



Exhibit P-3

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Page 1

1 UNITED STATES DEPARTMENT OF LABOR
 2 OFFICE OF ADMINISTRATIVE LAW JUDGES
 3 - - - - -
 4 OFFICE OF FEDERAL CONTRACT) OALJ Case No.
 5 COMPLIANCE PROGRAMS, UNITED) 2017-OFC-00006
 STATES DEPARTMENT OF LABOR,)
 6) OFCCP No. R00192699
 Plaintiff,)
 7)
 vs.)
 8)
 ORACLE AMERICA, INC.,)
 9)
 Defendant.)

- - - - -

12 VIDEOTAPED DEPOSITION OF
 13 JANICE FANNING MADDEN, Ph.D.
 14 Thursday, October 10, 2019, 8:28 a.m.
 15 Dilworth Paxson LLP
 16 1500 Market Street, E3500
 17 Philadelphia, Pennsylvania
 18
 19
 20
 21
 22
 23 Reported By:
 24 Marjorie Peters, RMR, CRR
 25 Job No. 10061318

Page 2

1 VIDEOTAPED DEPOSITION OF JANICE FANNING MADDEN, Ph.D.,
 2 a witness herein, called by the Defendant for
 3 examination, taken pursuant to the Code of Federal
 4 Regulations 41 C.F.R. 60-30.11 and Rule 30 of the
 5 Federal Rules of Civil Procedure, by and before
 6 Marjorie Peters, a Registered Merit Reporter,
 7 Certified Realtime Reporter and Notary Public in and
 8 for the Commonwealth of Pennsylvania, at Dilworth
 9 Paxson LLP, 1500 Market Street, E3500, Philadelphia,
 10 Pennsylvania, on Thursday, October 10, 2019, at
 11 8:28 a.m.
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Page 3

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 21 Dennis Mullin, Legal Videographer
 22
 23
 24
 25

Page 4

I N D E X

2 EXAMINATION	PAGE
3 JANICE FANNING MADDEN, Ph.D.	
4 By Ms. Mantoan	8
I N D E X O F E X H I B I T S	
6 MADDEN EXHIBIT	PAGE
7 Exhibit 1 Notice	10
8 Exhibit 2 Madden Expert Report, July	17
9 19, 2019	
10 Exhibit 3 Madden Expert Rebuttal	17
11 Report, August 16, 2019	
12 Exhibit 4 Econsult Corporation	21
13 website printout	
14 Exhibit 5 Saad Expert Rebuttal	86
15 Report, August 2019	
16 Exhibit 6 Book, Fanning, "The	144
17 Economics of Sex	
18 Discrimination"	
19 Exhibit 7 Madden, "Spatial	146
20 Implications of Increases	
21 in the Female Labor	
22 Force...", November 1980	
23	
24	
25	

Page 5

1	INDEX OF EXHIBITS		
2	MADDEN EXHIBIT		PAGE
3	Exhibit 8	Madden, "Why Women Work Closer to Home", July 1980	146
4			
5	Exhibit 9	Madden, "Women and Work, An Annual Review," 1985	147
6			
7	Exhibit 10	Madden, "Gender Differences in Behavior at Home and Work"	148
8			
9			
10	Exhibit 11	Madden, "The Gender Equity Report", Gender Equity Committee, December 2001	148
11			
12			
13	Exhibit 12	Madden, "Preface." Annals, AAPSS, 596, November 2004	154
14			
15			
16	Exhibit 13	The National Academies Press, "Collecting Compensation Data from Employers"	155
17			
18			
19			
20	Exhibit 14	Statement of Janice Fanning Madden, Harrisburg, 9.18.2014	158
21			
22			
23	Exhibit 15	Madden, "Pay Gap," 2017	158
24			
25			

Page 7

1	INDEX OF EXHIBITS		
2	MADDEN EXHIBIT		PAGE
3	Exhibit 25	log:	207
4		C:\Client\Oracle\Saad\	
5		EconsultWork\Support\LOG_	
6		TableR5.log	
7	Exhibit 26	EmployeeTransactions.dta	208
8	Exhibit 27	log:	212
9		C:\Client\Oracle\Saad\	
10		EconsultWork\Support\Log_	
11		TableR10.log	
12	Exhibit 28	TableR10.D0	215
13	Exhibit 29	log:	225
14		C:\Client\Oracle\Report\	
15		Analyses\Log_Regressions_1	
16		a2a3alb2b.log	
17			
18			
19			
20			
21			
22			
23			
24			
25			

Page 6

1	INDEX OF EXHIBITS		
2	MADDEN EXHIBIT		PAGE
3	Exhibit 16	Madden Affidavit, 9.8.2017	159
4	Exhibit 17	Cooper v. Southern, Madden Expert Report	160
5			
6	Exhibit 18	Madden Expert Report, Gutierrez v. Johnson & Johnson	161
7			
8			
9	Exhibit 19	Madden Expert Report, Allstate Insurance, 11.6.2007	162
10			
11			
12	Exhibit 20	Madden Expert Report, Boeing, 6.8.2005	163
13			
14	Exhibit 21	Madden, "Evaluating Pay Differences by Gender...", 5.10.2013	163
15			
16			
17	Exhibit 22	log:	181
18		C:\Client\Oracle\Report\	
19		Analyses\Log_AppendixB.log	
20	Exhibit 23	Saad Expert Report	202
21	Exhibit 24	log:	204
22		C:\client\Oracle\Saad\	
23		EconsultWork\Support\Log_	
24		ChartR1_R2.log	
25			

Page 8

1 PROCEEDINGS

2 THE VIDEOGRAPHER: We are now on the

3 record. Today's date is October 10, 2019, and the

4 time is 8:28 a.m. This is the video deposition of

5 Janice Fanning Madden, Ph.D., being taken in the

6 matter of Office of Federal Contract Compliance

7 Programs v. Oracle America, Inc., pending in the US

8 Department of Labor Office of Administrative Law

9 Judges. Case number 2017-OFC-00006.

10 We are at 1500 Market Street,

11 Philadelphia, PA. My name is Dennis Mullen of Aptus

12 Court Reporting. Counsel will be noted on the

13 stenographic record. Our court reporter is Marjorie

14 Peters, and she may now swear in the witness.

15 JANICE FANNING MADDEN Ph.D.,

16 a witness, having been first duly sworn, was

17 examined and testified as follows:

18 EXAMINATION

19 BY MS. MANTOAN:

20 Q. Good morning, Dr. Madden.

21 A. Good morning.

22 MS. MANTOAN: Should we begin by

23 going around and introducing ourselves? So if

24 counsel and those present for plaintiffs could

25 introduce themselves, please.

Page 9

1 MS. FLORES: This is Jessica Flores
 2 on behalf of the Department of Labor.
 3 MR. SONG: Charles Song on behalf of
 4 the Department of Labor.
 5 MR. BRUNETTI: Michael Brunetti,
 6 Department of Labor.
 7 MS. BREMER: Laura Bremer on behalf
 8 of Department of Labor.
 9 MR. SAAD: Ali Saad, Resolution
 10 Economics.
 11 MS. JAMES: Jessica James of Orrick
 12 on behalf of Oracle.
 13 MS. MANTOAN: And my name is Kathryn
 14 Mantoan. I'm from Orrick representing Oracle
 15 America, Inc., in this action.
 16 BY MS. MANTOAN:
 17 **Q. Dr. Madden, we're here today to take**
 18 **your deposition with respect to an administrative**
 19 **action brought by the Office of Federal Contract**
 20 **Compliance Programs against Oracle America, Inc.**
 21 **Do you understand that?**
 22 A. Yes, I do.
 23 **Q. Rather than repeatedly saying Office of**
 24 **Federal Contract Compliance Programs throughout the**
 25 **day, I plan to use the abbreviation OFCCP. Can we**

Page 10

1 **use agree that that's an abbreviation we can use?**
 2 A. Yes.
 3 MS. MANTOAN: Mark this, please.
 4 (Madden Exhibit 1, Notice, was marked for
 5 identification.)
 6 **Q. Dr. Madden, have you seen Exhibit 1**
 7 **before?**
 8 A. Yes.
 9 **Q. Does this appear to be the Notice of**
 10 **Your Deposition for today?**
 11 A. Yes.
 12 **Q. We discussed this a bit before we went**
 13 **on the record today, but my understanding is that**
 14 **you intend to leave the deposition at 3:00 p.m.,**
 15 **eastern today, correct?**
 16 A. Due to a prior commitment, yes.
 17 **Q. The court reporter has placed you under**
 18 **oath, and you'll be testifying under oath throughout**
 19 **the remainder of the depo.**
 20 **Do you understand that?**
 21 A. Yes.
 22 **Q. I should have said it at the outset, I**
 23 **expect that you have heard these prefatory kind of**
 24 **admonitions many times. How many times, roughly,**
 25 **would you estimate you've been deposed?**

Page 11

1 A. Probably in the range of 50.
 2 **Q. And when was the last time you gave a**
 3 **deposition in a discrimination case where you were**
 4 **giving the -- you had been retained by the**
 5 **plaintiff?**
 6 A. Let me get my report.
 7 **Q. So, we needn't -- we needn't do that at**
 8 **this time.**
 9 A. Oh.
 10 **Q. If you don't remember, we can talk about**
 11 **it later.**
 12 A. Well, it's on -- I think probably the
 13 last time is on my report. If I saw what it was, I
 14 would recall whether I had anything since then,
 15 so...
 16 **Q. Okay. Thank you.**
 17 **So because you're under oath,**
 18 **Dr. Madden, it's extremely important that your**
 19 **testimony be truthful, complete and accurate.**
 20 **Do you understand that?**
 21 A. Yes.
 22 **Q. In addition, because you're testifying**
 23 **under oath, it's important that you understand the**
 24 **questions that I'm asking you. Accordingly, if at**
 25 **any time my question is in any way unclear or**

Page 12

1 **ambiguous, can you please let me know that so I can**
 2 **clarify or rephrase it?**
 3 A. Yes. So, the nature of a
 4 misunderstanding is that it is a misunderstanding,
 5 and often it's not understood until later that
 6 there's been a misunderstanding.
 7 **Q. Okay.**
 8 A. But at the time if I am confused, I will
 9 certainly let you know.
 10 **Q. Thank you.**
 11 **So if you don't indicate that you**
 12 **don't understand my question, you go ahead and**
 13 **answer it, I will presume that, at least as you sit**
 14 **there at that moment, you believe yourself to have**
 15 **understood the question; is that fair?**
 16 A. That's fair.
 17 **Q. At the conclusion of the deposition, the**
 18 **court reporter will give you a transcription of your**
 19 **questions -- my questions and your answers for your**
 20 **review.**
 21 **Do you understand that?**
 22 A. Yes.
 23 **Q. At that time you will have the**
 24 **opportunity to correct or change your testimony, as**
 25 **you deem necessary; however, if you make any changes**

Page 13

1 or corrections to your testimony, I will have the
 2 opportunity to comment on the fact that you have
 3 changed your testimony later in this case.
 4 Do you understand that?
 5 A. Yes.
 6 Q. Is there any reason you know of that you
 7 can't give truthful, complete and accurate
 8 deposition testimony today?
 9 A. Not -- not at the moment, no.
 10 Q. Okay. Because the court reporter is
 11 attempting to transcribe the questions and the
 12 answers, it's important that we try not to talk over
 13 one another. So can I ask that you please try to
 14 wait a moment after I finished completing my
 15 question so that she can take down the full question
 16 and then the full answer.
 17 Is that all right?
 18 A. Yes.
 19 Q. Now, we've agreed with counsel for OFCCP
 20 that we will tender your fees a reasonable time
 21 after the deposition, and not today at the day of
 22 the deposition.
 23 MS. MANTOAN: Do you agree with
 24 that, Ms. Flores?
 25 MS. FLORES: That's correct.

Page 14

1 MS. MANTOAN:
 2 Q. Dr. Madden, your hourly rate for
 3 testimony is \$690; is that correct?
 4 A. If that's what you have been told.
 5 That's not my current rate, but that may be what --
 6 it's 690, not 609.
 7 Q. Sorry. I meant -- I'm sorry if I
 8 misspoke. Your report says 690.
 9 A. Yeah.
 10 I don't know if that's the current
 11 rate being charged on this contract our not, because
 12 that's not my current rate, but there may have been
 13 a condition that kept it at the old rate.
 14 Q. Okay. And you understand that you've
 15 been designated as an expert witness in this case,
 16 correct?
 17 A. Yes.
 18 Q. What is your understanding of OFCCP's
 19 claims in this case?
 20 A. My understanding is that the claims are
 21 compensation discrimination of -- against Asians
 22 relative to whites, against blacks relative to
 23 whites, and against men -- against women relative to
 24 men.
 25 Q. When you say your understanding is that

Page 15

1 the claims are "compensation discrimination," what
 2 do you understand "compensation discrimination" to
 3 mean?
 4 A. Differences in earnings. For --
 5 differences in earnings for comparably qualified
 6 persons as they entered Oracle.
 7 Q. Is there any particular source or
 8 literature that you're looking to for that
 9 understanding of compensation discrimination?
 10 A. No. I mean, that's common knowledge.
 11 Common perception in economics. I mean, that's
 12 certainly what we all write about that are working
 13 in this area.
 14 Q. Can you give me an example of a writing
 15 in economics that defines compensation
 16 discrimination as differences in pay for comparably
 17 qualified persons as they enter the company being
 18 studied?
 19 MS. FLORES: Objection. Vague and
 20 compound.
 21 A. I'm sure that's stated probably in my
 22 dissertation. You have that from 1972. Certainly
 23 in other things I've written and virtually the
 24 National Science Academy, National Academy of
 25 Sciences volumes on collecting data for this. I

Page 16

1 mean, they all are talking in that -- in that
 2 conception of discrimination by economists.
 3 Q. You've testified in a number of cases,
 4 legal cases where compensation discrimination claims
 5 were at issue, correct?
 6 A. Yes.
 7 Q. Do you have any understanding of how the
 8 definition of compensation discrimination you just
 9 articulated relates to a definition of compensation
 10 discrimination in a legal sense?
 11 MS. FLORES: Objection. Calls for
 12 legal conclusion and vague.
 13 A. No. I'm not a lawyer.
 14 Q. Were you asked to opine on any specific
 15 questions in connection with this case?
 16 MS. FLORES: Objection. Vague.
 17 A. Well, certainly, the general question
 18 just posed. Possibly I was asked about a detail or
 19 two. I just don't recall as I sit here.
 20 Q. When you say, "the general question just
 21 posed," I'm trying to get at what you understand to
 22 be the topics for which you have been asked to give
 23 an opinion?
 24 A. I would like to get my report.
 25 Q. So we will look at the report. I'm

Page 17

1 wondering as you sit here today, if you have an
 2 understanding of the topics for which you were asked
 3 to testify in this case? [Whispers in sotto voce
 4 regarding a report.]
 5 So Dr. Madden, rather than having
 6 you look at document that's not be an exhibit and
 7 that I don't have a copy of. Why don't we at this
 8 time mark some exhibits and I'll put them in front
 9 of you, and you can reference them when you are
 10 answering the question.
 11 MS. MANTOAN: So if we could please
 12 mark this the next in order.
 13 (Madden Exhibit 2, Madden Expert Report, July 19,
 14 2019, was marked for identification.)
 15 **Q. Some questions before we get back to the**
 16 **substantive issue we were discussing before.**
 17 **Does Exhibit 2 appear to be a copy**
 18 **of your initial expert report in this case?**
 19 A. Yes, it does.
 20 MS. MANTOAN: Okay. And if we could
 21 mark this next in order.
 22 (Madden Exhibit 3, Madden Expert Rebuttal Report,
 23 August 16, 2019, was marked for identification.)
 24 **Q. Dr. Madden, does what's been marked as**
 25 **Exhibit 3 appear to be your rebuttal expert report**

Page 18

1 in this case?
 2 A. Yes, it is.
 3 **Q. So the question that I had asked for**
 4 **which I understand you want to consult one or both**
 5 **of these reports, is whether you have an**
 6 **understanding of the topics about which you are**
 7 **being asked to testify in this case?**
 8 A. Yes, and I wanted to be very specific
 9 and not say something that inadvertently sounded
 10 differently.
 11 So it's in the first paragraph of my
 12 initial report. They asked me to analyze whether
 13 there are racial differences in compensation in the
 14 product development job function. They asked me to
 15 analyze whether there are gender differences in
 16 compensation in product development, information
 17 technology and support job functions at Oracle
 18 America. And relevant to the earlier question you
 19 asked me, they also specifically asked me to analyze
 20 the relationship of Oracle's decisions on job
 21 assignment and compensation at hire on any
 22 subsequent gender and racial compensation
 23 differentials, and to estimate the damages accrued
 24 from my differences I found.
 25 **Q. So you were asked specifically by**

Page 19

1 counsel for OFCCP to analyze the relationship of
 2 Oracle's decision on job assignment and compensation
 3 at hire on any subsequent gender and racial
 4 compensation differentials?
 5 A. Yes.
 6 **Q. I know you already said that you're not**
 7 **a lawyer. I appreciate that you're not a lawyer.**
 8 **But I do want to ask if you have a -- a lay, with**
 9 **respect to the law, a lay understanding of what kind**
 10 **of proof OFCCP needs to tender to prove its claims**
 11 **in this case?**
 12 MS. FLORES: Objection. Calls for
 13 legal conclusion, and vague.
 14 A. No. I'm not a lawyer.
 15 **Q. Is this the first case in which you have**
 16 **been retained by OFCCP to provide an expert opinion?**
 17 A. No.
 18 **Q. How many cases have you been retained by**
 19 **OFCCP to provide an expert opinion?**
 20 A. I can't give you a count. There's
 21 certainly two that I've done recently, that have
 22 gone to trial. There are three that I can think of
 23 that went to trial, and there have probably been a
 24 few others as well.
 25 **Q. Would you say you've been retained more**

Page 20

1 **than ten times by OFCCP?**
 2 A. Probably not. But without my list in
 3 front of me, I don't really know.
 4 I'm sorry, I made a mistake. One --
 5 the other one I'm thinking of did not go to trial.
 6 It settled. Two went to trial and then there's
 7 another one that there was quite a bit of deposition
 8 on.
 9 **Q. Okay. What are the two that went to**
 10 **trial?**
 11 A. Enterprise Rental Car, and I think it
 12 was Williams. It was an asbestos case in D.C. An
 13 asbestos removal firm in Washington, D.C. I think
 14 it was Williams or something like that was the
 15 company.
 16 **Q. Were either or both of those**
 17 **compensation discrimination cases?**
 18 MS. FLORES: Objection. Calls for
 19 legal conclusion, and vague.
 20 A. No, both of them were hiring, I believe.
 21 The Williams might have been compensation, as well
 22 as hiring. I don't recall. It was a few years ago.
 23 **Q. Okay. You mentioned a third case that**
 24 **hadn't gone to trial but that you were deposed at**
 25 **where you were retained by OFCCP. What case was**

Page 21

1 that?

2 A. It was in Texas, and I think it was

3 South Bank or Southern Bank. It was a bank in

4 Texas.

5 Q. And when did these three retentions

6 happen approximately; last five years, last ten

7 years?

8 A. Well, Enterprise Rental Car is certainly

9 the last couple of years. The Williams case was

10 probably the last three years. The South Bank case

11 might have been about eight years ago.

12 Q. Okay. Am I correct you've been retained

13 on more than those three matters by OFCCP, correct?

14 A. Yes, I have. As I said, there might be

15 three or four other matters that I'm not recalling

16 either because they didn't come to deposition or

17 because it was a while back.

18 MS. MANTOAN: If you can mark this

19 next please.

20 (Madden Exhibit 4, Econsult Corporation website

21 printout, was marked for identification.)

22 Q. Dr. Madden, what's Econsult Corporation?

23 A. It's a consulting firm. For -- largely

24 engaged in litigation and regulatory support of

25 employers and government.

Page 22

1 Q. And what is your relationship to

2 Econsult Corporation?

3 A. I am a founding person. I own about 8

4 percent of it, and I am an academic consultant.

5 Q. Okay. And looking at what's been placed

6 in front of you, Exhibit 4.

7 A. Yes.

8 Q. Does this appear to you to be a printout

9 of a -- of a web page for Econsult Corporation?

10 A. It appears to be. I don't think I have

11 ever seen it, but, yes.

12 Q. Okay. So who at Econsult Corporation

13 writes the information that's available, if you

14 know, on the website?

15 A. Probably the managing person, Kathy

16 Duffy.

17 Q. So if I could direct you to the bottom

18 of page 1 of Exhibit 4.

19 A. Yes.

20 Q. Let me give you a moment to read the

21 entry under 2015, and I'll have a few questions

22 about that. Let me know when you're done.

23 A. Yes.

24 Q. Okay. So this website references

25 "Multi-year contracts with the Department of Labor's

Page 23

1 Office of Federal Contract Compliance Programs,

2 OFCCP, for seven unique actions involving

3 discrimination on the basis of gender, race and

4 ethnicity."

5 Did I read that correctly?

6 A. Yes, you did.

7 Q. Are you involved in any or all of those

8 seven matters?

9 A. This case may be one. No, I guess --

10 well, I don't know. I may be. I know there were a

11 number of things that came in that nothing has

12 happened on, so I don't -- and whether somebody else

13 on the firm is doing them or me, I don't know. And

14 whether I'm thinking -- whether there's some cases I

15 have gotten some start on, I don't recall, but --

16 Q. So when you --

17 A. Enterprise -- and in fact, Enterprise

18 and Williams may have been part. I just don't

19 recall. I'm not involved in contracting or in the

20 operations of the business.

21 Q. Who would I talk to at Econsult if I

22 wanted to understand what seven actions these were

23 or information about the contracting for these seven

24 actions?

25 A. Kathy Duffy.

Page 24

1 Q. Can you spell that last name?

2 A. D-U-F-F-Y.

3 Q. Thank you. Are you, like, a part owner

4 of Econsult Corporation, am I understanding that

5 correctly?

6 A. Yeah, I own about 8 percent, I think,

7 yes.

8 Q. 8 percent?

9 A. Yeah.

10 Q. Has any of the work that you've done for

11 OFCCP as an expert witness been for other technology

12 companies?

13 MS. FLORES: Objection. Vague.

14 A. Well, certainly, asbestos and Enterprise

15 was not and the bank was not, and that's what I've

16 recalled.

17 I believe one was for a technology

18 company that nothing happened with, so...

