Our response rate is higher than Gallup uses, that
- 20 ABC uses. They do regular surveys, and they generally do a
- 21 survey of about 1,000 or 1100.
- 22 The major survey that's done in crime statistics is
- 23 the Bureau of Justice Statistics of the Department of Justice
- 24 that does the NCVS, the national crime victim survey, twice a
- year. They survey 40,000 households a year, up to 75,000

SOUTHERN DISTRICT REPORTERS, P.C.

D458FL05 Silverman - cross people. And that's a survey that is widely used, widely cited. And yet their percentage is far less than ours. Not only that, they exclude a whole group of people. They exclude people in 3 4 military bases. They exclude people in institutions. No one 5 in a correctional facility is surveyed in the national crime 6 victim survey. Q. Professor, those are randomly selected samples? 7 8 A. They are not randomly selected. They are representative. 9 That's the major crime survey. If you look at the whole series 10 of surveys that are done on population on crime issues, they 11 are not randomly sampled. They are representative of the 12 samples and the sample numbers that they retrieve. 13 THE COURT: They do go to a far larger group than 14 this? 15 THE WITNESS: No. They go to 1,000 --16 THE COURT: You said 40,000. 17 THE WITNESS: That's the national criminal victim survey. But that's the whole country. 18 19 THE COURT: It's much larger. 20 THE WITNESS: Right. But the percentage is far less 21 than ours. 2.2 THE COURT: But you can have that with a larger group, 2.3 no?

THE WITNESS: You can have it for a larger group, but

for that level, generally, they say 200 is a good level. And SOUTHERN DISTRICT REPORTERS, P.C. (212) 805-0300

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D458FL05 Silverman - cross 1 we passed that threshold in our survey. 2 THE COURT: 200 is an absolute number? 3 THE WITNESS: Yes. If you look at most of the surveys 4 that they use on the Travar Martin incident in Florida, all of 5 them are about 1,000, between 1,000 and 1,100. 6 THE COURT: Then if they get 200 respondents, that's considered good, out of 1100? 7 8 THE WITNESS: They consider it good. Nate Silver, who 9 is well-known in polling --10 THE COURT: He is. 11 THE WITNESS: In October of 2012, he referred to a pew 12 poll that looked at 2000 people, and he said it was a 13 respectable number. 14 THE COURT: OK. He doesn't want to hear you. 15 THE WITNESS: That's clear. 16 Q. We just got a little far afield of the question, which was 17 that your sample, Professor, was not random, correct? 18 A. No, it was not random. 19 Q. You testified on direct that you believed your sample was 20 representative, is that correct? A. In terms of the distribution of the responses, yes. 21 22 Q. I believe you said on direct that you had about 60 2.3 percent -- this is from the 2012 survey. You said about 60 24 percent responses were police officers, 2 percent were 25 sergeants, and 13.7 lieutenants, is that correct? SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO5 Silverman - cross

1 A. I don't remember the numbers.

2 MR. AZMY: I don't remember him testifying to the

3 percentages, just absolute numbers.

4 Q. We can do the math. You said there was 1,154 police

5 officers, is that correct?

- A. I think it was something like that.
- 7 Q. There was 1910 people who gave their rank?
- 8 A. I don't remember offhand.
- 9 Q. Do you want to see your report to refresh your recollection
- or will you take my word for it?
- 11 A. I will take your word.

No. I will see the report.

MR. KUNZ: That might classify as coaching the

14 witness.

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15 THE WITNESS: It's tough enough.

THE COURT: I would say take his word for it. He is

just converting the raw numbers into percentages. If I do, you

18 should.

So it's 60 percent for officers?

20 Q. 60 percent for officers. Would it surprise you to learn

21 that --

22 THE COURT: Give me the others again.

MR. KUNZ: 2 percent sergeants and 13.7 lieutenants.

THE COURT: I am sure the math is right. I am sure

25 Mr. Kunz did the math right.

SOUTHERN DISTRICT REPORTERS, P.C.

D458FLO5 Silverman - cross

Q. Would it surprise you to learn that actually 48 percent of retirees are police officers?

A. If you say.

THE COURT: Of all retirees from the department?

Q. From the 43,000, there's 21,060 that are police officers.

That would go into 48.34 percent.

So then your sample is off by 12 percent? MR. CHARNEY: That's wrong, your Honor. THE COURT: What is the problem, Mr. Azmy?

MR. AZMY: Despite our endeavor to trust counsel's math, I think it's wrong that 382 sergeants out of 1900, that's not 2 percent. I don't know what it is, but I know it's not 2

percent.
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MR. KUNZ: I will use my hand-held calculator. 382 divided by 1910 equals -- you're right. I was wrong. It is 20 percent.

THE COURT: That was a big error. But luckily it was solved. We are OK.

MR. KUNZ: My other numbers do appear to be correct. Do you agree with that, Mr. Azmy?

THE COURT: Take it from the top. What percentage were police officers? $43 \ \text{you said}$?

Q. Your survey had 60 percent police officers.

THE COURT: 60 percent police officers, 20 percent sergeants and?

D458FLO5 Silverman - cross

- 1 MR. KUNZ: 13.7 percent lieutenants.
- ${\tt Q.}\ {\tt Would}$ it surprise you to learn that out of the active
- 3 retiree pool, 48.34 percent are police officers?
 - A. I am taking your word.
- 5 Q. So then your sample is off by 12 percent?

Yes? The difference between 48 and 60 is 12 percent?

- A. That's a correct calculation.
- 8 Q. For sergeants, the percentage of sergeants for current 9 retirees is 13.96 percent.
- So then with your 20 percent, your number is off by about 6 percent, is that correct?
 - MR. AZMY: I'm sorry. Could you just repeat that?
- Q. There are 6,085 actively retired sergeants. And so out of the about 43,000 active retirees, that goes to 13.96 percent.
- So your number of 20 percent is 6 percent greater
- 16 towards sergeants than the actual number?
- 17 A. I am taking your word.
- 18 Q. Then with lieutenants, your number is 13.7 percent, but the
- 19 actual percentage of retired lieutenants is 6.73 percent,
- 20 correct?

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- 21 A. I hear you.
- 22 Q. So then your sample is not representative of the actual
- 23 makeup of the retired population of NYPD officers, isn't that
- 24 correct?
- MR. AZMY: Objection.

SOUTHERN DISTRICT REPORTERS, P.C.

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THE COURT: You can answer it. You heard the difference in the numbers. Does that make it not representative?

A. It generally parallels. The fact that it's not precisely the same doesn't cause us great harm. And in light of the results of that survey, which paralleled the first survey, gives us confidence that the evidence is pretty strong in what we found. And that not only did we provide that information, this sample was examined by others and found to be worthwhile. And our earlier work was peer reviewed.

So I think if you take the both surveys in combination and look at the results, and see how strongly they parallel one another in the direction that the pressure was felt on both, and in the first one, where the only negative relationship was to follow the rules, the first one --

THE COURT: The second one.

A. The second one was constitutional legal rules, but the first one was to do things ethically. That was in the first one. Those both went in a downward fashion. So I think the overall, while you may say that it's off some for each, the predominance of evidence is so strong that one can attack any survey. No survey is perfect.

THE COURT: That's a good note to end on. It's 4:30. I like ending on that, and we can pick up on Monday because it's 4:30.

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D458FL05
                              Silverman - cross
               THE WITNESS: Fine with me.
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               (Adjourned to Monday, April 8, 2013, at 10:00 a.m.)
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