19 Q. What company is that?

20 A. Plantir. P-L-A-N-T-I-R. I --

21 Q. Palantir, is that possibly it?

22 P-A-L-A-N-T-I-R?

23 A. Yes. Yes. Maybe that's it. As you can

24 see, I really had very little to do with it except

25 saying that it had come in on a list of ours and it

Page 25

1 wasn't going to go forward. I think so. I mean,
 2 I --
 3 **Q. So maybe my question earlier was vague.**
 4 **I'm asking not -- when I say "you," not about**
 5 **Econsult Corporation generally, but you**
 6 **specifically, Dr. Madden.**
 7 **So has any of the work that you,**
 8 **Dr. Madden, have done for OFCCP as an expert**
 9 **witnesses been in cases involving other technology**
 10 **companies?**
 11 MS. FLORES: Objection. Vague.
 12 A. Not as I recall.
 13 **Q. Have you ever served as an expert**
 14 **witness adverse to the OFCCP?**
 15 A. No.
 16 **Q. How many contracts has Econsult entered**
 17 **into with OFCCP to date?**
 18 MS. FLORES: Objection. Vague, and
 19 calls for speculation.
 20 A. I would have no idea.
 21 **Q. Can you give me even a rough estimate?**
 22 A. No. I don't know what other people in
 23 the firm are working on.
 24 **Q. Well, you're part owner of the firm,**
 25 **right?**

Page 26

1 A. Yes.
 2 **Q. And I was perhaps remiss in not**
 3 **mentioning this at the outset, although I expect**
 4 **you've heard this admonition before.**
 5 **There may be times today when I**
 6 **asked ask you to estimate. I am entitled to your**
 7 **best estimation, even if you don't remember the**
 8 **exact information. But I don't want you to**
 9 **speculate the difference I will draw, because others**
 10 **might draw it differently between estimating and**
 11 **guessing. Is that if I asked you the estimate the**
 12 **length of the conference table that we're setting**
 13 **in, you presumably could do that even though you**
 14 **don't have a tape measure in front of you. But if I**
 15 **ask you to estimate the length of the dining room**
 16 **table in my home, that would be speculation.**
 17 A. Yeah.
 18 **Q. Is that a clear distinction to you?**
 19 A. Yes.
 20 **Q. So with that understand, are you still**
 21 **unable to estimate how many contracts Econsult as**
 22 **entered into with OFCCP?**
 23 MS. FLORES: Objection. Still calls
 24 for speculation.
 25 A. No, I cannot. I mean -- I have --

Page 27

1 there's another economist in the firm that does, I
 2 think, many more than I do and I have no idea what
 3 he's doing.
 4 **Q. Okay. Are you able to estimate in total**
 5 **how many contracts you have done work on for OFCCP**
 6 **to date?**
 7 A. I did the best I could, which I said, I
 8 can remember the sort of one, two, three, four, that
 9 have involved testimony and there are probably three
 10 or four others is the best of my knowledge.
 11 **Q. Would they there be records at Econsult**
 12 **that would provide a more specific answer to my**
 13 **question?**
 14 MS. FLORES: Objection. Vague.
 15 A. Depending how far you go back. I mean,
 16 certainly, there are records for the last 10 to 20
 17 years. Whether they go back over 45 years over my
 18 testifying history, I'm less sure. And certainly
 19 there's -- we do maintain records of testimony. I
 20 just don't know that we maintain records of
 21 things -- contracts that were made and no work was
 22 done and that nothing very much happened. So I'm
 23 just not sure. I don't maintain those records. I
 24 don't know.
 25 **Q. How much -- again, I'm going to ask you**

Page 28

1 **to estimate, how much Econsult Corporation has been**
 2 **paid to date by OFCCP for matters in which you did**
 3 **work as an expert witness?**
 4 MS. FLORES: Objection. Calls for
 5 speculation. Also vague.
 6 A. You mean over my life?
 7 **Q. Correct. I'm trying to -- you said**
 8 **you've worked repeatedly with OFCCP, I'm trying to**
 9 **get some estimation or sense --**
 10 A. Whoo.
 11 **Q. -- of how much money you've earned by**
 12 **testifying as an expert on behalf of OFCCP?**
 13 MS. FLORES: Same objection.
 14 A. Okay. How much -- how much I've earned
 15 or how much Econsult took in? Those are two
 16 different questions.
 17 **Q. Either or both. Both to the extent that**
 18 **you remember them?**
 19 A. Well, I -- I'd -- well, I review the
 20 bills before they're sent to the OFCCP to make sure
 21 they're accurate month to month. I certainly never
 22 cal -- on my cases, I never calculate.
 23 In terms of my own earnings over my
 24 life, 100 to 200,000 would be my guess. That's a
 25 ballpark guess.

Page 29

1 **Q. And what about billings -- or I'm sorry,**
 2 **earnings by Econsult Corporation on cases in which**
 3 **you have worked as an expert witness for OFCCP?**
 4 A. I would have no idea. I mean, Econsult
 5 operates so that we make no profit. I mean,
 6 everything is paid out to the people that do the
 7 work. So there's no -- there's no net profit to
 8 Econsult if that's what you're asking. And I don't
 9 recall how others were paid, so...
 10 **Q. Maybe the word earnings wasn't correct.**
 11 **Do you have any sense of the total amount that has**
 12 **been paid to Econsult Corporation to date by OFCCP**
 13 **for cases in which you worked as an expert witness**
 14 **for OFCCP?**
 15 MS. FLORES: Objection. Asked and
 16 answered. Also calls for speculation.
 17 A. Well, since I said that Econsult makes
 18 no net profit and I don't know what others are paid,
 19 I don't know what other bucket that you think there
 20 is that I could testify about, so I don't have
 21 addition -- no additional answer.
 22 **Q. When you do work for OFCCP, does Janice**
 23 **Madden write a bill to OFCCP, or does Econsult write**
 24 **a bill to OFCCP?**
 25 A. Econsult does.

Page 30

1 **Q. When OFCCP pays, do they write a check**
 2 **to Janice Madden, or do they write a check to**
 3 **Econsult Corporation?**
 4 A. To Econsult Corporation.
 5 So, I'm trying to get a sense of the
 6 --
 7 (Clarification requested by the Court Reporter.)
 8 **Q. Okay. So I'm trying to get a sense of**
 9 **the total amount that OFCCP has paid to Econsult**
 10 **Corporation to date for cases in which you worked as**
 11 **an expert witness, if you know.**
 12 MS. FLORES: Objection. Asked and
 13 answered.
 14 A. I told you. I gave you a guesstimate of
 15 what I earned, and I do not know what others were
 16 paid, and I do not know what Econsult billed in
 17 total.
 18 **Q. So would --**
 19 A. That's not going to change no matter how
 20 many ways you ask the question. I just don't know.
 21 **Q. Would records of billings at Econsult**
 22 **Corporation provide that answer, do you suspect?**
 23 A. Certainly, first with some recency, I
 24 don't know how far back they go.
 25 **Q. Dr. Madden, do you understand that you**

Page 31

1 **were required to provide a report in this case?**
 2 MS. FLORES: Objection. Vague.
 3 A. Required by whom?
 4 **Q. Well, did OFCCP indicate to you that you**
 5 **needed to memorialize your opinions in a written**
 6 **report?**
 7 A. The OFCCP, as my client, asked for a
 8 report.
 9 **Q. Okay. And did they ask for two reports?**
 10 A. Yes.
 11 **Q. And when they asked for those reports,**
 12 **did they advise you that there were deadlines for**
 13 **those reports?**
 14 A. Yes.
 15 **Q. And what did you understand that those**
 16 **reports were supposed to contain?**
 17 MS. FLORES: Objection. Calls for
 18 speculation.
 19 And counsel, are you trying to get
 20 into the conversations between OFCCP and Dr. Madden
 21 about the specifics of the report?
 22 MS. MANTOAN: No, I'm trying to get
 23 into the -- if OFCCP was asking her to make
 24 assumptions about what she needed to put into the
 25 report, as to what the rules required, whether she

Page 32

1 needed to provide, say, some of her opinions or all
 2 of her opinions. I do think that that would be
 3 something that we're entitled to under the more
 4 recent amendments to FRCP26.
 5 MS. FLORES: Right. So the recent
 6 amendments that protect our conversations with
 7 Dr. Madden, maybe instead of asking what we actually
 8 discussed and talked about, we can talk about what
 9 the facts are as Dr. Madden know them.
 10 So when you ask questions like, did
 11 OFCCP ask you to do this; did OFCCP ask you to do
 12 that; that's getting into the conversations that we
 13 had with Dr. Madden.
 14 MS. MANTOAN: So counsel, my last
 15 question was: What did you, Dr. Madden, understand
 16 that those reports were supposed to contain?
 17 So I'm not asking for conversations.
 18 I'm asking what her understanding of the
 19 requirements for this report were.
 20 MS. FLORES: Right. The question
 21 before that was about what we were asked.
 22 MS. MANTOAN: Well, the question
 23 pending is what Dr. Madden understood that these
 24 reports were supposed to contain.
 25 BY MS. MANTOAN:

Page 33

1 **Q. So I'll put that question to you,**
 2 **Dr. Madden.**
 3 A. My understanding was that the first
 4 report was to contain my analysis of the evidence of
 5 the data and documents that had been presented to me
 6 that are attached to the end of my report. What
 7 they said about the questions that we read earlier,
 8 which I can read earlier, but basically the
 9 compensation differentials, the job assign -- and
 10 role of job assignment and compensation at hire on
 11 current compensation differentials.
 12 **Q. And what did you understand that the**
 13 **second report that you authored was supposed to**
 14 **contain?**
 15 A. That it was supposed to respond to the
 16 report of Dr. Ali Saad as it applied to any analysis
 17 in my original report.
 18 **Q. You understand, though, that Dr. Saad**
 19 **didn't have his [sic] initial report at the time**
 20 **that he wrote his initial report, correct?**
 21 MS. FLORES: Objection. Calls for
 22 speculation.
 23 A. He did not have my initial report, yes.
 24 **Q. Did you review your initial and your**
 25 **rebuttal report in an effort to refresh your**

Page 34

1 **recollection for today's deposition?**
 2 A. I tried to.
 3 **Q. And having done or attempted to do that**
 4 **review, was there anything you found that you want**
 5 **to correct in either document?**
 6 A. No.
 7 **Q. Did counsel provide you any assumptions**
 8 **that they asked you to rely upon in forming the**
 9 **opinions to be expressed in this case?**
 10 A. Not that I recall.
 11 **Q. Did anyone at OFCCP provide you with any**
 12 **assumptions to be relied upon in forming your**
 13 **opinions in this case?**
 14 A. Not that I recall.
 15 **Q. I have a few questions here about the**
 16 **initial report and the rebuttal report, and just so**
 17 **that we're terminologically clear, Exhibit 2, dated**
 18 **July 19th, I'll refer to that as your initial**
 19 **report; and Exhibit 3, dated August 16th, I'll refer**
 20 **to that as your rebuttal report.**
 21 **Is that all right?**
 22 A. Yes.
 23 **Q. How much time, to the best of your**
 24 **ability to estimate, did you spend preparing the**
 25 **analyses discussed in your initial report?**

Page 35

1 MS. FLORES: Objection. Vague.
 2 A. My guess is 40 to 50 hours. But I'm not
 3 sure. I mean, I actually could -- could look at my
 4 records and give you a real answer to that, but
 5 that's my guess.
 6 **Q. Okay. And is the 40 to 50 hours the**
 7 **time you actually spent putting pen to paper writing**
 8 **the report or is it more broadly the time you spent**
 9 **preparing the report?**
 10 A. More broadly.
 11 **Q. So how many of those 40 to 50 hours**
 12 **would you say that you spent actually putting pen to**
 13 **paper and drafting Exhibit 2?**
 14 A. Whoa. It's hard for me to say that,
 15 because my research style is that I get some ideas
 16 for an analysis. I ask it to be done. I start
 17 writing. I start writing, realize I need -- it's
 18 just that I don't break down things in that form, so
 19 I would be more comfortable putting it all together
 20 because it's a process.
 21 **Q. What is your best estimate of the time**
 22 **you spent preparing the analyses discussed in your**
 23 **rebuttal report?**
 24 A. That's probably more like 60 hours.
 25 **Q. And that 60 hours was expended between**

Page 36

1 **July 19th and August 16th of this year?**
 2 A. Yes.
 3 **Q. Just a few questions ago, you testified**
 4 **that you asked the analyses to be done. Am I**
 5 **correct, then, that you did not write the programs**
 6 **actually used to do the analyses whose results are**
 7 **contained in your reports?**
 8 MS. FLORES: Objection. Misstates
 9 testimony.
 10 A. The -- my programmer did the analyses
 11 that I reviewed. Did the coding.
 12 **Q. Is that --**
 13 A. I don't believe I did any original
 14 coding.
 15 **Q. Who is that programmer?**
 16 A. Tabitha Lupinetti.
 17 **Q. And some of your backup contained what**
 18 **I -- I don't know if you will agree with this term,**
 19 **as a like a resume scraping, where there was review**
 20 **of hard copy documents and it was turned into a**
 21 **machine readable format. Do you understand what I'm**
 22 **talking about when I say that?**
 23 MS. FLORES: Objection. Vague.
 24 A. Yes.
 25 **Q. Did -- is it Dr. Lupinetti?**

Page 37

1 A. No.

2 **Q. Did Ms. Lupinetti do that resume**

3 **scraping?**

4 A. She did. She probably was assisted

5 with -- by others.

6 **Q. Do you know anyone else who assisted**

7 **her?**

8 A. Kathy Duffy may have and Rachel Carse

9 may have.

10 **Q. Can you spell the last name of the**

11 **second person, Rachel.**

12 A. C-A-R-S-E.

13 **Q. Is Ms. Lupinetti a statistician or a**

14 **labor economist?**

15 A. No, she is a -- she is a -- her degree

16 was in computer programming.

17 **Q. Is it Ms. Duffy or Miss Duffy or**

18 **Dr. Duffy?**

19 A. Ms. Duffy.

20 **Q. Is Ms. Duffy's degree in statistics or**

21 **labor economics?**

22 A. I don't know.

23 **Q. Do you consider Ms. Duffy a statistician**

24 **or labor economist?**

25 A. No.

Page 38

1 **Q. Is it Dr. Carse or Ms. Carse?**

2 A. Ms. Carse.

3 **Q. Is Ms. Carse a statistician or a labor**

4 **economist?**

5 A. She is a labor economist.

6 **Q. She does not have a Ph.D.; is that**

7 **correct?**

8 A. That's correct. She is ABD.

9 **Q. From what institution?**

10 A. Temple University.

11 **Q. Do you believe that Ms. Carse was**

12 **involved in any aspect of preparing the analysis in**

13 **this case other than potentially some of that resume**

14 **scraping?**

15 MS. FLORES: Objection. Calls for

16 speculation.

17 A. I don't know. I don't recall. It may

18 be better say I don't recall. I'm not sure what --

19 what tasks she worked on specifically, and at what

20 point she -- I mean, she was working more early on

21 in the case. I'm not sure if her -- what her -- how

22 strong her role was after we got into the material

23 on compensation differentials.

24 **Q. Would the bills that you generated**

25 **reflect when and to what extent she was involved?**

Page 39

1 MS. FLORES: Objection. Calls for

2 speculation.

3 A. I don't know. I don't know what the

4 bill looks like that's sent to the client. I have

5 never seen one.

6 **Q. I thought you testified earlier that you**

7 **reviewed the bills for matters where you are a**

8 **testifying expert?**

9 MS. FLORES: Objection. Misstates

10 testimony.

11 A. I reviewed what is billed. I don't

12 review the final document that goes out.

13 **Q. Did you review the statistical programs**

14 **that were actual run to generate the results that**

15 **are reported in your -- either of your reports?**

16 A. Yes.

17 MS. FLORES: Objection. Vague.

18 **Q. So did you review the .DO files?**

19 MS. FLORES: Objection. Lacks

20 foundation.

21 **Q. Did you -- were .DO files generated in**

22 **the course of your doing your -- the analysis in**

23 **this case?**

24 A. Yes. I -- that's not the form in

25 which -- I did not review the .DO format. I

Page 40

1 reviewed the logs.

2 **Q. Did you review any of the .DTA files?**

3 MS. FLORES: Objection. Lacks

4 foundation.

5 **Q. There were .DTA files generated in the**

6 **course of your analysis in this case, correct?**

7 A. Yes, and those are what the logs are.

8 **Q. Well, there are -- your counsel, I'll**

9 **represent to you, provided us different files;**

10 **some .DTA files and some .LOG files.**

11 **Do you have an understanding of the**

12 **difference between those files?**

13 A. I guess the DTA might be the data. I'm

14 trying to think. I don't pay that much attention

15 when I'm doing my own programming, but maybe the DTA

16 files are actually the data files. So I did not

17 review the data files, if that's what the .DTA files

18 are.

19 **Q. So if you could turn to Exhibit 2. It's**

20 **your initial report, to Attachment D. And in**

21 **particular, page 130. Tell me when you're there.**

22 A. Yes.

23 **Q. Does Attachment D identify all of the**

24 **facts and data that you considered in forming the**

25 **opinions expressed in your initial report?**

Page 41

1 MS. FLORES: Objection. Vague.
 2 A. That were unique to this case. Yes,
 3 that's my understanding.
 4 **Q. Okay. And I see maybe ten lines up from**
 5 **the bottom on page 130, declaration and report of**
 6 **labor economist, Newmark remotion for class cert; is**
 7 **that correct?**
 8 A. Yes.
 9 **Q. Did you, in fact, review the**
 10 **Dr. Newmark's class certification report?**
 11 A. I believe so.
 12 **Q. At what point in the process of forming**
 13 **your opinions did you review Dr. Newmark's report?**
 14 A. I don't recall.
 15 **Q. Well, certainly before July 19th,**
 16 **correct? When you listed it.**
 17 A. Yes. Yes. It was before July 19th.
 18 **Q. Can you give me your best estimate? Was**
 19 **it in the week before this report was finalized, the**
 20 **month, six months?**
 21 MS. FLORES: Objection. Asked and
 22 answered.
 23 A. I doubt it was six -- as long ago as six
 24 months before the report, but beyond that, I'm not
 25 sure.

Page 42

1 **Q. Have you ever spoken with Dr. Newmark**
 2 **regarding Oracle?**
 3 A. No.
 4 **Q. Have you ever spoken with anyone who you**
 5 **understand worked with Dr. Newmark on the Jewett**
 6 **case regarding Oracle?**
 7 A. No.
 8 **Q. Have you ever spoken with anyone you'll**
 9 **understand to be plaintiff's counsel from the Jewett**
 10 **case regarding Oracle?**
 11 A. No.
 12 **Q. Do you know who plaintiff's counsel in**
 13 **the Jewett case are?**
 14 A. I believe it's Mr. Finberg. I don't --
 15 I just know that -- I mean -- but, no, I haven't
 16 spoken to him.
 17 **Q. Have you ever been retained by**
 18 **Mr. Finberg?**
 19 A. Not that I recall.
 20 **Q. Do either your initial report or your**
 21 **rebuttal report contain any opinion as to which**
 22 **employees at Oracle are performing substantially**
 23 **similar work?**
 24 MS. FLORES: Objection. Vague. And
 25 lacks foundation.

Page 43

1 A. All of them are employing similar work
 2 to some other employee. I don't know how else to
 3 answer that.
 4 **Q. Do you -- do either your initial report**
 5 **or your rebuttal report contain an opinion that you**
 6 **formed about which employees at Oracle are**
 7 **performing similar work to which other employees?**
 8 MS. FLORES: Objection. Vague.
 9 Also lacks foundation.
 10 A. Yes.
 11 **Q. Okay. Where do you believe that opinion**
 12 **is located?**
 13 A. I'm sorry. I -- as I look at your
 14 question, I answered it a bit differently.
 15 No, I did not look at whether
 16 they're performing similar work other than to take
 17 Oracle's definition of that. I haven't formed an
 18 independent view of that. Okay.
 19 **Q. Okay. So just to make sure that I'm**
 20 **totally clear. So none of the columns that you**
 21 **present, regardless of which table you present it**
 22 **in, which report you present it in, reflects an**
 23 **analysis that you're opining compares employees who**
 24 **are doing similar work at Oracle; is that correct?**
 25 MS. FLORES: Objection. Asked and

Page 44

1 answered.
 2 A. No. That's not correct.
 3 I'm taking Oracle's definition of
 4 what is similar work. And those appear -- if we
 5 want to go to my tables.
 6 **Q. Are you in your initial report or your**
 7 **rebuttal report?**
 8 A. My initial report.
 9 Those appear in tables -- the -- the
 10 last columns of Tables 1, 2, and 3. The last
 11 columns of Table 7, 6, 5. I think those are the
 12 case.
 13 **Q. Okay. In your response, you said you**
 14 **were taking Oracle's definition of what is similar**
 15 **work. What is -- what's the basis for that**
 16 **statement?**
 17 A. Oracle's job codes.
 18 **Q. Okay. Where do you opine anywhere in**
 19 **your report about what Oracle's job codes mean?**
 20 A. What they mean? I don't think I -- I
 21 accept what Oracle says, that these are codes that
 22 classify people doing similar jobs for purpose of
 23 making compensation decisions.
 24 **Q. Okay. Where did you -- where do you**
 25 **believe that you read that statement from Oracle?**

Page 45

1 A. There were some policy statements
 2 instructing people on job -- on setting
 3 compensation, some Powerpoints that talk about using
 4 the job codes. And using the job codes to benchmark
 5 to job surveys as to people that are outside of
 6 Oracle doing similar work.
 7 **Q. So where in either of your reports do**
 8 **you talk about those policy statements or**
 9 **benchmarking surveys?**
 10 A. I don't.
 11 **Q. So it's not contained in your report,**
 12 **it's just something you're saying here today?**
 13 A. It's in my reliance. That's what I
 14 relied on. Those documents are listed as documents
 15 relied on to my opinion that that is what Oracle
 16 defines as similar work. To my conclusion that
 17 that's what Oracle defines as similar work.
 18 **Q. So the opinion that you've just**
 19 **expressed here today about which employees at Oracle**
 20 **are doing similar work, where in either of those**
 21 **reports do you express the basis or the reasons for**
 22 **that opinion?**
 23 MS. FLORES: Objection. Asked and
 24 answered.
 25 A. I don't express that particular detail

Page 46

1 in the report. I give the documents on which my
 2 opinions are based at the end, and those documents
 3 are there that describe it.
 4 **Q. So let's go to Table 1 in your initial**
 5 **report. Let's just start with you 1A, because we**
 6 **have several panels in Table 1.**
 7 **You just testified quite a bit about**
 8 **job codes. Can you show me which of the -- where in**
 9 **Table 1 you've included a control for job code?**
 10 A. Yes. Table 8. What I just said, column
 11 8 effectively does that.
 12 **Q. So are you saying it effectively does**
 13 **it?**
 14 A. Yes.
 15 **Q. That wasn't quite my question.**
 16 **Is there a control for job code in**
 17 **this model?**
 18 MS. FLORES: Objection. Asked and
 19 answered.
 20 A. As an economist, I say the control is 8.
 21 Column 8.
 22 **Q. Okay. So you took the job code variable**
 23 **in the Oracle data and you put that job code in this**
 24 **model. Is that your testimony?**
 25 MS. FLORES: Misstates testimony.

Page 47

1 A. It actually puts the components of that
 2 job code together in separately, but the components
 3 are there. So it's effectively the job code.
 4 **Q. Am I right that part of the basis for**
 5 **that statement is that you've included what you call**
 6 **job descriptor?**
 7 A. Yes.
 8 **Q. Is job descriptor a variable that exists**
 9 **at Oracle or is it a variable that you created?**
 10 A. It's a variable that I created from job
 11 titles.
 12 **Q. Why create that variable as opposed to**
 13 **use job titles?**
 14 A. When we get to the eighth column, I'm
 15 perfectly happy to use the job title, but I wanted
 16 to show -- I mean, I was making an illustration of
 17 how group differences change with different
 18 variables, and I wanted to separate the sort of
 19 categorization of description of the job from the
 20 classification or grade of the job. So that's why I
 21 did it in that fashion.
 22 **Q. And as part of that process, you created**
 23 **a variable job descriptor by which you grouped**
 24 **together jobs in a way that Oracle does not**
 25 **necessarily group together those same jobs?**

Page 48

1 MS. FLORES: Objection. Misstates
 2 testimony. And vague.
 3 A. I group them -- I aggregated them, yes.
 4 **Q. And --**
 5 A. I didn't separate any groups, but I
 6 aggregated some jobs, because the job code has the
 7 grade level in them, and the management level in
 8 them, and then I took that out to do the job
 9 descriptor.
 10 **Q. Okay. But just so that I'm clear, in**
 11 **creating that job descriptor, you were creating a**
 12 **variable based on your decisions about how to group**
 13 **the data rather than tracking a grouping that Oracle**
 14 **used?**
 15 MS. FLORES: Objection. Misstates
 16 testimony. And vague.
 17 A. I grouped some of Oracle's groups.
 18 **Q. Have you reviewed any sworn testimony**
 19 **either in the form of a deposition or a declaration**
 20 **about -- from anyone at Oracle -- about how job**
 21 **codes function at Oracle?**
 22 MS. FLORES: Objection. Vague.
 23 A. I believe the Waggoner deposition from
 24 the earlier case does that. And I read some of that
 25 deposition.

Page 49

1 Q. Had you read that Waggoner deposition
 2 before your July 19th report?
 3 A. I don't recall.
 4 Q. The policy statements that you mentioned
 5 before that you said you believe relate to job code,
 6 had you read those before your July 19th report?
 7 A. I don't recall.
 8 Q. The information about benchmarking that
 9 you referenced before, had you read that before you
 10 issued your July 19th report?
 11 A. I don't recall.
 12 I do -- I just -- I want to -- maybe
 13 I should say, I am certain that this was reviewed
 14 before the July 19th report by my staff. I'm not
 15 sure what at that point was brought to my attention
 16 so...
 17 Q. Well, I'm here for the basis for your
 18 opinions in the report.
 19 A. That is the basis for my opinion.
 20 Because they're working for me and I'm asking them
 21 to clarify points and to see what -- to review
 22 the -- I just don't recall if we actually talked
 23 about that before the report, and I actually -- they
 24 actually brought to me rather than discussed with me
 25 what was in those reviews.

Page 50

1 Q. So let's focus again on Table 1A in this
 2 series of columns 1 through 8.
 3 Did you instruct your staff as to
 4 which variables to use, or did you instruct your
 5 staff, do an analysis of pay, and they came to you
 6 and said, we've made certain decisions about how to
 7 do that?
 8 MS. FLORES: Objection. Vague. And
 9 compound.
 10 A. I instructed my staff as to what
 11 variables to use.
 12 Q. So you instructed them to use exempt,
 13 non-exempt, to create a job descriptor to use
 14 management control, and to use global career level,
 15 correct?
 16 A. Yes.
 17 Q. So had you read the Waggoner testimony
 18 that you're talking about before you gave that
 19 instruction?
 20 A. I don't know if I read -- I don't know
 21 if I actually read the text as opposed to my telling
 22 them to review the documents, and this -- and then
 23 we discussed that, and then this was designed. I
 24 just don't remember whether I actually read the text
 25 or we just discussed the process from what they had

Page 51

1 done reading the documents. That's what I don't
 2 recall before July 19th.
 3 Q. Okay. But at some time after you issued
 4 your report in this case, you're saying that you
 5 did, in fact, read the Waggoner deposition
 6 transcript?
 7 MS. FLORES: Objection. Misstates
 8 testimony. And asked and answered.
 9 A. I certainly have read the -- read it
 10 afterwards. I certainly -- about I just don't
 11 recall whether I read it beforehand or not.
 12 Q. Okay. Have you offered any opinion in
 13 either of the two reports reflected in Exhibit 2 and
 14 Exhibit 3 on whether or the extent to which decision
 15 making at Oracle is centralized?
 16 MS. FLORES: Objection. Vague.
 17 A. No.
 18 Q. You are not an industrial organizational
 19 psychologist, correct, Dr. Madden?
 20 A. I am not.
 21 Q. Is anyone that you worked with in
 22 preparing your reports in this case an industrial
 23 organizational psychologist?
 24 A. No.
 25 Q. Do you know what a job analysis is?

Page 52

1 A. Yes.
 2 Q. What is your understanding of what a job
 3 analysis is?
 4 A. It's going and looking at the job,
 5 figuring out what the components are, and then
 6 grouping them into job classifications.
 7 Q. Do you have any understanding of how job
 8 analyses are typically used, if at all, in
 9 discrimination cases?
 10 MS. FLORES: Objection. Vague.
 11 A. Yes.
 12 Q. What is that understanding?
 13 A. They're typically -- they're used to
 14 look at the role of jobs, to look at whether there's
 15 differences in jobs and to look at the role of jobs
 16 in compensation or promotion or hiring.
 17 Q. Did you conduct a job analysis in this
 18 case?
 19 A. No, I'd use the outputs of it.
 20 Q. When you say you've used the outputs of
 21 it, what are you referring to?
 22 A. I presume that Oracle, being a
 23 reasonable organization, would have used job
 24 analyses to create those job codes.
 25 Q. So is that an assumption that you're

Page 53

1 making?

2 A. Yes.

3 **Q. Okay. Have you read any documents that**

4 **say that Oracle intended to use job codes for the**

5 **purposes of similarly situating people within the**

6 **meaning of Title 7?**

7 MS. FLORES: Objection. Vague. And

8 calls for legal conclusion.

9 A. I'm not a lawyer.

10 **Q. I'm asking if you've seen documents that**

11 **say that?**

12 A. No.

13 MS. FLORES: Same objection.

14 **Q. Okay. Okay.**

15 A. I also hope they're not fools.

16 **Q. What do you mean by that?**

17 A. You would have to be nuts as an employer

18 to do something like that, make a record of it.

19 **Q. Have you -- have you -- do you recall**

20 **reading anything in Ms. Waggoner's testimony or**

21 **anywhere else about the purposes for which job codes**

22 **are used at Oracle?**

23 MS. FLORES: Objection. Vague.

24 A. Yes.

25 **Q. What do you recall reading?**

Page 54

1 A. I'm -- they're -- they're used for

2 setting salary, and they're used for comparing

3 salary to -- in job categories at Oracle to external

4 competitors. Common -- I mean, this is common

5 throughout all employer -- large employers.

6 **Q. Do job codes at Oracle have a single**

7 **dollar value assigned to them as the salary for a**

8 **job code at a given point in time?**

9 MS. FLORES: Objection. Vague.

10 Calls for speculation.

11 A. They don't at Oracle nor at any other

12 employer that I've ever analyzed.

13 **Q. They're -- instead the job codes are**

14 **mapped at any given point in time to a particular**

15 **salary range, correct?**

16 MS. FLORES: Objection. Vague.

17 A. Yes.

18 **Q. Do you have any understanding as you sit**

19 **here today of the width of the salary range for any**

20 **or all of the job codes that are at issue in this**

21 **case?**

22 MS. FLORES: Objection. Vague. And

23 lacks foundation.

24 A. Yes.

25 **Q. Okay. What is your understanding?**

Page 55

1 A. I've looked at them.

2 **Q. Okay. So what can you tell me about the**

3 **width of those salary ranges?**

4 A. Do you want a number? It depends on the

5 job. I mean, the salary ranges often span -- it

6 will span tens of thousands of dollars in base

7 salary.

8 **Q. Do you have any understanding as to why**

9 **that is?**

10 MS. FLORES: Objection. Calls for

11 speculation. And vague.

12 A. Because you have people with different

13 degrees in the job. You have people with different

14 experience in the job. You have people with

15 different skill levels within a job code.

16 **Q. Did you attempt to separately study any**

17 **components of -- well, strike that.**

18 **Do you understand there to be a**

19 **single compensation practice at Oracle spanning the**

20 **employees at issue, or do you understand there to be**

21 **many compensation practices?**

22 MS. FLORES: Objection. Vague. And

23 compound.

24 A. You'd have to explain to me what you

25 mean by a compensation practice.

Page 56

1 **Q. Have you done any study to determine**

2 **what the compensation practices at Oracle are?**

3 A. I've read the Powerpoints on

4 compensation settings. I've read some of the

5 Waggoner deposition.

6 **Q. Did you -- did you -- after reading**

7 **those Powerpoints, did you try to do any analysis**

8 **that separately analyzed any particular element of**

9 **Oracle's compensation decision-making processes?**

10 MS. FLORES: Objection. Vague.

11 A. I don't understand what you mean

12 "particular elements," so I -- if you want to tell

13 me what you're referring to, I can respond.

14 **Q. Do you believe that either your initial**

15 **report or your rebuttal report contains an analysis**

16 **that shows that any particular practice, common to**

17 **the employees at issue here, caused the pay**

18 **disparities that you've identified?**

19 MS. FLORES: Objection. Vague.

20 A. They're all given a paycheck and all of

21 them have their pay assigned by managers, and that's

22 reviewed throughout the organization. If that's

23 what you mean by a particular element, that's what

24 they all share in common.

25 **Q. Is there any -- is there any more**

Page 57

1 particular or more specific practice common to all
 2 of the employees at issue here --
 3 A. Yes.
 4 Q. -- that you believe you have -- let me
 5 just finish the question.
 6 I'll start it again.
 7 Is there any more particular or more
 8 specific practice common to all of the employees at
 9 issue here that you believe you have identified as
 10 the cause of all of the pay disparities you believe
 11 you have identified?
 12 MS. FLORES: Objection. Vague.
 13 A. Not all of the pay disparities, no.
 14 Some of them.
 15 Q. Okay. What is the -- what specific
 16 common practice or practices, common to all of the
 17 employees at issue here, do you believe you have
 18 identified as a cause of the pay disparities you
 19 have observed?
 20 MS. FLORES: Objection. Lacks
 21 foundation. And vague.
 22 A. Initial job assignments and salary
 23 setting. And for women versus men and whites versus
 24 African-Americans, promotion after entering the
 25 firm, and for -- and for virtually all of these

Page 58

1 groups, salary disparities within job code.
 2 Q. Okay. So I just want to make sure that
 3 I understand what you're saying there.
 4 Are you -- is it your opinion that
 5 every female employee in any of the three functions
 6 at issue here at the headquarters location, was the
 7 victim of a discriminatory initial job assignment?
 8 MS. FLORES: Objection. Misstates
 9 testimony. And asked and answered.
 10 A. As a group, women were.
 11 Q. So that wasn't the question. The
 12 question is: Is it your opinion that every female
 13 in any of the three functions at issue here at the
 14 headquarters locations was the victim of a
 15 discriminatory initial job assignment?
 16 MS. FLORES: Objection. Asked and
 17 answered.
 18 A. I don't know the answer to that
 19 question.
 20 Q. Is it your opinion that every
 21 African-American in any of the three functions at
 22 issue here at the headquarters location was the
 23 victim of a discriminatory initial job assignment?
 24 MS. FLORES: Objection. Vague.
 25 A. I haven't analyzed three functions for

Page 59

1 African-Americans. So I can't answer that question.
 2 Q. Okay. Is it your opinion that every
 3 African-American in the product development function
 4 in the headquarters location was the victim of a
 5 discriminatory initial job assignment?
 6 MS. FLORES: Objection. Vague.
 7 A. African-Americans as a group were. I do
 8 not have an answer to every individual. I haven't
 9 looked at that. I mean, it's not possible, really,
 10 to look at that question.
 11 Q. Okay. Why is it not possible?
 12 A. Because that requires -- I think --
 13 well, that would require an individual-by-individual
 14 analysis.
 15 Q. That's a thing one can do, isn't it?
 16 MS. FLORES: Objection. Vague. And
 17 argumentative.
 18 A. It's not something an economist or a
 19 statistician does, no.
 20 Q. Why do you say that?
 21 A. Because I -- I -- well, I was asked to
 22 look at whether there were group differences, and
 23 that's what I looked at. And that's what I
 24 understand. That's what I've always done in the
 25 literature and that's what I have done in 45 years

Page 60

1 in testifying in these cases. That's always the
 2 issue and that's what I've done here.
 3 Q. Okay. A few more questions. I suspect
 4 based on what you've said already that I know the
 5 answer, but I'd like to ask them and get an answer
 6 on the record.
 7 Is it your opinion that every Asian
 8 employee in the product development function in the
 9 headquarters location was the victim of a
 10 discriminatory initial job assignment?
 11 MS. FLORES: Objection. Vague.
 12 A. I don't know the answer to that
 13 question. I know as a group that Asians were so
 14 treated.
 15 Q. Okay.
 16 A. I think the evidence is -- I think the
 17 evidence is consistent with the fact that Asians
 18 were so treated.
 19 Q. That the group was so treated, correct?
 20 A. Yes. Yes.
 21 Q. But you don't have any opinion as to
 22 whether that's true of any particular individual,
 23 correct?
 24 MS. FLORES: Objection. Asked and
 25 answered.

Page 61

1 A. Correct.

2 **Q. Is it your opinion that every woman in**
3 any of the three functions at issue here at the
4 headquarters locations was the victim of one or more
5 discriminatory promotion decisions?

6 MS. FLORES: Objection. Asked and
 7 answered.

8 A. Women as a group were. The evidence is
 9 pretty over -- is pretty significant, but I don't --
 10 I haven't looked at -- I haven't at individual -- I
 11 have was not asked to, nor do I think it relevant to
 12 look at individual data for a class action.

13 **Q. Okay. So on the question of was every**
14 woman in any of the three functions at issue here at
15 the headquarters location the victim of one or more
16 discriminatory promotion decisions, you just don't
17 have an opinion on that question, because you
18 haven't studied it; is that correct?

19 MS. FLORES: Objection. Asked and
 20 answered. And argumentative.

21 A. That's what I answered in the previous
 22 answer. Yes.

23 **Q. Okay. Is it your opinion that every**
24 African-American in the product development function
25 at the headquarters location was the victim of one

Page 62

1 or more discriminatory promotion decisions?

2 MS. FLORES: Objection. Vague.

3 A. Well, African-Americans as a group were.
 4 I have not looked, nor is it the role of a labor
 5 economist and statistician to look at individuals.

6 **Q. Okay. And when you were summarizing**
7 your opinions about specific practices, I notice
8 that you didn't offer any opinion as to whether
9 there are promotion differences adverse to Asians as
10 compared to whites.

11 **Am I correct that you have not**
12 formed any opinion that there are even group-based
13 promotion disparities adverse to Asians in the
14 product development job function at the headquarters
15 location?

16 MS. FLORES: Objection. Vague. And
 17 compound.

18 A. I think that's incorrect. I need to
 19 look at my report to...

20 All right. Effectively there's an
 21 opinion that could be stated -- consistent with that
 22 in the original report where I say that the initial
 23 assignments and current differences account for
 24 Asians. In my rebuttal report, I think I say it
 25 more clearly.

Page 63

1 **Q. Just so we're talking about the same**
2 thing, this question is with respect to promotion
3 differences.

4 A. Yes. Yes.

5 **Q. Okay. So now you're turning to Exhibit**
6 3 in your rebuttal report; is that right?

7 A. Yes. Yes, at page 39, I say there were
 8 no differences in pay or growth. For Asian
 9 employees, given the initial job assignment, and
 10 that would be promotions. That would entail
 11 promotions. So there's a clear opinion there. And
 12 in the original report, I say it's all coming from
 13 initial assignment and from current job differences.

14 **Q. Okay. So separate from initial**
15 assignment -- job assignment there's no -- you're
16 not offering any separate opinion that Asian
17 employees in the product development job function
18 are then victims of promotion discrimination?

19 A. From the very beginning in my initial
 20 report and my subsequent report, I have said there
 21 is no evidence of that, yes.

22 **Q. Okay. Do either your initial or**
23 rebuttal report contain any opinions regarding the
24 propriety of the statistical analyses that OFCCP
25 included in the notice of violation in this case?

Page 64

1 MS. FLORES: Objection. Vague. And
 2 lacks foundation.

3 A. No.

4 **Q. Do either your initial or rebuttal**
5 report contain any opinions regarding the propriety
6 of any of the statistical analyses that OFCCP
7 included in the operative complaint in this case?

8 MS. FLORES: Objection. Vague. And
 9 lacks foundation.

10 A. No.

11 **Q. Have you reviewed the second amended**
12 complaint in this case?

13 A. I think I probably did, but I don't
 14 recall it.

15 **Q. Do you recall that the second amended**
16 complaint analyzed for Asians and women total
17 compensation, not base pay?

18 MS. FLORES: Objection. Assumes
 19 facts.

20 A. No.

21 **Q. You just don't recall whether total**
22 compensation as opposed to base pay was analyzed; is
23 that right?

24 MS. FLORES: Objection. Asked and
 25 answered.

Page 65

1 A. That's correct. I don't recall. As I
 2 said, I -- I think I read it, but I really have no
 3 recall of it.

4 **Q. Okay. If we could take a short break.**
 5 THE VIDEOGRAPHER: The time is 9:33
 6 a.m. We're going off the video record.
 7 (RECESS, 9:28 a.m. - 9:47 a.m.)
 8 THE VIDEOGRAPHER: The time is now
 9 9:47 a.m. We're back on the video record.
 10 BY MS. MANTOAN:
 11 **Q. Welcome back, Dr. Madden.**
 12 **As we were just discussing off the**
 13 **record, the lighting conditions are not ideal, I**
 14 **understand from your perspective, so, if we're --**
 15 **just feel free to let me know if you need to -- if**
 16 **we need to go off the record to discuss or to use**
 17 **glasses or whatever is necessary.**
 18 A. Okay.
 19 **Q. So I wanted to ask you a few high-level**
 20 **questions about your approach to doing statistical**
 21 **analysis. So -- or your views on what statistical**
 22 **analysis shows and does not show.**
 23 **Is it possible that a statistical**
 24 **analysis of a given data set could reveal a pay gap**
 25 **between groups without supporting an inference of**

Page 66

1 **pay discrimination against the adversely-affected**
 2 **group?**
 3 MS. FLORES: Objection. Vague. And
 4 compound.
 5 A. I don't think so.
 6 **Q. So every pay gap that we see between two**
 7 **groups in a given data set supports an inference of**
 8 **discrimination against the group that earns less?**
 9 MS. FLORES: Objection. Misstates
 10 testimony. And vague.
 11 A. If it's using all data that's reasonable
 12 to use, and there's an unexplained gap, it's
 13 consistent with discrimination.
 14 **Q. When you say all data reasonable to use.**
 15 **What do you mean by that?**
 16 A. I'm assuming we're not simply looking at
 17 two averages between groups. We're using all of the
 18 data that shows what the groups innately have; what
 19 the characteristics of the group are as determined
 20 by the group members.
 21 **Q. So am I understanding your testimony as**
 22 **saying that in order to support an inference of**
 23 **discrimination, a statistical model has to**
 24 **incorporate all of the readily available data that**
 25 **bears on the productivity of individuals in that**

Page 67

1 **data?**
 2 MS. FLORES: Objection. Misstates
 3 testimony. And compound.
 4 A. It has to use all of the data that shows
 5 the productivity investments made by the
 6 individuals, and their characteristics that they
 7 control. And if that's -- if all of the data we
 8 know about these two groups that reflect the
 9 productivity they control are the same and there's a
 10 difference in pay, that supports an inference of
 11 discrimination.
 12 **Q. What if you hypothetically had a data**
 13 **set of which you had no information of any type**
 14 **about the educational attainment of the employees?**
 15 MS. FLORES: Objection.
 16 **Q. What --**
 17 MS. FLORES: Continue.
 18 **Q. Oh, sorry. Just hadn't -- sorry.**
 19 **I'm meant to ask you, Dr. Madden, to**
 20 **imagine a hypothetical data set that contains no**
 21 **information whatsoever about the type of educational**
 22 **attainment of employees.**
 23 **Do you believe that a statistical**
 24 **analysis of that data set, if it revealed a pay gap**
 25 **between groups, would support an inference of pay**

Page 68

1 **discrimination against the adversely-impacted group?**
 2 MS. FLORES: Objection. Un --
 3 MS. MANTOAN: Let's go off the
 4 record. We'll come back. Thank you.
 5 MR. SONG: Yeah.
 6 THE VIDEOGRAPHER: The time is 9:51
 7 a.m. We're going off the video record.
 8 (RECESS, 9:51 a.m. - 9:51 a.m.)
 9 THE VIDEOGRAPHER: The time is 9:51
 10 a.m. We're back on the video record.
 11 BY MS. MANTOAN:
 12 **Q. So we're back on the record here**
 13 **following a -- an announcement over the PA system.**
 14 **I'm going to restate the question --**
 15 **A. Okay.**
 16 **Q. -- that I stated before the**
 17 **interruption. I understand we'll have another**
 18 **interruption in nine minutes per that PA**
 19 **announcement.**
 20 **So Dr. Madden, the question -- I'm**
 21 **going to first ask you to assume something for the**
 22 **purposes of the question. I'm going to asking you**
 23 **to assume that you're reviewing a hypothetical data**
 24 **set that contains no information what whatsoever**
 25 **with the type of educational attainment, the level**

Page 69

1 of educational attainment of employees. Do you
 2 understand the assumption I'm asking to you make?
 3 A. Yes.
 4 Q. Do you believe that a statistical
 5 analysis of that data set, if it revealed a pay gap
 6 between groups, would support an inference of pay
 7 discrimination against the adversely-affected group?
 8 MS. FLORES: Objection. Incomplete
 9 hypothetical. Compound. And vague.
 10 A. As I read your hypothetical, this is --
 11 would be a case where nobody cares about education,
 12 because they're not collecting any data on it, so if
 13 education doesn't matter, yes, I believe it would.
 14 Q. So is it your assumption when looking at
 15 company level pay data, that if it is not in a
 16 centralized machine readable format that that means
 17 it's not relevant to how any particular pay
 18 decisions are made at the company?
 19 MS. FLORES: Objection. Misstates
 20 testimony. Vague. And compound.
 21 A. No.
 22 Q. Okay. So, but you said in my
 23 hypothetical, you assume no one cares about
 24 education because they're not collecting any data on
 25 it. That was your testimony.

Page 70

1 A. Yes.
 2 Q. So that -- I'm trying to understand that
 3 testimony a little more. That seems to me to be --
 4 you seem to be concluding that the company and the
 5 people who are involved in pay decisions at the
 6 company don't care about a particular piece of
 7 information if that piece of information is not in a
 8 central machine readable repository of data?
 9 MS. FLORES: Objection. Misstates
 10 testimony. And there's no question.
 11 Q. Am I -- is what I just said a correct
 12 statement of your view? And if not, why not.
 13 MS. FLORES: Objection. Compound.
 14 And vague.
 15 A. It has to be in a repository of data. I
 16 don't know what -- central machine readable is a
 17 different format. But certainly, in most tech
 18 companies I've seen and that I worked with, they do
 19 record the data they really care about, because they
 20 need to find this out, particularly if they're a
 21 large company.
 22 I -- your hypothetical, I presume,
 23 could be grave diggers. I mean, it -- looking at
 24 two groups of people and there's no education data,
 25 and you're looking at these two groups to see if,

Page 71

1 for a group there's a difference and there's no
 2 reason to believe there's differences between the
 3 group other than their pay, then that's consistent
 4 with an inference of discrimination.
 5 Q. In the analyses that you conducted in
 6 your case, you're testing -- in this case, you're
 7 testing a null hypothesis in each of those, correct?
 8 MS. FLORES: Objection. Vague.
 9 A. Yes.
 10 Q. In the null hypothesis that you're
 11 testing is no -- no group based differences in pay,
 12 correct?
 13 A. There's no discrimination, yes.
 14 Q. Okay. So the -- the foundational
 15 assumption of those models is no discrimination and
 16 you're looking to see whether there's evidence that
 17 is inconsistent with that hypothesis, correct?
 18 A. That's correct.
 19 Q. You mentioned your work with tech
 20 companies. When was the last time you served as an
 21 expert witness in a case that you would -- that
 22 involved what you would consider to be a tech
 23 company?
 24 MS. FLORES: Objection. Vague.
 25 A. I worked on a case involving a

Page 72

1 science -- science area of a major university. I
 2 can't say what it is. I worked on a case on Kodak.
 3 I worked on a case with Johnson & Johnson. I worked
 4 on a case with Los Alamos Labs. I worked on a case
 5 with Livermore Labs.
 6 Q. So let me -- let me offer a definition
 7 of tech -- well, what definition of tech company are
 8 you using that you believe sweeps in those --
 9 A. They're scientifically-based companies
 10 with huge technology bases.
 11 Q. So what about a -- a software technology
 12 company whose primary products and services relate
 13 to computer software?
 14 MS. FLORES: Objection. Vague.
 15 A. I believe this is the only one that I
 16 have worked on at the company level.
 17 Q. If different factors impact pay
 18 differently for different employees, do you believe
 19 it is appropriate to analyze pay for all of those
 20 different employees together in a single regression
 21 model?
 22 MS. FLORES: Objection. Incomplete
 23 hypothetical. And vague. And compound.
 24 A. It's pretty hard to know the first part
 25 of your question. Different factors impact pay

Page 73

1 differently for different employees. That's an
 2 empirically demonstrable factor, and you would do
 3 that with a regression model. So you'd need
 4 regression models that showed that. And if that
 5 were the case and it related to group differences
 6 systematically in compensation, then you should
 7 consider it.

8 **Q. But my question is not about whether you**
 9 **would consider it.**

10 **If you find empirically that it's**
 11 **true, that different pay factors have different**
 12 **effect for different employees, is it appropriate**
 13 **statistically to then pool all of those employees**
 14 **into a single model, with no interaction terms, and**
 15 **run a pay regression?**

16 MS. FLORES: Objection. Vague.
 17 Incomplete hypothetical. And compound.

18 A. That's an empirical question. If you
 19 test and find that group differences go away when
 20 you do reasonable interaction terms, then it's
 21 appropriate to put it in. If not, then it doesn't
 22 matter.

23 **Q. Did you do any interacted analysis here?**
 24 MS. FLORES: Objection. Vague.
 25 A. Not that I recall. And I don't recall

Page 74

1 any being done by Oracle.

2 **Q. Why didn't you do any interact --**
 3 A. I guess -- I take that back. No. I did
 4 do an interaction analysis.

5 **Q. Where?**

6 A. I analyzed the clusters in the
 7 developer -- for the developer for code to look at
 8 whether those clusters -- so that's an interaction,
 9 because I'm now looking within a particular job
 10 category as to what the effects of education and the
 11 clusters designed by Dr. Saad were.

12 **Q. So you're talking about the results**
 13 **reported in Table R7 of your rebuttal report?**

14 A. Yes.

15 **Q. Okay. What about in the pay models you**
 16 **were designing; did any of those pay models contain**
 17 **any interactive terms?**

18 A. No, I was waiting for Oracle to tell me
 19 from your own knowledge of the firm of where there's
 20 such an -- I mean, you could do zillions of
 21 interactions -- but where they might matter.

22 **Q. So you didn't come to any independent**
 23 **conclusions of as to where they might matter?**

24 A. I didn't -- no, if I was waiting. If
 25 Oracle knew they mattered, I was expecting it to

Page 75

1 come forward, and then I would evaluate them.

2 **Q. I guess I don't understand what you mean**
 3 **when you -- you're saying you were expecting Oracle**
 4 **to come forward. What were you -- what expectation**
 5 **are you articulating there?**

6 A. Well, typically when one works in these
 7 kind of cases, as plaintiff you have less detailed
 8 knowledge of the firm than the firm does.

9 So you do based on your training and
 10 evaluating science and engineering jobs of how
 11 compensation is set, but the firm may have some
 12 different peculiarities. So the firm can bring up
 13 empirical data that shows, no, what we really valued
 14 was C-plus-plus language, and you need to put that
 15 in your analysis and you need to interact it with
 16 specific jobs. And, yes, if this is stuff -- if
 17 this is characteristics that employees come to the
 18 firm with and that's affecting pay or it's different
 19 by gender and by race, it should probably be
 20 included. And I'm waiting to be informed of that.
 21 And frequently that's the case, that I find out
 22 about new, peculiar characteristic to a firm that
 23 has to be considered.

24 **Q. Do you believe based on all of the work**
 25 **you've done to date in this case that there is a**

Page 76

1 **single set of pay factors that matters in the same**
 2 **way for every employee across the entire population**
 3 **you've studied?**

4 MS. FLORES: Objection. Vague. And
 5 lacks foundation.

6 **Q. If we could get an answer.**

7 A. Yes, statistically I do.

8 THE VIDEOGRAPHER: Off the record?
 9 MS. MANTOAN: Yes. Let's go off the
 10 record please.

11 THE VIDEOGRAPHER: The time is 10
 12 a.m. We are going off the video record.
 13 (RECESS, 10:00 a.m. - 10:01 a.m.)

14 THE VIDEOGRAPHER: The time is 10:01
 15 a.m. We're a back on the video record.
 16 BY MS. MANTOAN:

17 **Q. So Dr. Madden, your answer to the last**
 18 **question about whether there was a single set of pay**
 19 **factors that matters in the same way for every**
 20 **employee across the entire population you studied**
 21 **was statistically, yes, you believe that's true?**

22 A. Yes.

23 **Q. Okay. And that's just because your**
 24 **model forces that every pay factor to take the same**
 25 **value for every employee in the model, because**

Page 77

1 you're running a single aggregated model, correct?
 2 MS. FLORES: Objection. Assumes
 3 facts. And misstates the testimony.
 4 A. My model uses the absolute standard
 5 that's been used in research and in Title 7
 6 litigation for the last 40 years that I have been
 7 involved in this, and that is, that you have -- you
 8 test for whether an individual characteristic has an
 9 effect. That effect is actually modeled as having a
 10 distribution. And so in that sense, there's a
 11 distribution across it, and you weight the
 12 characteristics of individuals across that
 13 characteristic.
 14 So that's what I said statistically,
 15 that the model is really testing whether
 16 statistically there is a positive effect on salary,
 17 and that's -- that's what statistically I have
 18 found. I have found a set of characteristics that
 19 statistically appears quite strongly to affect
 20 salary, though it depends on what else you put in
 21 the model.
22 Q. So let's focus on a particular thing.
23 Let's say -- let's say time at Oracle. That's a
24 factor you include in your model, correct?
 25 A. Yes.

Page 78

1 Q. Do you agree that some of the products
2 and services Oracle is making today didn't exist ten
3 years ago?
 4 MS. FLORES: Objection. Incomplete
 5 hypothetical. Lacks foundation.
 6 A. I actually don't -- as I sit here, I
 7 couldn't name a product that that's the case for,
 8 but it certainly wouldn't surprise me.
9 Q. Okay. Your model is going to treat the
10 value of time at Oracle the same for an employee
11 working on a product that didn't exist ten years ago
12 as for someone working on a legacy product that's
13 been around for 30 years, correct?
 14 MS. FLORES: Objection. Assumes
 15 facts. And vague.
 16 A. Well, it depends on whether I have job
 17 descriptor in the analysis and whether job
 18 descriptor is tied to product. I mean, it depends
 19 on what else is in the analysis. If we are looking
 20 at the analyses that stop before any of that is
 21 added, it would treat the additional time at Oracle.
 22 You have to look at the effect of time at Oracle.
 23 You have to look at both all time and time at
 24 Oracle, because they're measured together.
 25 It would -- it would have the

Page 79

1 expectation the same for people working on different
 2 products, yes.
3 Q. Like that's how your model is design is
4 to treat tenure as equally valuable regardless of
5 the product that the person is working on, correct?
 6 MS. FLORES: Objection. Misstates
 7 testimony.
 8 A. It's not my model. That's the standard
 9 regression analysis, multiple regression analysis,
 10 as it is applied in this case, and every other case
 11 that I've ever been involved in by both experts and
 12 in the research literature.
13 Q. Okay. But with respect -- we're not
14 putting on -- OFCCP has not offered the history of
15 research literature as an argument in this case.
16 It's offered your expert report.
17 So the models that you've presented
18 in this case are designed to treat tenure as
19 equally valuable regardless of a product that a
20 person is working on. That's a correct statement,
21 isn't it?
 22 MS. FLORES: Objection.
 23 Argumentative. And misstates testimony. Vague.
 24 And compound.
 25 (Announcement over the PA system.)

Page 80

1 MS. MANTOAN: Counsel, I'd like to
 2 get an answer to the question. Is that -- are you
 3 okay with that? I don't want to be --
 4 MS. FLORES: (Nods head up and
 5 down.)
 6 A. My research report is centrally based on
 7 the history of research in this area. So I don't
 8 care if the OFCCP has made -- my research report --
 9 my report is premised on that, number one.
 10 Number two -- now I've lost the
 11 question.
12 Q. I'd be happy to restate it.
 13 A. It's okay. I -- thank you.
 14 The models I've presented, as I
 15 said, to the extent I haven't brought in any -- I
 16 stop at tenure at Oracle or, in fact, everybody
 17 would have the same value regardless of whether
 18 they're -- what product they're working on.
19 Q. Okay.
 20 A. Subsequent models do not.
21 Q. Okay. And what --
 22 A. Well, subsequent models -- subsequent
 23 models would be weighted by the particular job
 24 category or GCL depending on which model we look at
 25 and what happens.

Page 81

1 **Q. Okay. Do you believe the job descriptor**
 2 **variable you've created distinguishes employees**
 3 **based on what product they're working on?**
 4 A. I don't think it distinguishes them, no.
 5 But I believe there is some correlation.
 6 **Q. Well, let's say the software development**
 7 **job descriptor. Do you believe that that job**
 8 **descriptor distinguishes software developers based**
 9 **on the type of product on which they're working?**
 10 MS. FLORES: Objection. Incomplete
 11 hypothetical. And vague.
 12 A. It doesn't distinguish on software
 13 developers, but it distinguishes relative to other
 14 job descriptors.
 15 **Q. There are thousands of software**
 16 **developers in your software developer descriptor,**
 17 **correct?**
 18 A. Yes.
 19 **Q. And does the exempt, non-exempt variable**
 20 **you add on to your software developer job**
 21 **descriptor, do you believe that distinguishes**
 22 **software developers based on the type of product on**
 23 **which they're working on?**
 24 MS. FLORES: Objection. Vague.
 25 Lacks foundation.

Page 82

1 A. Nothing other than GCL potentially
 2 distinguishes -- that I've put in there
 3 distinguishes software -- software developer job
 4 descriptors.
 5 **Q. Okay. How --**
 6 **Do you believe that global career**
 7 **level distinguishes software developers based on the**
 8 **type of product on which they're working?**
 9 MS. FLORES: Objection. Vague.
 10 A. It certainly doesn't identify uniquely,
 11 but it possibly is correlated. If I -- if there
 12 were any data on products, we could test that, but
 13 there are no data on products.
 14 **Q. Let's look in your initial report at**
 15 **this -- a few questions about Attachment D, it's**
 16 **materials considered for the report.**
 17 **Did you actually review every one of**
 18 **these documents prior to issuing your July 19th**
 19 **report, or conversely, is this intended to be a list**
 20 **of materials that was provided to you, some of which**
 21 **you reviewed, some of which you didn't?**
 22 A. It's a list of materials. I -- my
 23 understanding is my staff put this together. It's a
 24 list of all materials that were provided to us, and
 25 in some sense, they were looked at by my staff or

Page 83

1 me.
 2 **Q. Okay. How should I or any of us know**
 3 **which of these documents you actually looked at as**
 4 **opposed to your staff actually looked at, and how**
 5 **thorough that consideration was?**
 6 MS. FLORES: Objection. Vague. And
 7 compound.
 8 A. You can show me the document, and I can
 9 respond.
 10 **Q. Okay. Let me ask you about some types**
 11 **of documents.**
 12 **Did you personally review prior to**
 13 **issuing your reports in this case, any of the**
 14 **specific job postings or requisitions for any job at**
 15 **Oracle?**
 16 MS. FLORES: Objection. Vague.
 17 A. Yes.
 18 **Q. Okay. How many of those did you review?**
 19 A. I probably -- I maybe only looked at one
 20 document, but listed several in an Excel file.
 21 That's what I recall.
 22 (PA announcement interrupted the deposition.)
 23 BY MS. MANTOAN:
 24 **Q. So Dr. Madden, I had asked whether you**
 25 **reviewed any specific job postings or requisitions**

Page 84

1 **prior to issuing your reports in the case.**
 2 **Let me ask a more specific question.**
 3 **Did you review any job postings or requisitions for**
 4 **any job at Oracle prior to issuing your initial**
 5 **report in this case?**
 6 A. Yes. That is the same one I just
 7 described.
 8 **Q. Okay. And your testimony was that it**
 9 **was a single Excel file that had several of these**
 10 **job descriptions?**
 11 A. Yeah. It was a PDF, it wasn't actually
 12 the actual -- but it was a PDF of what appeared to
 13 me to be an Excel file.
 14 **Q. Did you ever look in any of the data**
 15 **files that were produced by Oracle in this case to**
 16 **see whether or not there were thousands of job**
 17 **descriptions for specific positions?**
 18 MS. FLORES: Objection. Vague.
 19 Assumes facts.
 20 A. I didn't look at them. I asked the
 21 question and my staff told me.
 22 **Q. What did your staff tell me?**
 23 A. That there were thousands of such
 24 requisitions.
 25 **Q. Okay. Did they tell you anything more**

Page 85

1 about what those requisitions contained?
 2 MS. FLORES: Objection. Vague.
 3 A. I mean, I had looked at what the
 4 requisitions contained. I didn't think I needed to
 5 ask them more about it.
 6 **Q. So let's take again -- let's focus in on**
 7 **a specific job code and let's talk about software**
 8 **developer 4s. Do you understand that there were**
 9 **thousand of software developer 4 requisitions in the**
 10 **data?**
 11 A. Yes.
 12 MS. FLORES: Objection. Assumes
 13 facts.
 14 (PA announcement interrupting the deposition.)
 15 BY MS. MANTOAN:
 16 **Q. So Dr. Madden, talking again about those**
 17 **job requisitions and focusing in on job requisitions**
 18 **for a single job code, let's say software developer**
 19 **4. Is every job for a software developer position**
 20 **identical in substance based on your review?**
 21 MS. FLORES: Objection. Vague.
 22 A. No.
 23 **Q. What kind of differences did you see?**
 24 A. Some wanted C-plus-plus. Some didn't
 25 mention it. Some wanted Java. Some didn't mention

Page 86

1 it.
 2 (PA announcement interrupts the deposition.)
 3 MS. MANTOAN: If you can mark this
 4 next please.
 5 (Madden Exhibit 5, Saad Expert Rebuttal Report,
 6 August 2019, was marked for identification.)
 7 **Q. So Dr. Madden, does what's been marked**
 8 **as Exhibit 5 appear to you to be the rebuttal report**
 9 **that Dr. Saad provided in August?**
 10 A. Yes.
 11 **Q. So I'd like to turn your attention to**
 12 **Attachment D.**
 13 MS. FLORES: Do you have a page
 14 number, counsel?
 15 MS. MANTOAN: The page numbers
 16 appear to have been cut off on the photo copy, and
 17 in any event they were numbered specific to the
 18 attachment since it's the final 40 pages.
 19 THE WITNESS: It's the last
 20 attachment.
 21 (PA announcement interrupts the deposition.)
 22 BY MS. MANTOAN:
 23 **Q. Dr. Madden, are you in -- did you look**
 24 **at Attachment 5 in Exhibit -- Attachment D in**
 25 **Exhibit 5?**

Page 87

1 A. I have it.
 2 **Q. Okay.**
 3 **If you look through this, do these**
 4 **appear to be the kind of specific job postings or**
 5 **requisitions that you said you previously reviewed?**
 6 (PA announcement interrupts in the deposition.)
 7 A. These are in a different format than
 8 what I reviewed, but the information seems to be
 9 very similar.
 10 **Q. Okay. And do you agree that these job**
 11 **requisitions are associated with different**
 12 **organizations?**
 13 MS. FLORES: Objection.
 14 **Q. They're not all -- so earlier, you said**
 15 **there was, you know, some of the differences are**
 16 **maybe a programming language is mentioned in one and**
 17 **not the other. And what I'm trying to understand is**
 18 **whether do you agree that these postings contain**
 19 **different organizations that they're affiliated**
 20 **with.**
 21 MS. FLORES: Objection. Vague.
 22 Compound. And lacks foundation.
 23 A. Sorry. Because of my recent eye
 24 surgeries and because of the lighting and the fact
 25 that they have not been able to control dilation in

Page 88

1 my eye that they operate on, I cannot handle light
 2 like this, so I'm going to have to put on glasses to
 3 look at this.
 4 **Q. Okay.**
 5 A. I'm not sure. I see organization name
 6 clearly distinguished on all of these. Some of
 7 them -- organization names Oracle America. Is there
 8 something that's not Oracle America under
 9 organization name?
 10 **Q. So in the first page of Attachment D,**
 11 **and I am truly sorry that the page numbers are cut**
 12 **off. It's for vacancy I.D. 1425737. Do you see**
 13 **that the organization name is DataGuard Development?**
 14 A. I'm sorry. Is it this page you're
 15 looking at?
 16 **Q. Correct.**
 17 MS. FLORES: Objection. Vague. And
 18 ambiguous as to organization.
 19 **Q. There's a variable here called**
 20 **"organization name."**
 21 A. Yes. That one does.
 22 **Q. And it was DataGuard Development?**
 23 A. And that does say DataGuard Development.
 24 **Q. If then if you flip to the next vacancy.**
 25 **So you can see the vacancy I.D.s up here. We can**

<p style="text-align: right;">Page 89</p> <p>1 move to 1683737. 2 A. Let's see. I was looking at several. 3 It just said -- what was I looking at? It said 4 Oracle America. 5 Yeah, if we go further on, they're 6 all saying -- it depends. Yeah. Some of them are 7 just saying the company and some of them do have an 8 organization. I agree with you. 9 Q. If we could look back at the first one, 10 at very beginning of Attachment D, that's again 11 1425737. 12 A. Mm-hmm. 13 Q. There's a department description listed 14 there, correct? On the second page where the same 15 information about the same vacancy continues. 16 A. Yes. Yes. 17 Q. That department description is -- it's 18 not the same across all of the different 19 requisitions, correct? 20 MS. FLORES: Objection. Vague. 21 Assumes facts. And vague as to department. 22 MS. MANTOAN: I'm asking about. I 23 don't think it's vague, counsel. I'm asking about a 24 very specific field in this document, which she said 25 is the type of information she's previously</p>	<p style="text-align: right;">Page 91</p> <p>1 can develop the other. That's why they're 2 categorized together I think appropriately by 3 Oracle. 4 Q. So what did you do to study whether the 5 different skills listed for these kind of specific 6 jobs at this specific company involve skills that 7 were fungible or not? 8 MS. FLORES: Objection. Vague. And 9 compound. 10 A. I didn't do anything to see whether they 11 were fungible. My presumption is there was no 12 reason to presume that Asians were inferior to 13 whites in terms of the particular skill sets they 14 had. 15 Q. But I'm asking a different question, in 16 fairness. I'm asking a question about what you did 17 to study whether the different skills listed for 18 these specific jobs were fungible or not. And your 19 answer is, you did not study that question, correct? 20 MS. FLORES: Objection. Misstates 21 testimony. Vague. And compound. And 22 argumentative. 23 A. No. It's not relevant to the study I 24 was asked to do. 25 Q. Okay. Did you review any of the -- do</p>
<p style="text-align: right;">Page 90</p> <p>1 reviewed. 2 MS. FLORES: I'm just noting the 3 objection, counsel. 4 A. Some of them do have department 5 descriptions, some of them just have -- some of them 6 have a label. But there are some that have 7 department descriptions, yes. 8 Q. Okay. And let's see if we can sort of 9 get to the heart of this line of questioning here. 10 Would you agree that these specific 11 job postings, even when under a single job code, 12 describe different skills that are required to 13 perform the work in those different, specific 14 positions? 15 MS. FLORES: Objection. Compound. 16 Assumes facts. And vague. 17 A. Virtually every company that has any 18 complexity to it within their job categories have 19 jobs that have different skills. They use the job 20 codes to describe them as similar compensation 21 effects, and similar people similarly do them. And 22 my experience working with STEM work, which I've 23 done a tremendous amount of, STEM being science 24 technology engineering and mathematics, that the 25 skills are actually people generally have one still</p>	<p style="text-align: right;">Page 92</p> <p>1 you understand that the -- strike that. 2 Are you aware that Oracle produced 3 documents that contained new-hire justifications? 4 MS. FLORES: Objection. Vague. 5 A. I believe -- I believe that was part -- 6 that was in sort of the Excel spreadsheets, there 7 were sort of long commentaries of one kind of data. 8 If that's what I recalling. I may not be recalling 9 this correctly. But I do recall that sort of these 10 databases which then had these -- a file -- which 11 had a data transcription which were verbal, and 12 sometimes short, and sometimes long. 13 Q. So those files contained information 14 about -- in which someone involved in the hire was 15 describing something about the reasons for the hire 16 and the -- at times the pay that they thought was 17 appropriate for the hire, correct? 18 MS. FLORES: Objection. Assumes 19 facts. 20 A. I don't recall seeing that they were 21 talking about the pay, but I did look at that and 22 decided it was unusable, but, yes. 23 Q. So what do you mean by "unusable"? 24 A. That it wasn't something that was going 25 to be easily put into any model, and I would see</p>

Page 93

1 what Oracle thought, to decide --

2 **Q. So it can't --**

3 A. So can I finish my answer?

4 I would to see what Oracle thought

5 to decide how and whether that should be put into a

6 model.

7 **Q. When you say "see what Oracle thought,"**

8 **what do you mean?**

9 A. I mean, this is something that to me as

10 an analyst, as a labor economist, I analyze lots of

11 companies, it wasn't apparent how relevant it was to

12 an analysis of group differences. And if Oracle

13 could provide some basis for thinking it was, I

14 would be happy to look at it.

15 **Q. Okay. But in terms of the work that you**

16 **yourself did, am I correct that you found that**

17 **information to be not something that you could**

18 **easily put into a format that you could include in**

19 **your statistical model and so you didn't study it**

20 **any further?**

21 MS. FLORES: Objection. Vague.

22 A. I did not -- I did not study it any

23 further. I waited to see how the case progressed,

24 yes.

25 **Q. Are you aware that Oracle produced**

Page 94

1 **documents that contained promotion justifications?**

2 MS. FLORES: Objection. Assumes

3 facts.

4 A. I'm not sure -- I don't recall as I sit

5 here, seeing that.

6 **Q. So I take it you don't recall reviewing**

7 **any of those as you sit here?**

8 MS. FLORES: Objection. Misstates

9 testimony.

10 A. Not that I recall. As I -- I mean,

11 again, I have to say that I was not able to do the

12 usual review of what I normally do for a deposition,

13 to sort of look at what I had reviewed, because I

14 only really had two or three days of being able to

15 read, so I wasn't able to look at everything I might

16 have looked at.

17 **Q. I'm just asking if you recall before you**

18 **issued your reports in this case reviewing any**

19 **documents produced by Oracle that contained**

20 **promotion justification?**

21 A. And what I'm saying is I don't recall as

22 I sit here, and I was not able to review documents

23 to check that.

24 **Q. Does your report contain any -- any**

25 **discussion of any study you did of any promotion**

Page 95

1 **justifications?**

2 A. No.

3 **Q. Prior to issuing your reports in this**

4 **case, did you review any off-cycle pay**

5 **justifications for any particular pay decision at**

6 **Oracle?**

7 MS. FLORES: Objection. Vague.

8 A. No. I mean, I didn't review them

9 analytically. And I don't recall checking them on

10 the file -- I don't recall what's on the file.

11 **Q. And do either of your reports contain**

12 **any study or analysis of any of those off-cycle pay**

13 **justifications?**

14 MS. FLORES: Objection. Vague.

15 A. Obviously, if I didn't review them

16 analytically, they couldn't be in the report.

17 **Q. Prior to issuing your reports in this**

18 **case, did you review any performance appraisals for**

19 **any particular employee at Oracle?**

20 MS. FLORES: Objection. Vague.

21 A. Yes.

22 **Q. How many -- and to be clear, I'm not**

23 **talking about a numeric score, I'm talking about the**

24 **text of a performance appraisal that was completed**

25 **for an employee.**

Page 96

1 **Did you review any of those prior to**

2 **issuing your reports?**

3 MS. FLORES: Objection. Vague.

4 A. I didn't review any text, no. I'm a

5 statistician and labor economist. I review data.

6 **Q. So if there is information that was**

7 **produced that it takes the form of something**

8 **narrative as opposed to something that you can put**

9 **into a statistical model, that kind of information**

10 **wasn't part of what you were basing your opinions**

11 **on; is that right?**

12 MS. FLORES: Objection. Misstates

13 testimony.

14 A. I'm very interested in your thinking

15 that a narrative can be put in a statistical model.

16 If you can show me how to do that, I would happily

17 consider it. But, no, I didn't put a narrative in a

18 statistical model.

19 **Q. Prior to issue being your reports in**

20 **this case, did you review any self-appraisals,**

21 **written self-appraisals that any particular Oracle**

22 **employee did?**

23 MS. FLORES: Objection. Vague. And

24 lacks foundation.

25 A. Not -- not that I recall.

Page 97

1 **Q. We talked a bit earlier about a resume**
 2 **scraping exercise that some members of your staff**
 3 **conducted. Do you recall that?**
 4 A. We talked about looking at data on the
 5 resumes, yes.
 6 **Q. Okay. Did you talk with them about**
 7 **looking for information about specific prior**
 8 **experience on those resumes?**
 9 MS. FLORES: Objection. Vague.
 10 A. Yes.
 11 **Q. Why were you interested in looking at**
 12 **specific prior experience on those resumes?**
 13 A. Because if it was something that was
 14 reasonably attainable, that would have been
 15 something I would have included in the analysis.
 16 **Q. Why?**
 17 A. Because it would give more precise
 18 estimations than using more generalized experience.
 19 **Q. Okay. Did you include any specific**
 20 **prior information -- I'm sorry. Did you include any**
 21 **specific information about prior experience that was**
 22 **contained in resumes in any of your analyses in this**
 23 **case?**
 24 MS. FLORES: Objection. Vague.
 25 A. No. The resume data was pretty much

Page 98

1 unusable. Many of it were not presented in a way
 2 that we could attach it to any employee. It was --
 3 it was just spotty. Many didn't have resumes. Many
 4 couldn't be -- many resumes couldn't be uniquely
 5 identified and attached to an employee. It just
 6 wasn't very promising to be able to use that in any
 7 general way to look at experience.
 8 **Q. Have you been involved in hiring**
 9 **decisions at the University of Pennsylvania?**
 10 A. Yes.
 11 **Q. When you do a hire, do you typically**
 12 **look at a resume or, I guess, the academic analog is**
 13 **the CV of an applicant?**
 14 A. Yes.
 15 **Q. What kind of things are you looking for**
 16 **on a CV of an applicant?**
 17 MS. FLORES: Objection. Vague.
 18 A. I'm looking at what they have produced
 19 in peer-reviewed journals so I can go read the
 20 articles.
 21 **Q. Is that the only thing you're typically**
 22 **interested in on an applicant's CV?**
 23 A. Yes.
 24 MS. FLORES: Objection.
 25 **Q. What would reviewing those peer-reviewed**

Page 99

1 **articles, what are you hoping to glean from**
 2 **reviewing those peer-reviewed articles?**
 3 A. How creative and good an economist
 4 somebody is or sociologist or public policy analyst
 5 or city planner.
 6 **Q. And when you make a hiring**
 7 **recommendation, are you typically relying on your**
 8 **assessment after reading those of how creative or**
 9 **good an economist or a sociologist or public policy**
 10 **analyst or city planner the applicant appears to you**
 11 **to be?**
 12 A. Yes.
 13 **Q. I presume you believe that's an**
 14 **appropriate way to make a hiring recommendation?**
 15 A. Yes.
 16 **Q. So we talked earlier about your review**
 17 **of Ms. Waggoner's deposition, and you had said it**
 18 **was from an earlier case. Am I correct that what**
 19 **you reviewed was a deposition Ms. Waggoner gave in**
 20 **the Jewett case?**
 21 MS. FLORES: Objection. Vague.
 22 Misstates testimony.
 23 A. It's the case that Dr. Newmark testified
 24 in, so...
 25 **Q. Did you review any deposition testimony**

Page 100

1 **that Ms. Waggoner gave in this case?**
 2 A. Not that I recall.
 3 **Q. Did you review any deposition testimony**
 4 **that anyone gave in this case?**
 5 A. Not that I recall.
 6 **Q. Did you review any declarations from any**
 7 **Oracle employees, whether they -- at any -- scratch**
 8 **that.**
 9 **Did you review any declarations from**
 10 **any Oracle employees from that Jewett case?**
 11 A. Oh. I don't believe so.
 12 **Q. Were you aware that there were**
 13 **declarations from the Jewett case from Oracle**
 14 **employees?**
 15 A. I don't know one way or the other. As I
 16 sit here, I don't -- I can't think of having been
 17 told about that, and I don't recall looking at any.
 18 **Q. If you had been provided those, would**
 19 **you have looked at them?**
 20 A. If I had -- if I had been told that I
 21 should look at them, and my staff looked at them and
 22 thought they were worth my time.
 23 **Q. So if they had been provided to -- to**
 24 **Econsult, would you have asked your staff at a**
 25 **minimum to look at them?**

Page 101

1 A. My staff looks at everything that comes
 2 into Econsult.
 3 **Q. And if you -- do you know if -- do you**
 4 **know if Econsult was provided with any declarations**
 5 **from any Oracle employees from the Jewett case?**
 6 MS. FLORES: Objection. Calls for
 7 speculation.
 8 A. I'm not going to change my answer. I
 9 don't know.
 10 **Q. Well, I wasn't sure if your earlier**
 11 **answer was about whether you had been provided them**
 12 **as opposed to Econsult?**
 13 A. Oh, I'm sorry. No, I consider providing
 14 to me -- providing to Econsult as having provided to
 15 me.
 16 **Q. What, if anything, do you feel that you**
 17 **need to know about a company's particular practices**
 18 **or business operations or structure in order to do a**
 19 **compensation analysis effectively?**
 20 MS. FLORES: Objection. Vague. And
 21 compound.
 22 A. Sorry, just let me get this straightened
 23 out here. Okay.
 24 I don't know what you mean by
 25 "effectively," because certainly we can take the

Page 102

1 standard tools of economics and virtually look at
 2 any workforce with those standard tools without
 3 knowing what operations or structure is --
 4 operations and structure then embellish it and help
 5 us understand if there's something else that we need
 6 to consider other than the basic economic model.
 7 **Q. Okay. So I appreciate that the word**
 8 **"effectively" might not have been clear in that**
 9 **question. So let me ask it without that word.**
 10 **What, if anything, do you feel you**
 11 **need to know about a company's particular practices**
 12 **or business operations or structure in order to do a**
 13 **compensation analysis of that company?**
 14 MS. FLORES: Objection. Vague. And
 15 compound.
 16 A. As I said, as a first cut, it's always
 17 reasonable to use a standard economics model, and
 18 then find out if there's anything else that needs --
 19 I would always start with the standard economics
 20 model and not care that much about the structure.
 21 Then go in to find out what the structure is, and
 22 what else might matter, and how else you might
 23 want -- that might change what you want to do.
 24 **Q. By the standard economic model, you mean**
 25 **the human capital model that you discussed in your**

Page 103

1 reports?
 2 A. Yes.
 3 **Q. Okay. You can point me to any peer-**
 4 **reviewed literature that states that the only**
 5 **factors that should be included in a human capital**
 6 **model study in a particular company are highest**
 7 **level of education and age and time at company?**
 8 MS. FLORES: Objection. Vague.
 9 A. Yeah, I don't know only. It depends if
 10 you have other data available that give you more
 11 about education, give you more about experience, and
 12 more -- that you would use that. Nobody would say
 13 never to use it. But there's certainly a whole
 14 literature that analyzes compensation differences
 15 with exactly those variables.
 16 And I never said "only".
 17 THE VIDEOGRAPHER: Pardon me,
 18 counsel. I have roughly five minutes left to change
 19 the tape.
 20 MS. MANTOAN: Why don't we take a
 21 quick break while he change and I'll look for what
 22 I'm looking for.
 23 THE VIDEOGRAPHER: The time is 10:38
 24 a.m. We're going off the video record.
 25 (RECESS, 10:38 a.m. - 10:47 a.m.)

Page 104

1 THE VIDEOGRAPHER: The time is now
 2 10:47 a.m. We're back on the video record.
 3 BY MS. MANTOAN:
 4 **Q. Welcome back, Dr. Madden.**
 5 **If I could direct you to Exhibit 2.**
 6 **This is your initial report. And I wanted to just**
 7 **go to page 5, which is where you introduce the human**
 8 **capital theory.**
 9 A. Mm-hmm.
 10 **Q. And in particular, I wanted to focus you**
 11 **in and then ask some questions about the numbered**
 12 **list that you have here and the two sentences**
 13 **immediately preceding the numbered list.**
 14 A. Yes.
 15 **Q. Just to read that, it says, "The theory**
 16 **focuses upon the investments that individuals make**
 17 **that increase their skills and thus make them more**
 18 **productive. The following factors are particularly**
 19 **important: 1, experience measured by tenure with an**
 20 **employer and age to respect experience at other**
 21 **employers; and 2, education."**
 22 **Did I read that correctly?**
 23 A. Yes, you did.
 24 **Q. Is this -- have you had occasion in**
 25 **other reports to articulate sort of the contours,**

Page 105

1 generally, of the human capital theory as you did
 2 here?
 3 A. Yes.
 4 Q. Is this the same articulation of the
 5 human capital theory that you've used in other
 6 reports?
 7 A. Basically, yes.
 8 Q. In other reports have you described
 9 experience as being measured by tenure with an
 10 employer, or in a particular job?
 11 MS. FLORES: Objection. Vague.
 12 A. I would have done that if it was a
 13 promotion case or if it was a equal-pay case.
 14 Q. But not in this case?
 15 A. Not a general compensation case.
 16 And it also depends what you mean by
 17 particular job. You can talk about tenure in a
 18 occupation.
 19 Q. In other reports, have you listed in
 20 addition to 1 and 2, a third thing, namely,
 21 occupational expertise acquired before hire?
 22 A. Yeah. Yes.
 23 Q. Okay. What did you mean -- what do you
 24 mean when you say "occupational expertise acquired
 25 before hire"?

Page 106

1 A. Because some employers sometimes have
 2 information on training programs that aren't
 3 education programs.
 4 So if there's data on that, you
 5 would include that as part of the experience.
 6 Q. So occupational expertise acquired
 7 before hire would be relevant to human capital
 8 regardless of whether it's you included in a
 9 database, correct?
 10 MS. FLORES: Objection.
 11 A. That is correct. Yes.
 12 Q. Aside from age, do your models in this
 13 case have any control for occupational expertise
 14 acquired before hire?
 15 A. Only to the extent I looked -- I added
 16 majors to the analysis, major of your highest
 17 degree, and to the extent a job descriptor is
 18 added -- a job descriptor at hire is added.
 19 Q. A question about the college major,
 20 that's something that your team coded during that
 21 resume scraping exercise, correct?
 22 A. No.
 23 Q. Your team did not extract, like, subject
 24 matter of degree from resumes?
 25 A. I don't think so.

Page 107

1 Q. What do you understand your team to have
 2 scraped from resumes?
 3 A. Highest degree attained.
 4 Q. But you said earlier, you haven't looked
 5 at the DTA files that they created that would have
 6 that information?
 7 A. Yes, it's possible they did do college.
 8 It's possible they have done some major -- because I
 9 know we had this discussion that it was so -- that
 10 the narrative was so hard to put into a codable
 11 basis. So I don't know, it's possible they picked
 12 it up, and that's how we had the discussion on it.
 13 We may have had the discussion before they did the
 14 coding. I don't recall.
 15 Q. And then when they were coding
 16 information on educational attainment from resumes,
 17 they were of course limited to the resumes that they
 18 had available, correct?
 19 A. And that they could link to an employee,
 20 yes.
 21 Q. And am I right that for more than 50
 22 percent of the employees, they were unable to scrape
 23 any resume information for those employees?
 24 A. That is correct. Because we couldn't
 25 link those employees to a resume.

Page 108

1 Q. Or because you didn't have a resume
 2 for -- you didn't have any resume for that employee,
 3 right?
 4 A. That is not being able to link them to a
 5 resume, yes.
 6 Q. Okay. A few questions about Oracle
 7 specifically, or I should -- attorneys should never
 8 say a few. I guess sometimes we ask more than a
 9 few.
 10 I expect you had some familiarity
 11 with Oracle as a company before this case; is that
 12 true?
 13 A. Yes.
 14 Q. What do you understand Oracle the
 15 company to do?
 16 A. Relational databases.
 17 Q. Is that all you understand them to make?
 18 A. That, I understand is the main business.
 19 They also acquired Sun. They acquired PeopleSoft,
 20 but that's a relational database. They do Linux.
 21 Q. Do you understand them to make cloud-
 22 based products or hardware on-premise based products
 23 or both?
 24 A. I don't know about the hardware, but I
 25 do know they make cloud-based products, that would

Page 109

1 be part of a relational database operation.

2 **Q. Well, you can have a relational database**

3 **platform that operates on a cloud platform, or one**

4 **that operates on hardware, correct?**

5 A. Yes, you can have either, but these days

6 everybody would have cloud.

7 **Q. Do you know how many Oracle employees**

8 **who were working on relational databases are working**

9 **on cloud-based applications versus non-cloud based**

10 **applications?**

11 MS. FLORES: Objection. Calls for

12 speculation. And vague.

13 A. No, I do not. As we've already

14 discussed, there are no product data.

15 **Q. When you say there's no product data,**

16 **you mean there's no field that you found in the data**

17 **as given to you that was labeled "product".**

18 **Is that what you're saying?**

19 MS. FLORES: Objection. Misstates

20 testimony.

21 A. That's one of the things I'm saying.

22 I'm also regarding -- I think Waggoner actually says

23 there are no data on product, and I think we've got

24 some -- I think I saw some mail, some mail

25 correspondence that indicated that from Oracle.

Page 110

1 **Q. Do some of those -- do some of those**

2 **specific job requisitions that you recalled**

3 **reviewing earlier contain information about the**

4 **specific products that that specific employee is**

5 **going to work on?**

6 MS. FLORES: Objection. Vague.

7 A. Yes.

8 **Q. Do some of the resumes that were**

9 **produced contain information about the products on**

10 **which this particular person had experience working?**

11 A. I don't recall having resumes from

12 Oracle's employees after they had been at Oracle.

13 I -- I just don't recall that. That would have been

14 very few resumes, and I didn't look at that.

15 **Q. Well, you didn't -- you said you didn't**

16 **review any of the performance appraisal narratives,**

17 **correct?**

18 A. That's correct.

19 **Q. So you don't know if that had**

20 **information about products, correct?**

21 A. Oh, it may well have, but what you need

22 to do --

23 **Q. Okay.**

24 A. -- a statistical analysis, is you need

25 it for a broad base of the data, not for particular

Page 111

1 individuals and particular cases.

2 **Q. Do you know how many individuals had one**

3 **or more performance appraisals in the information**

4 **that was produced at Oracle?**

5 A. Most of them had a performance

6 appraisal, as I recall. And we had that data on

7 most of the people, I think. In the electronic

8 data.

9 **Q. And in those new hire starting pay**

10 **justifications that we talked about earlier, do you**

11 **recall seeing information in there about the**

12 **specific products on which an individual was going**

13 **to be asked to work?**

14 A. No. There may have been, but as I said,

15 that data was not -- it was just too hard to think

16 about using until we had some sense from Oracle what

17 we might want to use from there.

18 **Q. Okay.**

19 **Do you have a rough sense of how**

20 **many different products Oracle currently markets?**

21 A. I looked at the website, and my

22 impression of -- this is just an impression, is I

23 would say it looked like -- I would say between 30

24 and 60.

25 **Q. I asked before if you reviewed**

Page 112

1 **declarations. I think you said you hadn't reviewed**

2 **any, but let me check in particular.**

3 **Did you ever review a declaration**

4 **from Steve Miranda?**

5 A. Not that I recall.

6 **Q. So I'll represent to you and ask you to**

7 **assume for purposes of this deposition that he**

8 **attested to hundreds of products made by Oracle**

9 **employees. But whether it's 30 to 60 or whether**

10 **it's hundreds, do you -- how do those products**

11 **differ from one another?**

12 MS. FLORES: Objection. Vague.

13 Calls for speculation.

14 A. Well, some are dealing with specific

15 kinds of tasks, like PeopleSoft, which is a human

16 resources software. Some are dealing with more

17 general approaches, like Java. I mean, the --

18 having bought Sun, you're now doing Java.

19 I don't know what -- let's see, so

20 what you're asking me. You're asking me how do

21 products differ from one another? Well, they differ

22 by line of business that they're trying to get the

23 relational database for. Some of them are more

24 basic kind of programming.

25 I mean, that's the general

Page 113

1 categories. So, if you want to ask me about a
 2 specific product I may or may not know it.
 3 **Q. Does the work needed to develop those**
 4 **different kinds of products that you described**
 5 **differ?**
 6 MS. FLORES: Objection. Vague.
 7 A. Depends at what level. I mean, it's --
 8 at the very detailed level, the work I do for this
 9 case is different than the work I do for another
 10 case. So that's different. But in terms of the
 11 kind of approaches used, they're the same. So -- at
 12 a higher level. So I -- I don't know -- I don't
 13 understand how to answer that question, because I'm
 14 not sure of what you mean by "differ".
 15 **Q. Does the work on the different products**
 16 **of which you're aware require the same skills?**
 17 MS. FLORES: Objection. Vague.
 18 A. Again, it depends on what level you're
 19 talking about. I bring the same skill to every
 20 case, but in every individual case, I might be using
 21 a different skill. And that's certainly the case
 22 here, that at some level there's a general kind of
 23 skill that's required across all of the products.
 24 The coding, most of these require some sort of
 25 coding. But there's different -- some are Java

Page 114

1 based, some are C-plus-plus, I mean, there's
 2 different specifics.
 3 **Q. Perhaps your answer will be the same,**
 4 **but I want to ask the question so I know what your**
 5 **testimony is.**
 6 **Does the work on the different**
 7 **products that Oracle makes of which you're aware**
 8 **require the same effort?**
 9 MS. FLORES: Objection. Vague.
 10 A. Effort being how hard you work? If you
 11 mean by effort being how hard you work, I wouldn't
 12 imagine that being connected with a product.
 13 **Q. Are they equally challenging to program,**
 14 **for, let's say, for people whose job involves**
 15 **programming?**
 16 MS. FLORES: Objection. Vague.
 17 A. I don't know.
 18 **Q. Do the different products that Oracle**
 19 **makes differ in their importance to the company?**
 20 MS. FLORES: Objection. Vague.
 21 A. I assume that every product is
 22 important, or they wouldn't produce it. So I don't
 23 know what different -- how would different -- I
 24 don't know what it means to differ in importance.
 25 You produce it because you make money on it, period.

Page 115

1 **Q. Well, you're -- from your extensive**
 2 **study of companies, you know that sometimes**
 3 **companies will have like a marquee product or a**
 4 **product that they're investing in. Let's think of,**
 5 **I don't know, Apple and the iPhone at least at some**
 6 **time.**
 7 A. Yes.
 8 **Q. So with that understanding of**
 9 **importance, do the different products that Oracle**
 10 **makes differ in their importance to the company?**
 11 MS. FLORES: Objection. Vague. And
 12 calls for speculation.
 13 A. In terms of their iconic qualities, I'm
 14 sure it does. I'm certain that, that Sun
 15 acquisition was very important. I'm certain that --
 16 I mean, it wasn't developed by Oracle, it was
 17 acquired by Oracle. PeopleSoft is well known. I
 18 mean, there are products out there that are iconic.
 19 About it probably depends for different customers
 20 which are iconic.
 21 **Q. Do the different products that Oracle**
 22 **makes differ in the profitability that they generate**
 23 **for the company?**
 24 MS. FLORES: Objection. Vague. And
 25 calls for speculation.

Page 116

1 A. I have no idea.
 2 **Q. Do you think the differences in the**
 3 **products on which an employee works can have a**
 4 **legitimate impact on pay?**
 5 MS. FLORES: Objection. Vague. And
 6 assumes facts.
 7 A. Within a company?
 8 **Q. Within this company, Oracle.**
 9 A. Well, I answered that in my rebuttal.
 10 That as a labor economists, employees with the same
 11 skills will simply not accept lower pay because the
 12 product is less profitable to the company. The
 13 company makes -- the affects the profitability is
 14 shifting the demand curve, not the supply curve, so
 15 what happens is it affects employment, not --
 16 **Q. So that --**
 17 A. -- not pay.
 18 **Q. So the --**
 19 A. The people of the same skill.
 20 **Q. Right. So you're aware that there are**
 21 **employees who share, say, a job title at Oracle,**
 22 **some of whom make more money than others who share**
 23 **the same job title, right?**
 24 MS. FLORES: Objection.
 25 A. Yes.

Page 117

1 **Q. And you're saying if those employees had**
 2 **the same skill, they wouldn't accept those pay**
 3 **differences, correct?**
 4 MS. FLORES: Objection. Misstates
 5 testimony. Assumes facts. And vague.
 6 A. In general, yes.
 7 **Q. Okay. So does that suggest to you that**
 8 **they don't have the same skills?**
 9 A. There's very -- they have -- as we know,
 10 within the -- within those skills that we've got
 11 different degrees. Within those jobs there's
 12 different degrees. There's -- it's not
 13 necessarily -- yeah, I guess in some sense, yes, it
 14 represents skill or it represents discrimination and
 15 arbitrariness. It's one way or the other.
 16 **Q. Those are --**
 17 A. That's the issue.
 18 **Q. Those are competing explanations?**
 19 A. Those are competing explanations.
 20 **Q. Do you understand Oracle to be divided**
 21 **functionally into lines of business?**
 22 MS. FLORES: Objection. Vague.
 23 A. I've heard that, and I've tried in the
 24 data to figure out -- that out and couldn't see it.
 25 **Q. Where have you heard or read about**

Page 119

1 that's -- I was interested in trying to look at what
 2 line of business meant in terms of skills, but I
 3 couldn't find any data that would let me do that.
 4 **Q. Okay. Did you ask for additional**
 5 **information or clarification of line of business and**
 6 **were told there was nothing else to provide?**
 7 A. There was a complicated letter we got
 8 and we couldn't figure out. We tried and we
 9 couldn't figure out how to follow it. And I note
 10 that Oracle hasn't seemed to use it themselves in
 11 this case.
 12 **Q. Were the same lines of business in place**
 13 **at Oracle's headquarters location for the entire**
 14 **period from 2013 to the present, or has that been**
 15 **something that is not static?**
 16 MS. FLORES: Objection. Calls for
 17 speculation. And vague.
 18 A. Since I've never been able to find any
 19 reliable data on this, I don't know how I could
 20 possibly answer that question. I don't have any
 21 data.
 22 **Q. Do you have any understanding as to the**
 23 **role that lines of business play at Oracle?**
 24 MS. FLORES: Objection. Asked and
 25 answered.

Page 118

1 **Oracle's lines of business?**
 2 A. In the longer history of this case.
 3 **Q. Do you recall seeing anything in**
 4 **Ms. Waggoner's testimony about lines of business?**
 5 A. I didn't look at that. I don't recall.
 6 Oh, I do think she talks about lines
 7 of businesses affecting pay, yes. I think that was
 8 in her discussion.
 9 I'm recalling, so I might not be
 10 recalling exactly, but -- the best of my recall
 11 right now is she might have mentioned lines of
 12 business.
 13 **Q. Okay. Do you have any basis to disagree**
 14 **with Ms. Waggoner's testimony, that line of business**
 15 **could affect pay?**
 16 MS. FLORES: Objection. Vague.
 17 A. Because I couldn't find data on line of
 18 business, it's pretty hard to know what was being
 19 meant by that.
 20 **Q. Lines of business, as we've been talking**
 21 **about it, is something different than job function,**
 22 **product development, IT support, correct?**
 23 A. Well, line of business will affect pay
 24 only if it's somehow connected to skill. If it's
 25 not connected to skill, it shouldn't affect pay. So

Page 120

1 A. My -- the reason why I was interested in
 2 it is I thought it might have to do with product and
 3 in a way that might deal with skill. That was what
 4 I was interested in looking at.
 5 **Q. Do you think differences in the line of**
 6 **business in which an employee works at Oracle can**
 7 **have a legitimate impact on pay?**
 8 MS. FLORES: Objection. Vague.
 9 A. If it's -- can be empirically linked to
 10 skill.
 11 **Q. And now pivoting from talking about the**
 12 **line of business to those job functions, product**
 13 **development, IT and support.**
 14 A. Yes.
 15 **Q. What is your understanding of the**
 16 **differences, if any, between those three job**
 17 **functions?**
 18 A. Well, product development is probably
 19 sort of the core of a place like Oracle, developing
 20 new products.
 21 Support is exactly what it says, it
 22 actually supports product development. And the
 23 technology -- well, I've looked -- the technology
 24 and information support are actually a very small
 25 part of the gender case and not relevant in the much

Page 121

1 larger case here, which is the Asian/white case, nor
 2 in the black/white case. But it's very few
 3 employees, and not in the core -- core jobs.
 4 **Q. For a -- for a given employee at Oracle**
 5 **who is in the functions at issue at headquarters,**
 6 **who determines that employee's compensation?**
 7 MS. FLORES: Objection. Vague. And
 8 calls for speculation.
 9 A. Well, it's not really relevant to any of
 10 my studies. I do have an understanding of that, but
 11 it wouldn't affect my studies one way or the other
 12 if it were different; but if the supervisor makes a
 13 recommendation, it's reviewed up the line and comes
 14 back down, which is in many companies quite
 15 standard.
 16 **Q. Do you have a sense of how many --**
 17 A. And -- and it is done within the context
 18 of the job code. Pay binds.
 19 **Q. Your talking about the salary ranges**
 20 **associated with the job code?**
 21 A. Yes.
 22 **Q. And those, as you testified earlier, can**
 23 **spend -- span tens of thousands of dollars?**
 24 A. Yes. For higher level jobs, yes.
 25 **Q. Do you know how many -- so do you know**

Page 122

1 **how many -- roughly how many employees are part of**
 2 **the population that you were studying here. So**
 3 **women in those three functions, Asians in product**
 4 **development only, African-Americans in --**
 5 A. Yeah. Yes. Yes, of course. It's on my
 6 tables. So for -- this is by year, and I think I --
 7 I think I actually might have it in the report.
 8 So for -- so there's a 4,000-plus
 9 men and women, and about a quarter of them are
 10 women, so a little over a thousand are women each
 11 year.
 12 **Q. You're looking, just for the record,**
 13 **you're looking in Exhibit 2, you're looking at the**
 14 **tables?**
 15 A. Yes. The initial report, yes. And
 16 Table 2. In the Asian/white case, it's more like
 17 about 3,500 with about three-quarters of them being
 18 Asians. So it's about eight to nine hundred whites
 19 and the rest Asians.
 20 And for the African-Americans
 21 relative to whites, it's less than a thousand, and
 22 running about eight to nine hundred, with about 2 to
 23 3 percent being African-Americans. So 30 -- 30 or
 24 so African-Americans typically in a year.
 25 **Q. So several thousand employees?**

Page 123

1 A. Well, not --
 2 **Q. Correct?**
 3 A. Well, self-thousand for the Asian/white
 4 and the male/female comparisons.
 5 **Q. Okay. Do you know how many different**
 6 **supervisors those thousands of employees have had**
 7 **during their careers at Oracle?**
 8 MS. FLORES: Objection. Vague. And
 9 calls for speculation.
 10 A. No.
 11 **Q. But certainly, there were -- if there**
 12 **were thousands of employees, would you expect there**
 13 **to be at least hundreds of managers -- first-level**
 14 **managers overseeing those employees?**
 15 MS. FLORES: Objection. Assumes
 16 facts.
 17 A. That would be my guess.
 18 **Q. How do decision makers at Oracle**
 19 **determine pay for a given employee?**
 20 MS. FLORES: Objection. Vague.
 21 A. They look first at the job code, decide
 22 what the job code is. Are you talking about a pay
 23 raise or an initial pay?
 24 **Q. Either, if you feel you need to speak**
 25 **about them separately, feel free to let me know.**

Page 124

1 A. Well, you look at the job code that the
 2 individual is in. You look at their education. You
 3 look at their experience. You look at their skills.
 4 And you hopefully do your best to set it based on
 5 those criterion. And off-cycle, you sometimes
 6 respond to outside salary offers by making
 7 adjustments.
 8 There's information coming down
 9 about what's going on externally in the market to
 10 adjust some salary within some jobs. And you think
 11 of -- I would hope you think about equity within
 12 your group.
 13 **Q. Do different decision makers at Oracle**
 14 **weight those different factors in different ways**
 15 **when they're looking at, you know, different new**
 16 **hires or different potential raises?**
 17 MS. FLORES: Objection. Vague. And
 18 compound.
 19 A. I don't know. Not relevant to my
 20 studies.
 21 **Q. Do you believe that every manager at**
 22 **Oracle weights the factors that they're considering**
 23 **in a pay decision the same way?**
 24 MS. FLORES: Objection.
 25 A. I don't know and it's not relevant to my

Page 125

1 study.

2 **Q. Okay. For a given manager, do you**

3 **believe that he or she weights the factors that**

4 **they're considering in pay the same for every**

5 **employee that he or she mention?**

6 MS. FLORES: Objection. Vague. And

7 calls for speculation.

8 A. I don't know and it's not relevant to my

9 study.

10 **Q. You mentioned a few answers back that**

11 **there may be off-cycle pay increases to respond to**

12 **outside salary offers?**

13 A. Yes.

14 **Q. Do you believe that's an appropriate**

15 **business practice?**

16 A. Yes. As long as it's handled the same

17 for everybody.

18 **Q. And is it an appropriate business**

19 **practice even if it ends up correlating with gender**

20 **or race; in other words, employees of one race**

21 **receive or are -- present outside offers more than**

22 **another?**

23 MS. FLORES: Objection. Vague. And

24 incomplete hypothetical.

25 A. Well, it's certainly appropriate to use

Page 126

1 that information to respond to that employee's offer

2 and to correct the salaries of any comparably -- any

3 similarly situated individuals who didn't get the

4 offer. So I mean, if -- if a -- if a white male

5 gets an offer, and you realize you've got to match

6 it, I would think as is policy in many companies and

7 in my own University, that you make sure that you

8 make similar increases in pay to anybody similarly

9 situated, particularly if they had protect groups.

10 **Q. And what understanding of "similarly**

11 **situated" are you using there?**

12 A. I'm thinking about doing the same kind

13 of work with the same skills.

14 **Q. You also mentioned a few answers back**

15 **what I think of as market-based adjustments or**

16 **looking at what's going on externally in the market**

17 **to adjust some salaries within some jobs?**

18 A. Yes.

19 **Q. Do you believe that's an appropriate**

20 **business practice?**

21 A. Yes.

22 **Q. Is it an appropriate business practice**

23 **even if some -- even if it ends up correlating with**

24 **race or gender; in other words, individuals of some**

25 **races or genders happen to hold jobs that are the**

Page 127

1 **subject of market adjustment at a greater rate than**

2 **others?**

3 A. Yes. I think that's appropriate as long

4 as you can clearly connect it to the market

5 adjustment and the differences that those

6 individuals have in skills to be within jobs.

7 **Q. Does compensation for salaried employees**

8 **at Oracle have different components?**

9 MS. FLORES: Objection. Vague.

10 A. I don't understand that question.

11 **Q. So is every employee that you studied**

12 **paid -- is their take-home pay entirely composed of**

13 **base pay?**

14 A. No, there's base pay. There are

15 bonuses, particularly in 2014 and 2008, and there

16 are stock options. Stock -- stock units paid.

17 **Q. And can employees at Oracle who do**

18 **receive equity receive different types of equity, or**

19 **is it all the same?**

20 A. They receive different amounts at their

21 options, pick options or pay units, but they're

22 all -- they're all have to take place into the

23 future, nothing is received in the year it's awarded

24 entirely.

25 **Q. So we had three different components**

Page 128

1 **that you mentioned, base, bonus and stock?**

2 A. Yes.

3 **Q. Okay. Do you know whether those**

4 **components -- which employees received those**

5 **components and the amount they receive are**

6 **determined based on the same factors or different**

7 **factors?**

8 MS. FLORES: Objection. Vague. And

9 calls for speculation.

10 A. In some sense they're all based on the

11 same underlying factors, that is how well the person

12 is performing -- performing the job and what job

13 they're doing. It is the case that a much smaller

14 group of people -- everybody gets base pay and a

15 much smaller group of people get bonuses and stock

16 options. And that those bonuses and stock options

17 even more than base pay tend to be affected by the

18 grade level, the global career level of the

19 individuals.

20 **Q. For some individuals in the population**

21 **the majority of their take-home pay is something**

22 **other than base, correct?**

23 MS. FLORES: Objection. Assumes

24 facts.

25 A. Yes.

<p style="text-align: right;">Page 129</p> <p>1 Q. And that's particularly true at the 2 higher IC levels and in the management levels, 3 correct? 4 A. That's the only place it can be true, 5 since those are the only people that typically get 6 those other forms of pay. 7 Q. Were all employees in the population you 8 analyzed eligible for each type of compensation? 9 MS. FLORES: Objection. Vague. 10 A. To the extent they were assigned the 11 same career -- global career levels, there may have 12 been some requirements in how long you have been in 13 that level, so -- but I haven't -- I'm not sure 14 about that, but it certainly was based on the global 15 career level that person was assigned by Oracle. 16 Q. Do your models incorporate any -- strike 17 that. 18 How do your models account for the 19 fact that some employees may or may not have been 20 eligible for a particular component of pay in a 21 particular year? 22 A. Well, of course, the issue is, are there 23 systematic, racial or gender differences in being 24 eligible. So those models would not appropriately 25 control for eligibility. And then the other models</p>	<p style="text-align: right;">Page 131</p> <p>1 A. Yes. 2 Q. Okay. When you say job that was 3 assigned by Oracle, do you mean that the job that 4 the person holds at Oracle? 5 A. Yes. 6 Q. And when you say endogenous variables in 7 your report -- in your reports, do you mean 8 variables that describe work performed at Oracle? 9 A. No. 10 Q. How would you describe the distinction 11 between endogenous and exogenous variables? 12 A. An endogenous variable are the set of 13 variables that are all affected and determined by 14 the exogenous variables. And the exogenous 15 variables are the variables that the individuals 16 themselves control. So any outcome that can be 17 predicted or that is primarily due to the underlying 18 skills of individuals is an endogenous variable. 19 It's clear in the literature. It's 20 what's determined by the system. They're determined 21 by the same characteris -- the endogenous variables 22 are all determined or affected by the same set of 23 exogenous variables. 24 Q. In this case when we look at, say, your 25 tables from your primary report, am I -- I just want</p>
<p style="text-align: right;">Page 130</p> <p>1 have controls for global career level, and the 2 models that have controls for global career level, 3 are assuming that there are no differences by 4 systematic differences by gender or race that would 5 make women or Asians or blacks in the particular GCL 6 less likely to qualify... or be eligible, I guess 7 is the word you used. 8 Q. But there was data available on who 9 was -- or documents available that would have told 10 you who was, in fact, eligible for different 11 components of pay at different times, correct? 12 MS. FLORES: Objection. Assumes 13 facts. And lacks foundation. 14 A. There were documents that showed you who 15 was eligible for the stocks. 16 Q. Okay. 17 A. But of course, the question is not -- 18 that's not the question I'm analyzing. So I would 19 not use that. I'm analyzing whether there are 20 racial and gender disparities which would require 21 looking at that eligibility question itself that is 22 on the table. 23 Q. So you mentioned in one of your answers 24 a few answers back and mentioned several times in 25 your report this notion of assignment.</p>	<p style="text-align: right;">Page 132</p> <p>1 to make sure our terminology is aligned here, 2 because I'm concerned that it's not. 3 When you're looking at exogenous 4 variables, that's columns 1 through 5, and when 5 you're looking at endogenous variables, it's columns 6 6, 7 and 8, correct? 7 A. Well, 1 through 4 are absolutely 8 clearly, exogenous. 5 is exogenous. 6 may or may 9 not be exogenous. 7 and 8 are endogenous. 10 Q. Okay. In your initial report in this 11 case, you described 6, 7 and 8 as endogenous 12 variables? 13 A. Well, having endogenous characteristics, 14 but I was always -- I was always clear that 6 was 15 also being used as a measure of area of experience 16 and education. 17 Q. So if I could turn you to page, in your 18 initial report, it's Exhibit 2. Let's go to page 19 15, if we could. There's a header, "adding 20 endogenous characteristics". 21 A. Yes. 22 Q. Can you let me know when you're at page 23 15. 24 A. Yes. I'm at page 15. 25 Q. Okay. And the header "adding endogenous</p>

Page 133

1 characteristics"?

2 A. Yes.

3 Q. You wrote here in your initial report,

4 the first sentence under that, "the characteristics

5 added as controls in columns 1 through 5 of Table 1A

6 are all exogenous to Oracle; that is, that none of

7 the characteristics are affected by or the results

8 of decisions made by Oracle." Right?

9 A. Yes.

10 Q. Okay. And if we flip over to page 16,

11 the last sentence of that same paragraph, "column 6,

12 7, and 8 of Table 1A evaluate the effect of

13 endogenous characteristics on the gender

14 differentials and compensation at Oracle."

15 Did I read that correctly?

16 A. Yes.

17 Q. Okay. So as I read that report, there

18 is a break between columns 5 and 6; where 1 through

19 5, those are exogenous employee controlled

20 variables, 6 through 8 are endogenous, in your view,

21 Oracle controlled variables." Is that what this

22 initial report says to you?

23 A. Potentially, but I -- I actually --

24 there's other language you can find in here where I

25 talk about that sixth column as sort of being -- we

Page 134

1 could look at it as endo -- as exogenous. 7 and 8

2 are clearly exogenous -- are clearly endogenous. 1

3 through 5 are clearly exogenous and 6, it depends on

4 whether you think that those job assignments are

5 purely based on the education and skills the person

6 has, or whether there's some other discretionary

7 judgment going on, that they're affected -- that

8 there's a filter for those.

9 Q. All right. This is --

10 A. I mean, there's other -- if you want, I

11 can spend some time. It's going to take me some

12 while with my eyes, but I can find -- there's later

13 discussion in here that makes that point.

14 Q. So I recall seeing that later discussion

15 in your rebuttal report --

16 A. No, I think --

17 Q. -- characterizing 6, column 6 a

18 different way --

19 A. All right. Let me --

20 Q. -- but this might be something that I

21 ask you to look at when we're on the lunch break or

22 something like that. I don't know that we have time

23 on the record to read the entire report.

24 A. Well, I -- okay. But my testimony is

25 that I made that clear in this report. It may not

Page 135

1 have been clear to you, but I tried to make that

2 clear.

3 Q. Okay. So when you're trying to -- let

4 me focus again back up and just ask you some

5 questions about practices, there.

6 You're trying to fill a faculty

7 position in your department at Penn.

8 A. Yes.

9 Q. Do you need to take a break? I see you

10 blinking here. Are you all right?

11 A. No. It's just the light.

12 Q. Okay. No, that's fine.

13 A. I'm all right.

14 Q. You're trying to fill a faculty

15 position. You're going to select from among the

16 candidates that apply to that position, correct?

17 A. Well, we certainly -- we do more than --

18 we get people who send in their applications, and

19 then we beat the bushes to find other people to

20 consider.

21 Q. Okay. And unless someone expresses an

22 interest either initially or in response to some

23 subsequent outreach that you do, that's not going to

24 be someone that you make an offer to, correct?

25 A. Most of the time. I bet we have made

Page 136

1 offers to people that have expressed no interest and

2 we were trying to get them.

3 Q. Is that same hiring process the process

4 that's used for, say, admin staff in your

5 department?

6 MS. FLORES: Objection.

7 A. No.

8 MS. FLORES: Calls --

9 Q. So let's -- so now focusing now on other

10 people in the professorial ranks but admins in your

11 apartment -- in your department, rather.

12 When you're hiring an admin for your

13 department, you're going to select from among the

14 individuals who have applied to an opening for an

15 admin in your department, right?

16 A. Whenever I have done it, I have also

17 tried to get applicants. I haven't just relied on

18 what human resources sent to me.

19 Q. Okay. And can you recall an occasion at

20 Penn when you've made an offer to someone for an

21 administrative position where that person, whether

22 initially or after outreach, had never applied or

23 expressed an interest in the position?

24 A. No, they ultimately applied, but their

25 application was coaxed by what we did. I wouldn't

Page 137

1 at all be surprised if those people aren't more
 2 likely to get offers, but I don't know.
 3 **Q. Are you familiar in the work that you**
 4 **have don't with OFCCP to date with the concept of**
 5 **good faith efforts?**
 6 A. Yes.
 7 **Q. What is your understanding of good faith**
 8 **efforts?**
 9 A. Good faith efforts is that you -- as I
 10 teach it in my discrimination class under the
 11 affirmative action order, it's that you didn't meet
 12 your goals of who you are supposed to hire, but you
 13 made good faith efforts of doing so. And that not
 14 meeting the goals can satisfy the OFCCP, if you can
 15 show that you made good faith efforts to do so.
 16 **Q. Have you reviewed any documentation**
 17 **related to Oracle's good faith efforts to the extent**
 18 **it made good faith efforts?**
 19 A. Not as part of this compensation case,
 20 and I don't recall otherwise.
 21 **Q. Okay. So you don't have any opinion on**
 22 **the extent or sufficiency of any good faith efforts**
 23 **Oracle may have done for outreach; is that correct?**
 24 A. No, I haven't done it at all with
 25 respect to the matter here, and I'm not sure about

Page 138

1 otherwise, so I don't recall anything otherwise.
 2 **Q. Okay.**
 3 MS. MANTOAN: This strikes me as a
 4 good place for a lunch break, if that's fine with
 5 you. Can we try to keep it to around 30, like be
 6 back here at noon, if I'm adding correctly to my --
 7 MS. FLORES: Yes.
 8 MS. MANTOAN: Just housekeeping
 9 matters. Like one housekeeping matter before we go.
 10 We have already discussed some material that's
 11 confidential that's in line with what Oracle's
 12 previously designated confidential.
 13 THE VIDEOGRAPHER: Do you want this
 14 on the video?
 15 MS. MANTOAN: Yes, I do.
 16 So given the upcoming motion
 17 deadlines, they may be filed before the deadline
 18 designations in the protective order. We're going
 19 to provisionally designate the entire deposition,
 20 and the exhibits as confidential. And we can
 21 discuss it further afterwards, but I just want to be
 22 clear that we're putting that designation -- I
 23 suppose like this public website that was Exhibit 4,
 24 probably won't designate that or the notice of depo.
 25 So we could talk at the end if there's any

Page 139

1 exclusions that may be obvious or not. But
 2 otherwise, we're a going to conditionally designate
 3 the entirety of the transcript confidential.
 4 MS. FLORES: We can talk about it at
 5 the end.
 6 MS. MANTOAN: Okay. Thank you.
 7 THE VIDEOGRAPHER: The time is 11:28
 8 a.m. We're going off the video record.
 9 (RECESS, 11:28 a.m. - 12:19 p.m.)
 10 THE VIDEOGRAPHER: The time is now
 11 12:19 p.m. We're back on the video record.
 12 BY MS. MANTOAN:
 13 **Q. Good afternoon, Dr. Madden.**
 14 A. Good afternoon.
 15 **Q. Do you understand that you're still**
 16 **under oath from the oath you swore this morning?**
 17 A. Yes, I do.
 18 **Q. Is there any reason that you can't**
 19 **continue to give your best testimony right now?**
 20 A. No.
 21 **Q. To your knowledge, have any of your**
 22 **opinions ever been excluded or limited by a court in**
 23 **a case where you offered opinions as an expert**
 24 **witness?**
 25 A. Not that I recall.

Page 140

1 **Q. Slightly different question. To your**
 2 **knowledge, have any of your opinions ever been**
 3 **criticized by a court in a case for which you**
 4 **offered opinions as an expert witness?**
 5 A. Yes.
 6 **Q. Can you tell me what example or examples**
 7 **you're thinking of?**
 8 A. Sears.
 9 **Q. That's an EEOC case against Sears in the**
 10 **'80s?**
 11 A. Yes. Georgia Power Company.
 12 **Q. Is that a Cooper case? Is that Cooper**
 13 **v. Southern?**
 14 A. Southern. Yeah. Southern. There were
 15 lower court cases in the Merrill Lynch cases, but
 16 ultimately the Court of Appeals upheld it. Really,
 17 call it exclusion when you quote Mark Twain and then
 18 don't deal with the statistical evidence. That was
 19 what the judge did.
 20 **Q. Which case are you speaking of?**
 21 A. I think it was Merrill Lynch, when he
 22 just quoted Mark Twain and the Court of Appeals was,
 23 no, you have to look at the evidence.
 24 **Q. Are you talking about "Lies, damn lies,**
 25 **and statistics" quote?**

Page 141

1 A. Yes.

2 **Q. Okay. I'm not sure that's actually**

3 **Twain, but I hear it attributed to him.**

4 A. Well, the judge did.

5 **Q. Yeah. If it would help to take a look**

6 **at your list of cases on your expert report. Maybe**

7 **it can --**

8 A. Well, that's only recent cases. I don't

9 think -- I don't think there's anything recently,

10 but let me --

11 **Q. Okay.**

12 A. -- I certainly can look at that.

13 **Q. Go to Exhibit 2, please.**

14 A. Yeah, Exhibit 2. Do you know if it's in

15 the front of the appen -- yes, it's in front of the

16 appendices, isn't it? No, the appendices -- see,

17 it's an attachment, right? Attachments, okay.

18 **Q. It's Attachment B, page 124-125.**

19 A. Okay. Thank you.

20 No, I don't think any of these --

21 none of these have had exclusions. That's the last

22 four years. There may be others where there was

23 criticism. I just don't recall.

24 **Q. Okay. Since you provided Attachment B**

25 **to your initial report, have you testified as an**

Page 142

1 **expert witness in any other cases?**

2 A. No.

3 **Q. So in other words, is there an update to**

4 **this?**

5 A. Yeah, no, I have not.

6 **Q. One of the cases listed here, and that**

7 **we spoke about earlier, is the OFCCP v. Enterprise**

8 **case. Enterprise Rent-a-Car?**

9 A. Yes.

10 **Q. That was a hiring case only; am I right?**

11 A. Yes.

12 **Q. And in order to assess whether there**

13 **were racial disparities in hiring, you looked at**

14 **actual applicant flow data, correct?**

15 A. I certainly looked at actual applicant

16 flow data. Yes, that's all I looked at because

17 the -- for testimony purposes. I looked at

18 availability and the applicant flow was in excess of

19 the availability, so there was no issue --

20 **Q. So the basis --**

21 A. -- of whether that applicant pool seemed

22 reasonable.

23 **Q. So the basis for your opinions in that**

24 **case were based on looking at who had actually**

25 **applied for the program at issue and then had been**

Page 143

1 **hired into it?**

2 A. Yes. Correct.

3 **Q. And because you were looking at actual**

4 **applicant flow data, there was no need in that case**

5 **for you to determine which groupings of employee to**

6 **put together in your statistical model, correct, the**

7 **groupings were the applicant pools as they existed?**

8 MS. FLORES: Objection. Vague.

9 A. Well, I mean, we certainly grouped the

10 applicant pools by credentials. I'm not quite sure

11 what you mean by "grouping". I mean, we looked at

12 the applicants, but they were grouped to be of

13 similar -- similarly situated.

14 **Q. Similarly situated with respect to**

15 **credentials in connection with a hiring claim?**

16 A. Yes, with their applications. With what

17 was on their applications.

18 **Q. This is the part of the deposition with**

19 **which you may be familiar where we parade through a**

20 **series of documents that I just need to you**

21 **authenticate for me.**

22 A. Sure. Sure.

23 MS. FLORES: Oh, counsel, by any

24 chance are you going to ask Dr. Madden to

25 authenticate the charts that we sent to...

Page 144

1 MS. MANTOAN: No. I will not be

2 doing that.

3 MS. FLORES: We would like to mark

4 it as an exhibit for this deposition.

5 MS. MANTOAN: I don't -- if there

6 were time at the end, potentially, but I don't

7 intend to mark this as an exhibit here.

8 MS. FLORES: Okay. These are the --

9 all copies of the documents we already provided to

10 you.

11 MS. MANTOAN: Right. I don't intend

12 to use them.

13 MS. FLORES: Okay.

14 MS. MANTOAN: In my examination of

15 this witness or mark it.

16 Is this 6?

17 COURT REPORTER: You're on 6.

18 (Madden Exhibit 6, Book, Fanning, "The Economics of

19 Sex Discrimination," was marked for identification.)

20 BY MS. MANTOAN:

21 **Q. So for this handful of documents that I**

22 **want to show you now, Dr. Madden, my question is**

23 **first going to be, is this either an article or a**

24 **expert of a book that you wrote?**

25 A. Madden 6 is my doctoral dissertation.

Page 145

1 Which was published, yes.
 2 **Q. And I'm, in fact, showing you the hard**
 3 **copy of the book, correct?**
 4 A. Yes. That actually may be a first
 5 edition.
 6 **Q. '73.**
 7 A. Yes. That's first edition.
 8 **Q. Is Lexington Books who published this, a**
 9 **publisher of academic literature?**
 10 A. Yes.
 11 **Q. Is there any peer-review process in**
 12 **determining whether Lexington Books would publish**
 13 **this work?**
 14 A. Yes.
 15 **Q. This is a peer-reviewed publication?**
 16 A. Well, it's a book.
 17 **Q. I know, right.**
 18 A. I mean, that's peer-reviewed differently
 19 than journal articles, but, yes, it was. I did get
 20 reviews, and had to respond to them before it was
 21 published.
 22 **Q. Do you believe that this Exhibit 6 is an**
 23 **authority that would be relied upon by people in the**
 24 **labor economics field?**
 25 A. I hope so, though it's pretty old.

Page 146

1 (Madden Exhibit 7, Madden, "Spatial Implications of
 2 Increases in the Female Labor Force...", November
 3 1980, was marked for identification.)
 4 **Q. So Dr. Madden, is Exhibit 7 a copy of an**
 5 **article that you co-authored?**
 6 A. Yes.
 7 **Q. And this was published in Land**
 8 **Economics?**
 9 A. Yes.
 10 **Q. Is that a peer-reviewed publication?**
 11 A. Yes.
 12 **Q. Do you believe that Exhibit 7 is an**
 13 **authority that would be relied upon by people in the**
 14 **labor economics field?**
 15 A. Yes.
 16 (Madden Exhibit 8, Madden, "Why Women Work Closer to
 17 Home", July 1980, was marked for identification.)
 18 **Q. Dr. Madden, is Exhibit 8 a copy of an**
 19 **article that you authored?**
 20 A. Yes, it is.
 21 **Q. And this was published in Urban Studies?**
 22 A. Yes.
 23 **Q. Is that peer-reviewed publication?**
 24 A. Yes.
 25 **Q. Do you believe Exhibit 8 is an authority**

Page 147

1 that would be relied upon by people in the labor
2 economics field?
 3 A. Yes, in a much wider field, because this
 4 is an interdisciplinary journal.
 5 (Madden Exhibit 9, Madden, "Women and Work, An
 6 Annual Review," 1985, was marked for
 7 identification.)
 8 **Q. So what is Exhibit 9, Dr. Madden?**
 9 A. It's a collective volume, an annual
 10 review that has articles from various people. I was
 11 on the editorial board, I believe, for this annual
 12 review for some time.
 13 **Q. So if there's an editorial review, this**
 14 **was a peer-reviewed collection?**
 15 A. Yeah. I think so. I'm not sure this is
 16 properly -- I don't recall, it's so old, but I
 17 think -- but I know there was an editorial board,
 18 because I was on it, but I'm not sure what kind of
 19 review that went through.
 20 **Q. When you say "it's old," it's from 1985,**
 21 **is what the third page indicates to me. Does that**
 22 **sound right to you?**
 23 A. Yes. That's probably right.
 24 **Q. And you wrote an article in this**
 25 **collection, "The Persistence of Pay Differentials,**

Page 148

1 the Economics of Sex Discrimination"?
 2 A. Yes.
 3 **Q. And do you believe that that article in**
 4 **Exhibit 9 that you wrote is an authority that would**
 5 **be relied upon by people in the labor economics**
 6 **field?**
 7 A. Yes.
 8 (Madden Exhibit 10, Madden, "Gender Differences in
 9 Behavior at Home and Work", was marked for
 10 identification.)
 11 **Q. Dr. Madden, is Exhibit 10 a copy of an**
 12 **article that you authored?**
 13 A. Yes.
 14 **Q. And this was published in Papers and**
 15 **Proceedings from the American Economic Association?**
 16 A. Yes.
 17 **Q. Is that a peer-reviewed publication?**
 18 A. The Papers and Proceedings are not
 19 generally peer reviewed. This one happened to be.
 20 **Q. Okay. And do you believe that Exhibit**
 21 **10 is an authority that would be relied upon by people**
 22 **in the labor economics field?**
 23 A. Yes.
 24 (Madden Exhibit 11, Madden, "The Gender Equity
 25 Report", Gender Equity Committee, December 2001, was

Page 149

1 marked for identification.)

2 **Q. Dr. Madden, do you recognize Exhibit 11?**

3 A. Yes.

4 **Q. What is it?**

5 A. It's from the employee newsletter at

6 Penn, a committee report reporting to the employees

7 at Penn on some activity going on for -- in review

8 of gender equity.

9 **Q. And it's reporting work that was done by**

10 **the gender equity committee at Penn, correct?**

11 A. It's reporting work that the gender

12 equity committee at Penn reviewed. They didn't give

13 us access -- I had been Dean. I had seen the real

14 data, but the committee itself didn't get access to

15 the data. They had to deal with the data the

16 University was willing to release in a public

17 format.

18 **Q. I see. But you were a member of this**

19 **gender equity committee?**

20 A. I was one of 16 people. Yeah, I was not

21 a chair.

22 **Q. But you saw the data that went into this**

23 **report, correct?**

24 A. I saw the data published in the report.

25 I don't -- I mean, I certainly, as Dean, had been

Page 150

1 working with the underlying data for a long time,

2 but that's not what this report was on, so...

3 **Q. Did you write any portion of this**

4 **report?**

5 A. The report was written by the chairs.

6 Now, I probably contributed. They probably asked me

7 to write up aspects of it.

8 **Q. And can I safely assume that any**

9 **sentences that are in this report, Exhibit 11, that**

10 **are verbatim the same sentences that are in one or**

11 **both of your reports in this case are probably ones**

12 **that you wrote --**

13 A. Probably.

14 **Q. -- in the 2001 report?**

15 A. Probably, yes.

16 **Q. Okay. And Exhibit 11 reports, among**

17 **other things, the results of salary analyses that**

18 **were done at the University of Pennsylvania?**

19 A. By the University that they were willing

20 to release to public domain.

21 **Q. Were you involved in the design of the**

22 **salary analyses that are reported in Exhibit 11?**

23 A. No.

24 **Q. Did you have the opportunity to review**

25 **the salary analyses reported in Exhibit 11 before**

Page 151

1 **they were made public?**

2 A. That are reported here, yes.

3 **Q. Did you give any input or comment on**

4 **those analyses between the time you reviewed them**

5 **and the time this report was published?**

6 A. I don't recall. This is pretty old,

7 isn't it? It's 2001. It's 18 years ago. I don't

8 recall.

9 **Q. If you have an understanding, what was**

10 **the objective of the gender equity committee in**

11 **generating this report?**

12 A. Well, the faculty senate put this

13 together. The University is very interested in

14 having me serve on the committee, and so got me

15 appoint to the committee. I as Dean, had been doing

16 a long series of analyses internally to Penn to try

17 and make sure we had equity. I had never run an

18 analysis with a gender or race coefficient, however,

19 because I was fully in support of the University

20 looking at equity, but I didn't want to do something

21 that was going to get them sued for doing it.

22 So I was put on this, but I had no

23 ability -- I -- obviously they wouldn't let me talk

24 about anything. But I was really curious what would

25 happen when they tried to run gender or race. If

Page 152

1 this was gender. Since I had never done that for

2 obvious -- and so -- and I did see these results

3 that they chose to share that indeed have -- I mean,

4 what's reported here is accurate. I was very

5 pleased that all of those years when I had been

6 doing more aggressive analysis seemed to have worked

7 out.

8 **Q. When you saw these analyses between --**

9 **you said you saw them before this report was**

10 **published, right?**

11 A. Well, yeah. The committee had this to

12 write up the report, yeah. The University turned

13 over the analyses to us.

14 **Q. And did you at any point in that process**

15 **say I don't think we should report these out because**

16 **these analyses are poorly designed?**

17 A. I would never have said that because

18 that would have hurt the University. I mean, that

19 was -- no.

20 **Q. Did you come to form a view that these**

21 **analyses were poorly designed?**

22 A. I don't think they're poorly designed.

23 I think they're appropriately designed for an

24 employee newsletter.

25 **Q. What do you mean by, "for an employee**

Page 153

1 newsletter"?

2 A. To let the employees get some sense of

3 what's going on and not threaten the University

4 being sued by what they publish.

5 Q. You said earlier that, when I asked you

6 if you wrote any portion of this report, that the

7 chairs probably asked you to write up aspects of it?

8 A. Yes.

9 Q. Are you able to -- do you recall which

10 portions you, in particular, wrote?

11 A. No, I don't, but I would presume they

12 would have wanted me to do compensation. Salary

13 analysis. That's -- to the extent I wrote anything,

14 it's probably in there.

15 Q. So to the -- if we could turn you to

16 Roman numeral V, that's part 3, salary analysis.

17 And I appreciate the print is small.

18 A. Yes.

19 Q. My apologies for that.

20 A. All right.

21 Q. The Section -- Part 3 Salary Analyses

22 begins, "We analyzed whether a faculty member's

23 gender affected his or her salary in the 1999-2000

24 academic year."

25 Do you have an understanding of who

Page 154

1 the "we" is in that sentence?

2 A. That would be the committee.

3 Q. So you and the other committee members?

4 A. Yes.

5 (Madden Exhibit 12, Madden, "Preface." Annals,

6 AAPSS, 596, November 2004, was marked for

7 identification.)

8 Q. Dr. Madden, do you recognize Exhibit 12?

9 A. Yes.

10 Q. What is it?

11 A. It's a preface to a volume of the

12 American Academy of Political and Social Sciences

13 that reports a conference Jerry Jacobs, my

14 colleague, and I, organized when I was director of

15 the Alice Paul Center For Research on Women at Penn,

16 and was funded by -- oh, gee, I hope I can thank

17 them. It's an introduction to that volume.

18 Q. And so that when I look on page 1 and I

19 see at the bottom, annals, AAPSS. Is AAPSS the

20 American Academy of Political and Social Science?

21 A. Yes.

22 Q. Would you consider this the volume to

23 which this is a preface to be a peer-reviewed

24 publication?

25 A. No.

Page 155

1 Q. But you wrote the preface to this,

2 correct?

3 A. Yes.

4 Q. Do you think that the -- that the volume

5 to which this is a preface is a text that would be

6 relied upon by people in the labor economics field?

7 A. Some parts of it, not all of it. It's

8 broader than economics and there are people who are

9 not economists who are writing there.

10 (Madden Exhibit 13, The National Academies Press,

11 "Collecting Compensation Data from Employers", was

12 marked for identification.)

13 Q. Dr. Madden, do you recognize Exhibit 13?

14 A. Yes, I do.

15 Q. What is it?

16 A. It's the volume published by the

17 committee -- what's the name of the committee. The

18 panel on measuring and collecting pay information

19 from US employers by gender, race and national

20 origin. The Committee on National Statistics and

21 the National Research Council.

22 It's the summary of their results --

23 of their meetings.

24 Q. And you were a member of that committee,

25 correct?

Page 156

1 A. Yes, I was.

2 Q. Did you author any part of Exhibit 13?

3 A. I don't believe so.

4 Q. Who did author it, if you know?

5 A. Does it say?

6 Q. Well, I'll say the preface is

7 attributed. So if you go through Roman numeral xii,

8 the preface is signed by John --

9 A. John Abowd was the chair, but he

10 certainly had more to do with writing it, but I

11 think there was employees of the academy. He might

12 mention it in the preface. I don't recall,

13 actually, but I think it was authored by members --

14 it was the first drafts were done by members of

15 the -- employed members of the National Research

16 Council, and we responded to these in making the

17 report happen.

18 Q. Sorry. I'm not clear when you say, "we

19 responded to these," who the "we" is?

20 A. The committee.

21 Q. So the first drafts were done by members

22 of the National Research Council, and then the

23 committee reviewed and edited this?

24 A. It's not members of the -- the first

25 draft was done by employees of the National Research

Page 157

1 Council.

2 **Q. I see. And then members of the**

3 **committee, including yourself, reviewed those**

4 **drafts, and revised them to create this final?**

5 A. Yes.

6 **Q. Is there any particular -- without**

7 **looking through the -- you know, every word of the**

8 **whole document, maybe the table of contents. Is**

9 **there any particular portion that you remember being**

10 **more or less involved in revising?**

11 A. I certainly had nothing to do with

12 Sections 4 and 5, the survey design and statistical

13 methodology, and the confidentiality disclosure and

14 data analysis.

15 The first three, I might have had

16 some role in.

17 **Q. Flipping back to page -- well, there's**

18 **two runs of Roman numerals here -- but flipping back**

19 **before the contents to the panel on measuring and**

20 **collecting pay information, the list of individuals**

21 **there.**

22 A. Yes.

23 **Q. Do you view these individuals as**

24 **reputable academics and/or private practitioners?**

25 A. Yes.

Page 158

1 (Madden Exhibit 14, Statement of Janice Fanning

2 Madden, Harrisburg, 9.18.2014, was marked for

3 identification.)

4 **Q. Dr. Madden, do you recognize Exhibit 14?**

5 A. Yes.

6 **Q. Is this a statement that you prepared**

7 **for a legislative hearing in Pennsylvania?**

8 A. Yes.

9 **Q. And that's your signature on page 4?**

10 A. Yes.

11 **Q. Do you recall what you were giving**

12 **testimony in connection with or what making a**

13 **statement, I suppose, in connection with?**

14 A. I don't remember what the act was. I

15 don't remember. If I read the statement, I probably

16 could. I'm sorry.

17 **Q. No. That's fine. I was just wondering**

18 **if you had an independent recollection?**

19 A. No. It's only five years ago, but I'm

20 sorry, I don't remember.

21 (Madden Exhibit 15, Madden, "Pay Gap," 2017, was

22 marked for identification.)

23 **Q. Do you recognize Exhibit 15, Dr. Madden?**

24 A. No. Oh, well, I haven't -- you know, I

25 have never seen this in this in print form.

Page 159

1 **Q. I have extra copies you can take.**

2 A. This is for an encyclopedia. Social

3 Science Encyclopedia.

4 **Q. So you did write this entry, correct?**

5 A. Yeah. I did write this. I have never

6 seen it in this form.

7 **Q. The publication date here is 2017. Do**

8 **you recall that's about when you wrote it, or did**

9 **you write it sometime before that?**

10 A. It took it a long time. I mean, it

11 wasn't -- I mean, it wasn't written before the 2014,

12 but it might have been 2016 or 2015. I just don't

13 recall.

14 **Q. Okay. How did you come to be writing an**

15 **entry for this Encyclopedia of Social Theory. Did**

16 **someone ask you to write it?**

17 A. Yes, I was invited.

18 **Q. By whom?**

19 A. I don't remember.

20 (Madden Exhibit 16, Madden Affidavit, 9.8.2017, was

21 marked for identification.)

22 **Q. Dr. Madden, is Exhibit 16 an affidavit**

23 **that you submitted in the Chamber of Commerce For**

24 **Greater Philadelphia v. City of Philadelphia case?**

25 A. Yes, it is.

Page 160

1 **Q. And flipping to page 16, is that your**

2 **signature?**

3 A. Yes, it is.

4 (Madden Exhibit 17, Cooper v. Southern, Madden

5 Expert Report, was marked for identification.)

6 **Q. So Dr. Madden, I think earlier today you**

7 **mentioned the Southern Company case in Georgia?**

8 A. Yes.

9 **Q. And I asked if it was the Cooper case.**

10 **I'll represent to you that this is a document that**

11 **we obtained from a legal research service, because**

12 **the docket did not have the report available that**

13 **far back.**

14 **You did give an expert report in the**

15 **Cooper v. Southern case, correct?**

16 A. I wrote a report. Yeah, I never

17 testified, but I did give a report.

18 **Q. The title I see here -- and again,**

19 **obviously, this is not your report itself, like the**

20 **document that you submitted, but you presented a**

21 **report titled, "Evaluating Whether Employment**

22 **Practices at Southern Company are -- I suspect you**

23 **didn't have the typo there -- "Racially Neutral."**

24 A. Who knows. I don't know. I have no

25 reason to believe it's not the case.

Page 161

1 **Q. Okay. Do you have a copy of this report**
 2 **somewhere?**
 3 A. I don't know.
 4 **Q. Okay. But you don't have any reason to**
 5 **believe this is not your report?**
 6 A. Well, I note that there's no tables, and
 7 that to me is the heart of the report, so I don't...
 8 **Q. Right. Yeah, on page 9, there's just**
 9 **reference to -- to omitted tables.**
 10 **Okay, but you did write a report**
 11 **around 2001 in this Cooper v. Southern case?**
 12 A. Yes. Yes, I did.
 13 (Madden Exhibit 18, Madden Expert Report, Gutierrez
 14 v. Johnson & Johnson, was marked for
 15 identification.)
 16 **Q. Dr. Madden, is Exhibit 18 a report that**
 17 **you submitted in the Gutierrez v. Johnson & Johnson**
 18 **case?**
 19 A. I don't want to answer that, because my
 20 understanding is all of this is under seal and I'm
 21 not allowed to testify about it. I'd like to check
 22 whether that's the case before we proceed on this.
 23 **Q. I will represent that I -- we pulled**
 24 **this from a publicly-available docket. So I went**
 25 **online to the docket of this court and pulled this**

Page 162

1 **document.**
 2 MS. FLORES: I don't know if
 3 Dr. Madden is under a different protective order,
 4 even if the document is made public, whether or not
 5 she can testify about other aspects.
 6 MS. MANTOAN: I simply want to know
 7 if she gave an expert report in the Gutierrez v.
 8 Johnson & Johnson case.
 9 A. I can say I did that.
 10 **Q. Flipping to page 47, can you just look**
 11 **at signature that's an page 47. I'm not asking**
 12 **about any other content. Just is that your**
 13 **signature there above Dr. Becker's?**
 14 A. Yes.
 15 (Madden Exhibit 19, Madden Expert Report, Allstate
 16 Insurance, 11.6.2007, was marked for
 17 identification.)
 18 **Q. Dr. Madden, is Exhibit 19 a report that**
 19 **you submitted in the Puffer v. Allstate case?**
 20 A. I submitted such a report. I again,
 21 even on this one, I'd like to check about whether
 22 I'm free to testify about that.
 23 **Q. Okay.**
 24 A. But I did submit a report in the case.
 25 **Q. Okay. You did submit a report in Puffer**

Page 163

1 **v. Allstate?**
 2 A. Yes.
 3 **Q. And I'm not asking you to look at or**
 4 **testify about the content, but just flipping to**
 5 **what's numbered page 23 in this document. I'd just**
 6 **like to confirm that that's your signature.**
 7 A. Yes.
 8 (Madden Exhibit 20, Madden Expert Report, Boeing,
 9 6.8.2005, was marked for identification.)
 10 **Q. Dr. Madden, is Exhibit 20 a report that**
 11 **and Dr. Vekker submitted in the case of Williams v.**
 12 **Boeing?**
 13 A. Yes.
 14 **Q. Turning to page 29...**
 15 A. Yes.
 16 **Q. Is that your signature?**
 17 A. Yes, it is.
 18 (Madden Exhibit 21, Madden, "Evaluating Pay
 19 Differences by Gender...", 5.10.2013, was marked for
 20 identification.)
 21 **Q. Dr. Madden, is Exhibit 21 a report that**
 22 **you submitted in the Moore v. Publicist case?**
 23 A. Again, I am not sure I'm free to testify
 24 about this. I understand this one is still in
 25 process. I certainly -- I will say I submitted a

Page 164

1 report in the case.
 2 **Q. Okay. And then again, let's flip over**
 3 **to page 15. I just want to confirm that that's your**
 4 **signature on page 15?**
 5 A. Yes, it is.
 6 **Q. If we could turn back to your original**
 7 **report, Exhibit 2. I have some questions about**
 8 **Table 1A, flip to page 60.**
 9 A. Yes.
 10 **Q. I wanted to ask you some questions just**
 11 **to make sure that I understand what these variables**
 12 **are.**
 13 A. Yes, okay.
 14 **Q. My first question, though, is if we're**
 15 **going to talk about, say, the education variable**
 16 **that's in column 4, am I correct that anytime in the**
 17 **remainder of this report in the other tables that I**
 18 **see "education," it means the same thing?**
 19 MS. FLORES: Objection. Vague.
 20 A. I believe so, in this report, yes.
 21 **Q. So looking at Table 1A, column 4 says,**
 22 **"adds education". What -- what did you -- strike**
 23 **that.**
 24 **That control for education, my**
 25 **understanding is, is based on the resume scraping**

Page 165

1 exercise that you described earlier, correct?
 2 A. About -- maybe 20 percent of that data
 3 is, yes.
 4 Q. Okay. And the other data was from
 5 electronic databases that you received, correct?
 6 A. Yes.
 7 Q. Okay. And what's -- strike that.
 8 The education variable used here
 9 reflects the employee's highest terminal degree,
 10 correct?
 11 A. Yes.
 12 Q. Or unknown, in cases where that was
 13 unknown, correct?
 14 A. That's correct.
 15 Q. And that unknown is the value that over
 16 half of the employees in the population had for this
 17 variable?
 18 A. For Table 1A.
 19 Q. Is that -- is it true throughout that
 20 for each of these studies over half of the
 21 population got "unknown" as their education
 22 variable?
 23 A. No, it is not.
 24 Q. Where is it not true?
 25 A. Table 1C.

Page 167

1 A. That's true for Table -- that's true
 2 for -- that's true for the education column in Table
 3 1A. It's not true for Table 1A.
 4 Q. Okay. What I'm focusing in on what is
 5 education variable means.
 6 A. That's correct.
 7 Q. And the education variable that you used
 8 in your initial report and your rebuttal report does
 9 not capture the school attended; is that correct?
 10 A. Absolutely. That should not be
 11 included.
 12 Q. Okay. And the education variable that
 13 you used in your initial report and your rebuttal
 14 report does not capture academic performance or
 15 honors, correct?
 16 A. That's true. I mean, that never is a
 17 significant in any analysis. At a company that
 18 selected employees.
 19 Q. And the education variable that you used
 20 in your initial report doesn't contain any features
 21 that attempt to describe the relevance of that
 22 particular degree to any particular position that an
 23 employee holds at Oracle, correct?
 24 MS. FLORES: Objection. Vague. And
 25 compound.

Page 166

1 Q. Okay. Fair enough.
 2 A. And then Table 2C.
 3 Q. Okay. Fair.
 4 So you're talking about Table 1B,
 5 right, where you're limiting it to employees with
 6 recorded education characteristics --
 7 A. Oh, I'm sorry. I may have them
 8 backwards.
 9 Q. -- is that right?
 10 A. Yes. It's 1B. 1B and 2B. C, is C base
 11 pay? I was thinking that was base pay. But, no, 1A
 12 is all employees; and 1B is only those with
 13 education recorded.
 14 Q. Okay. And this education control that
 15 you used in Table 1A and elsewhere in this report
 16 does not capture the field of study, correct?
 17 A. No. I did subsequent analyses to cover
 18 that.
 19 Q. Sorry. I put a negative in my question.
 20 So let me try to ask that.
 21 The education control you used in
 22 Table 1A and elsewhere in your initial report and
 23 your rebuttal report, nothing in that variable
 24 includes a field of study, correct?
 25 MS. FLORES: Objection. Vague.

Page 168

1 A. No, it does not because that work is
 2 done by subsequent analyses which do, and pick up
 3 that concern, because we do want to see how good
 4 education without that works relative to considering
 5 the areas.
 6 Q. In Table 1A, "unknown" is the most
 7 common value for education that any of these
 8 employees had, correct?
 9 A. Correct.
 10 Q. Okay. In Table 1D, which is the base
 11 pay table, "unknown" is the most common value for
 12 education that any of these employees had, correct?
 13 A. That is correct.
 14 Q. In Table 2A, which is the Medicare
 15 earnings table for Asian employees, "unknown" is the
 16 most common value for education among these
 17 employees, correct?
 18 A. Yes.
 19 Q. In Table 2 --
 20 A. That's why I performed Table 2D.
 21 Q. In Table 2D, this is base pay analysis
 22 for Asian, "unknown" is the most common value for
 23 education among these employees, correct?
 24 A. I'm having a lot of trouble reading
 25 this. I'm sorry. I compared these tables when I

Page 169

1 had much better eyesight. I'm not even finding
 2 Table 2D. So I want to make...
3 Q. Page 70.
 4 A. Yes. I'm looking. Yeah. 2D is for
 5 those that -- that is the most common. And 2E is
 6 look only at those that have recorded education. So
 7 in each case, I looked at recorded education -- the
 8 sample with only recorded education to look at the
 9 example of the unknown.
10 Q. And you did that by just when you moved
11 from say, 2D to 2E, you just dropped any employees
12 for whom you had unknown education info?
 13 A. That's what it means to look at the
 14 employees with recorded education, yes.
 15 MS. FLORES: And counsel, just add
 16 the additional analysis that we shared also have to
 17 do with the variable 4 for education.
 18 MS. MANTOAN: I don't believe
 19 there's any additional analysis properly before this
 20 case or in this deposition.
 21 BY MS. MANTOAN:
22 Q. At several points in your initial report
23 you talk about controlling for prior experience or
24 experience. Do you recall that?
 25 A. Yes. Yes.

Page 171

1 MS. FLORES: Objection. Vague.
 2 A. Of course not, and I don't assume that
 3 nor did I assign that to employees.
4 Q. Okay. Why do you believe that job
5 descriptor provides any information about the type
6 of prior experience that different employees at
7 Oracle had?
 8 A. Because I would assume that a fair-
 9 minded employer is hiring people looking at their
 10 experience and hiring them into jobs in which they
 11 have prior experience. And certainly, that's going
 12 to be the most common thing done, and they would do
 13 that even-handedly between Asians and whites or
 14 between women and men or between blacks and whites.
15 Q. Do you know anything about the
16 distribution of types of prior experience among
17 people who were hired into the software developer
18 job descriptor?
 19 A. No. I don't believe that's on the
 20 database. And I don't believe it's in the -- not on
 21 the database and it wasn't in the other materials
 22 given to me.
23 Q. Do any of your controls for experience
24 or prior experience pre-Oracle reflect the number of
25 years in the workforce versus the number of years

Page 170

1 Q. The way that you controlled for
2 experience or prior experience was by using an
3 employee's age, correct?
 4 A. That's the primary way. It's not only
 5 way.
6 Q. When you did that, did you look at years
7 since terminal degree?
 8 A. No. I mean, with so many employees
 9 without education unknown, that would not be a
 10 proper analysis.
11 Q. When you used age as a control for
12 experience or prior experience, that doesn't provide
13 any information about the type of prior experience,
14 would you agree?
 15 A. No, the job descriptor at hire did that.
 16 That was the -- I did another analysis to look at
 17 that issue.
18 Q. Well, job descriptor is, again, is a
19 variable that you created, correct?
 20 A. It's a variable by created using
 21 Oracle's groupings.
22 Q. Have you seen any information that says
23 that everyone hired into a -- what you called the
24 software developer job descriptor has the same prior
25 experience?

Page 172

1 out of the workforce?
 2 A. They -- it wouldn't because, of course,
 3 for this population, the years out of the labor
 4 force are minuscule, after education.
5 Q. Based on what do you say that?
 6 A. Based on all of the work that I have
 7 done in STEM work in this country on developing
 8 models and databases for measuring STEM
 9 participation.
10 Q. Okay. Do you have any information
11 specific to Oracle about that being -- there being
12 minimal -- minuscule time out of the workforce for
13 any of the employees here?
 14 A. Yes. I think that Oracle is typical of
 15 these kinds of STEM employers, maybe even more
 16 prestigious and arguably less likely to have this
 17 than is the general in the STEM workforce.
18 Q. Well, when you talk about STEM
19 employers, I thought you testified earlier that you
20 have not done an evaluation of compensation at a
21 technology company in the sense that I defined
22 earlier, one that focuses on software products?
 23 MS. FLORES: Objection.
24 Q. Is that correct?
 25 MS. FLORES: Objection. Vague. And

Page 173

1 misstates testimony.
 2 A. That's correct, and it has nothing to do
 3 with the question you asked me, nor would that
 4 information be useful to answer the question that
 5 you asked me.
 6 **Q. Turning back to Table 1A, I just want to**
 7 **ask about the time at Oracle control that's added in**
 8 **column 5.**
 9 **Am I understanding correctly that**
 10 **that's time since most recent hire at Oracle**
 11 **America, Inc.?**
 12 A. I don't think so. I would have to check
 13 that, but I thought we counted all time at Oracle
 14 America, including previous. I would have to check
 15 that with my coder, but I thought we put everything
 16 in there.
 17 **Q. Does the time at Oracle variable include**
 18 **time that might have been spent at an acquired**
 19 **company prior to joining Oracle?**
 20 A. No, it does not.
 21 **Q. Does the time at Oracle variable include**
 22 **the time that might have been spent at an Oracle**
 23 **affiliate overseas somewhere in Europe or Asia?**
 24 A. No, unless they're Oracle America, as I
 25 testified, it includes time at Oracle America.

Page 174

1 **Q. A few questions about how you**
 2 **constructed the job descriptor variable that you**
 3 **introduced in column 6.**
 4 A. Yes.
 5 **Q. The job descriptor variables you created**
 6 **grouped together employees without regard to their**
 7 **global career level, correct?**
 8 A. Yes.
 9 **Q. So the software developer, again, by way**
 10 **of example, the software developer, job descriptor**
 11 **would include IC1 employees all the way up to M6,**
 12 **M7, whatever the highest?**
 13 A. Yes. The job descriptor is designed to
 14 look at the substantive quality of the job. What
 15 field it's in.
 16 **Q. Am I correct --**
 17 A. Major or area that you're working in.
 18 **Q. Am I correct that the largest job**
 19 **descriptors that you created contain thousands of**
 20 **employees?**
 21 A. I don't know. I don't know if any
 22 regression analysis has 2,000 people in one job
 23 descriptor. I'd have to check that. Certainly --
 24 or 3,000. That would be actually a little
 25 surprising, but I don't know.

Page 175

1 **Q. Am I correct that the largest**
 2 **descriptors that you created contain hundreds or**
 3 **more employees?**
 4 A. Yes.
 5 **Q. What, if anything, did you do to study**
 6 **how the job descriptor variable you created relates**
 7 **to work performed at Oracle?**
 8 MS. FLORES: Objection. Vague.
 9 A. It's based on -- entirely on Oracle's
 10 job codes. So I presume that Oracle knew what it
 11 was doing, and I -- it was not inappropriate and
 12 it's using the same -- they're very -- it is
 13 combining across GCL codes and sometimes there's the
 14 same -- pretty much the same kind of thing that's
 15 spelled differently, but it's basically using the
 16 categorizations that were used by Oracle, but
 17 taking -- but adding across some of the modifiers of
 18 those categorizations.
 19 **Q. So you didn't yourself study how or if**
 20 **the job descriptor variable related to work**
 21 **performed at Oracle. It sounds like you assumed a**
 22 **relationship based on your reading of certain**
 23 **materials?**
 24 A. I assumed that Oracle was describing
 25 their jobs, putting jobs appropriately into these

Page 176

1 categories.
 2 **Q. When you say putting jobs appropriately**
 3 **into these categories, you assumed that Oracle's job**
 4 **families operated to compare people who performed**
 5 **similar work?**
 6 MS. FLORES: Objection. Vague as to
 7 job families, similar work, and overall. And also
 8 compound.
 9 A. I presume that when Oracle described
 10 these people as substantively with words that were
 11 the same, that they were substantively in the same
 12 area. I don't know what you mean by "similar work"
 13 and I never used that in that exact way, I don't
 14 think.
 15 Remember, I'm primarily using this
 16 by itself to look at people who are likely have
 17 similar majors and similar types of experiences. So
 18 that's what the categorization is for.
 19 **Q. Okay. So what, if anything, did you do**
 20 **to study how job descriptor relates to educational**
 21 **background?**
 22 A. I did this analysis of the effects of
 23 major versus job descriptor on pay. And actually
 24 found that they're pretty close.
 25 MS. MANTOAN: So I'll just put on

<p style="text-align: right;">Page 177</p> <p>1 the record to the extent that's referring to 2 anything that was untimely produced, we will be 3 moving to strike any testimony about it. 4 BY MS. MANTOAN: 5 Q. In the initial report and the rebuttal 6 report, can you point me to any -- let's say this: 7 Before you issued your initial report, which 8 included the job descriptor variable, what, if 9 anything, did you do to study how the job descriptor 10 variable relates to the educational background of 11 employees? 12 A. I didn't care how -- well, it's a 13 specific education matter I was using this for, and 14 that was to try and look at what the relevance of 15 the area studied in college and the prior work 16 experience was to Oracle's jobs. And I assumed that 17 Oracle was generally assigning people to those jobs 18 in which they had prior work experience, and their 19 education was in the appropriate areas. 20 I didn't -- I didn't think that 21 Oracle was randomly assigning people outside of 22 their education and prior experience to jobs. If 23 they did that, then this isn't such a good variable, 24 but it seems to be working in that way when I 25 compared it to what happened when we looked at</p>	<p style="text-align: right;">Page 179</p> <p>1 Q. What -- 2 A. -- to look at what the particular areas 3 of specialization, either coming from prior 4 experience or from college training might be. 5 Q. And what are the differences between 6 skills that are needed to be an App developer versus 7 a software developer at Oracle? 8 A. I don't know. 9 I'm sure Oracle knows, however, and 10 I would rely on their judgment over mine in any 11 case, even if I had some knowledge. 12 MS. MANTOAN: Can we take a five- 13 minute break. 14 THE VIDEOGRAPHER: The time is 1:11 15 p.m. We're going off the video record. 16 (RECESS, 1:11 p.m. - 1:22 p.m.) 17 THE VIDEOGRAPHER: The time is now 18 1:24 p.m. We are back on the video record. 19 BY MS. MANTOAN: 20 Q. Dr. Madden, I wanted to ask you some 21 questions about the analysis in Appendix B in your 22 initial report. So let me ask first if you could 23 turn in your initial report to page 51. It's where 24 you describe what you have reported in Appendix B. 25 Let me know when you're there.</p>
<p style="text-align: right;">Page 178</p> <p>1 college major. 2 Q. Let me talk through maybe a specific 3 example to try to make sure I understand. 4 So one of the job descriptors that 5 you created was software development, correct, 6 according to Appendix A of your initial report? 7 A. It should be one. Let me see, yes. 8 Q. And another job descriptor that you 9 created was Apps developer, correct? 10 A. Yes. Yes. 11 Q. Okay. What, if anything, did you do to 12 study whether people who were entering what you call 13 the App developer job descriptor had any differences 14 in educational background to those entering the 15 software development job descriptor? 16 MS. FLORES: Objection. Vague. 17 A. I assumed that the people who were 18 placing people into these job titles at Oracle were 19 putting people in Apps developers that had the 20 programming skills that were more relevant to Apps 21 development, and the programming skills that were 22 more relevant to software development into software 23 development. That's actually much narrower than a 24 major would be, but it was getting -- drilling down 25 beyond major to look at --</p>	<p style="text-align: right;">Page 180</p> <p>1 A. All right. I'm there. Yes. 2 Q. And the paragraph that begins with the 3 word, between, says, "Between 2013 and 2008, Oracle 4 was less likely to award women than to award men who 5 were in global career level of IC3 and IC4, higher 6 global career levels. See regress analysis in 7 Appendix B." Correct? 8 A. Mm-hmm. Mm-hmm. 9 Q. Am I correct that you didn't reach any 10 conclusions about moving to higher global career 11 levels for Asians as compared to whites, correct? 12 A. I -- I did. I mean, I think I said here 13 several times that there's no evidence that there's 14 a difference. 15 Q. Okay. And with respect to career level 16 progression for women in any levels except the two 17 you list here, you haven't stated any conclusions 18 one way or another, correct? 19 A. Well, these are overwhelmingly the 20 largest group, but in response to Dr. Saad's 21 rebuttal, I have since looked at this and done a 22 broader analysis which controls for year and 23 controls for all of the -- no, wait a minute. I 24 don't think -- I'm sorry. I don't think I did. I 25 don't remember if I -- I think I have looked at</p>

Page 181

1 broader categories in a multiple pools analysis, I
 2 believe.
 3 **Q. I'm going to move to strike that**
 4 **testimony. Mark the next.**
 5 (Madden Exhibit 22, log:
 6 C:\Client\Oracle\Report\Analyses\Log_AppendixB.log,
 7 was marked for identification.)
 8 THE WITNESS: Can I just -- I want
 9 to see that question again.
 10 And I also think my original report
 11 does that. So I think that my controlling for
 12 starting position and ending position and finding a
 13 difference why gender is also controlling for the
 14 same thing overall.
 15 BY MS. MANTOAN:
 16 **Q. I would like to ask you some questions**
 17 **about Exhibit 22, which is in front of you -- I**
 18 **believe has been handed to you. If you look at top**
 19 **of the first page, you can see that it's a log file**
 20 **with the name "LOG_AppendixB.log"?**
 21 A. Yes.
 22 **Q. Does this look to you like the log file**
 23 **underlying your Appendix B?**
 24 A. Yes.
 25 **Q. I'll represent to you that I did make**

Page 182

1 two changes from what was produced, what your
 2 counsel produced. One was to add page numbers to
 3 the bottom for ease of our reference here, and the
 4 second was to highlight certain material. There was
 5 not highlighting in the original. I did that for
 6 ease of reference in this deposition.
 7 MS. FLORES: Counsel, just so you
 8 know, the page numbers on mine are cut off, like the
 9 original Dr. Saad.
 10 MS. MANTOAN: I appreciate that.
 11 Yes.
 12 A. Mine, too.
 13 MS. FLORES: Okay.
 14 MS. MANTOAN: Yes.
 15 BY MS. MANTOAN:
 16 **Q. Aside from partial sometimes obscured**
 17 **page numbers, and the additional highlight, does**
 18 **this otherwise appear to you to be the log file that**
 19 **underlies Appendix B?**
 20 A. Yes.
 21 **Q. So if we could turn to 15, and I**
 22 **appreciate that the numbers are cut off, but it's**
 23 **where the highlighting says "prior_GCLEqualsIC3".**
 24 A. IC2 or IC3?
 25 **Q. IC3, please.**

Page 183

1 A. Yes.
 2 **Q. I just wanted to make sure that I'm**
 3 **understanding where in this log file is the source**
 4 **of the numbers in Appendix B. So that's what my**
 5 **next series of questions will concern.**
 6 A. Mm-hmm.
 7 **Q. So having turned to where it says prior**
 8 **GCLIC3, that means prior global career level was**
 9 **IC3, correct?**
 10 A. Yes.
 11 **Q. And then if we flip over to the next**
 12 **page, it's continuing to describe information about**
 13 **how you could structure this progression?**
 14 A. Yes.
 15 **Q. And then it says, again, I'm on page 16,**
 16 **the one immediately following where we were. Number**
 17 **of observations, 3433. Do you see that highlighted?**
 18 A. For IC3, yes.
 19 **Q. Correct, and that matches the N that you**
 20 **reported in Appendix B for IC3.**
 21 A. I see. Just a minute --
 22 MS. FLORES: 103.
 23 A. Yeah. I know. I'm trying to find
 24 Appendix B.
 25 **Q. It is page 103. Yeah, it would be**

Page 184

1 helpful for these line of questions to perhaps have
 2 Appendix B next to the log.
 3 A. Yeah. Unfortunately, this wasn't
 4 stapled and now everything's gotten messed up so...
 5 75 -- this is 51. Okay. 79, 80. Okay, just a
 6 minute. My staff would never give me anything not
 7 stapled. Let's see. So it's after the tables?
 8 Yes, it's got to be. It's after Attachment A.
 9 Okay. Got it. All right.
 10 **Q. Okay. So you agree that where we're**
 11 **looking in this log file, page 16, where it says,**
 12 **number of observations, 3433?**
 13 A. Yes. Mm-hmm.
 14 **Q. That's the number that you report in**
 15 **Appendix B?**
 16 A. Yes.
 17 **Q. And if you look down next to female**
 18 **where there's a coefficient negative --**
 19 **A. Mm-hmm.**
 20 **Q. -- .1931224, that's the same gender**
 21 **coefficient that you're reporting in Appendix B?**
 22 A. Yes, it.
 23 **Q. And the Z is the standard deviation that**
 24 **you're reporting in Appendix B for IC3?**
 25 A. Yes.

Page 185

1 Q. And that's a statistically significant
 2 standard deviation, correct?
 3 A. Yes. Yes.
 4 Q. So those -- that information that we
 5 just looked at on pages 15 and 16 of the log file,
 6 you included that in Appendix B?
 7 A. Right.
 8 Q. So we can flip over two pages to where
 9 prior GCLIC4 is highlighted?
 10 A. Yes.
 11 Q. Here we have a number of observations
 12 for this analysis of 6823?
 13 A. Yes.
 14 Q. And that matches the number for IC4 in
 15 Appendix B?
 16 A. That's correct.
 17 Q. And the coefficient on gender is -- I'm
 18 sorry, the coefficient on female on the same page of
 19 the log file is negative .1562446?
 20 A. Yes.
 21 Q. And that corresponds to the gender
 22 coefficient you included in Appendix B for IC4?
 23 A. Yes.
 24 Q. And the Z score in the log file of
 25 negative 2.87, that corresponds to the standard

Page 186

1 deviation that you recorded in Appendix B for IC4?
 2 A. Yes.
 3 Q. Okay. So those results you also
 4 included in Appendix B?
 5 A. Yes.
 6 Q. Okay. So now, could we flip back to IC2
 7 in Exhibit 22.
 8 A. Yes.
 9 Q. Which begins on page 13. Although again
 10 apologies that the page numbers are truncated.
 11 So this is what your -- the same
 12 regression model, the results that it generated for
 13 movement from IC2 to IC3, correct?
 14 A. Yes. Yes.
 15 Q. If I flip over to page 13, there were
 16 1,380 observations?
 17 A. Yes. Much smaller than the other two,
 18 as I said.
 19 Q. I'm sorry. We had flipped over to page
 20 14 where there are 1,380 observations, correct?
 21 A. Yes.
 22 Q. And the coefficient on gender here
 23 is .0200689, correct?
 24 A. Yes.
 25 Q. That's a positive coefficient?

Page 187

1 A. Yes. It's basically zero, yes.
 2 Q. Okay. What does it mean when -- in a
 3 regression model like the one you've structured
 4 here, if the coefficient on female is positive?
 5 A. Well, it's zero and it means that
 6 there's no gender difference after we control for
 7 race, education, cumulative years, years at Oracle,
 8 years in job, and prior -- what the job is, and the
 9 year.
 10 Q. Okay.
 11 A. Once we take these thousand people and
 12 sort them over all of these characteristics, there's
 13 no difference -- there's no difference, significant
 14 or insignificant.
 15 Q. Okay. That's what your own regression
 16 analysis -- those are the results of your regression
 17 generated for --
 18 A. For IC2 --
 19 Q. -- IC2?
 20 A. For that small group, yes.
 21 Q. But you didn't include those IC2 results
 22 in Appendix B, correct?
 23 A. No, because there's not -- there's not a
 24 difference for that group.
 25 Q. Okay. You ran analyses in -- at this

Page 188

1 log file reflects for IC5, correct? On page 20.
 2 A. Yes.
 3 Q. Did you include the results that are
 4 here for IC5 in Appendix B?
 5 A. I didn't because though it's negative
 6 and actually not a trivial coefficient, it's less
 7 than two standard deviations negative.
 8 Q. Okay. So and then flipping over, you
 9 have results here for M2?
 10 A. Incidentally, I do want to, since we
 11 mentioned this, I do want to point out that the
 12 IC -- the IC5 includes 4,698 people. Okay, and --
 13 Q. And --
 14 A. -- M2.
 15 Q. Following up on that point you just
 16 made, Dr. Madden, and you did not find any
 17 statistically significant difference between men and
 18 women's promotion from IC5 to IC6?
 19 A. When looked at in isolation.
 20 Q. Okay.
 21 A. When we put these all together, they are
 22 overall significant.
 23 Q. Okay. But you didn't find any
 24 statistically significant difference over those
 25 4,700 observations?

Page 189

1 A. If we assume that they're independent of
 2 the others, yes.
 3 **Q. Well, using the same model that you**
 4 **reported in Appendix B.**
 5 A. Right, but it's a very conservative
 6 solution that these are independent, they are
 7 different companies, which we know they're not,
 8 so...
 9 **Q. So turning over to page 22.**
 10 A. Tell me what's on it, since I don't have
 11 page numbers.
 12 **Q. Sorry. This is global career level M2?**
 13 A. M2.
 14 MS. FLORES: Prior global career
 15 level?
 16 A. M2.
 17 **Q. Prior global career level M2.**
 18 A. Yeah. Mm-hmm.
 19 **Q. It's the page after IC5 that we were**
 20 **just looking at. Do you see that page?**
 21 A. Yes.
 22 **Q. So my question with respect to this is**
 23 **just: Did you include the results for M2 that your**
 24 **regression generated in Appendix B?**
 25 A. No, I did not. For those 660 people it

Page 190

1 was negative, and but it wasn't two standard
 2 deviations, if we assumed that it has nothing to
 3 do -- that this is a different company.
 4 **Q. Well, in IC2, when the coefficient --**
 5 **when the Z score was positive, but not significant,**
 6 **I believe that you testified that there was no**
 7 **difference, in essence, correct?**
 8 A. Right.
 9 **Q. So here again, we see --**
 10 A. It was positive.
 11 **Q. -- something that's negative?**
 12 A. It's was a -- it's a coefficient that
 13 was also almost zero. These negatives are much
 14 larger than what you saw in the IC2. So I want
 15 to -- and when we put them all together, as I showed
 16 in response to Dr. Saad's report, it's overall
 17 significantly disadvantages females.
 18 **Q. So I want to move to strike that**
 19 **testimony and be because I -- you know, it just --**
 20 **for purposes of conducting these examination, I**
 21 **appreciate that there may be things that you want to**
 22 **talk about that aren't things that I'm planning to**
 23 **ask about, but I would ask that you confine your**
 24 **answer to the question --**
 25 A. It's relevant to these questions.

Page 191

1 **Q. -- to the extent possible.**
 2 A. Because you're looking at them
 3 individually, and I agree individually this is what
 4 they show, but overall, which I think these show,
 5 which are the big, important promotions that there's
 6 a significant difference.
 7 **Q. So in fairness though, I haven't asked**
 8 **about your conclusions. I'm simply asking if you**
 9 **ran certain analyses and if you put them in the**
 10 **report. And that's just what I'd like to confirm in**
 11 **this line of questioning.**
 12 A. Okay.
 13 **Q. So with respect to prior global career**
 14 **level being M3?**
 15 A. Yes.
 16 **Q. You generated results that show in this**
 17 **log file Exhibit 22, correct?**
 18 A. Yes. Mm-hmm.
 19 **Q. And you did not include those results in**
 20 **Appendix B, correct?**
 21 A. I didn't include -- but I included them
 22 in the backup to give to you. I wasn't hiding
 23 these.
 24 **Q. Okay. And then you -- then you ran your**
 25 **regression analyses on prior global career level M4,**

Page 192

1 **correct?**
 2 A. Yes.
 3 **Q. Okay. And did you report those results**
 4 **in Appendix B?**
 5 A. They are not reported in Appendix B.
 6 They were given to you and provided in the backup
 7 to -- and I want to point out that everything other
 8 than the first one you showed, which was virtually
 9 zero, we've got negative coefficients.
 10 **Q. Okay.**
 11 A. But you are going to one now that's
 12 positive.
 13 **Q. Okay. So just so I understand, then, do**
 14 **you believe that if a reader were going to under**
 15 **Appendix B of your report, they would also need to**
 16 **be provided with the log file?**
 17 A. Well, they were.
 18 **Q. So I'm saying if, say, the court were to**
 19 **be provided with Appendix B, do you -- are you**
 20 **saying that as a labor economist, to understand**
 21 **what's in Appendix B, they would also need to be**
 22 **provided with this log file?**
 23 MS. FLORES: Objection. Vague. And
 24 calls for speculation.
 25 A. I think the log file, to be informed --

Page 193

1 actually, to -- if I'm going to explain this to a
 2 reader, I need to do an analysis that brings them
 3 all together. And that's what I have subsequently
 4 done in response to Dr. Saad's comments.
 5 MS. MANTOAN: So I'm going to move
 6 to strike, because the question about Appendix B and
 7 not whether to understand what's in Appendix B, one
 8 would need the log file associated with Appendix B.
 9 THE WITNESS: I'm sorry. I thought
 10 you asked me about a reader understanding what
 11 Appendix B said. And I'm saying that if they're
 12 going to get this log file, and I'm thinking about a
 13 reader that doesn't understand the log file, I want
 14 them to be able to understand the larger context,
 15 and we have to put it all together at that point,
 16 which what my subsequent analysis does.
 17 MS. MANTOAN: I'm again going to
 18 move to strike. And I think I've made clear that
 19 I'm asking questions that are directed at certain
 20 information, and I would ask that you do my best --
 21 your best to answer the questions that I'm asking
 22 about the specific documents that I'm asking about.
 23 I don't intend to be asking any
 24 questions that relate to anything other than your
 25 reports in this case.

Page 194

1 THE WITNESS: Well, unless you're
 2 asking -- if you're asking me how to interpret this,
 3 I have to answer in this way.
 4 BY MS. MANTOAN:
 5 Q. Okay. So let's turn back to your log
 6 file, Exhibit 22, prior global career level M5.
 7 A. Yes.
 8 Q. That was run over 1,746 observations,
 9 right?
 10 A. Yes.
 11 Q. And it showed that women were 28 percent
 12 more likely than men based on your controls to be
 13 promoted from out of career level M5, correct?
 14 A. Yes.
 15 Q. And that was statistically significant
 16 at 2.06 standard deviations?
 17 A. Yes.
 18 Q. Is that result included in Appendix B?
 19 A. No, it's not. It's not enough to
 20 overcome an overall negative significance.
 21 MS. MANTOAN: I'm going to move to
 22 strike as non-responsive.
 23 BY MS. MANTOAN:
 24 Q. I have some questions about the two
 25 charts that you included in your August rebuttal

Page 195

1 report. So would you mind turning to your August
 2 rebuttal report and to I believe it's the last two
 3 pages of that document, charts R1 and R2.
 4 A. Yes.
 5 Q. Okay. And to be clear, I just want to
 6 ask some interpretive questions about these charts
 7 that are in front of us, R1 and R2. Because the
 8 charts are not labelled and I want to -- in some
 9 ways that I -- I wanted to make sure that when I was
 10 sort of labelling them or understanding them myself,
 11 that I was understanding them correctly.
 12 So let's start with chart R1. Do
 13 the blue bars in this chart represent men and the
 14 orange bars represent women?
 15 A. That's what it says at the bottom of the
 16 page, yes.
 17 Q. Okay. So that's true for every one of
 18 the charts that's here? Every one -- not just for
 19 the one at the bottom, for IC5, that's also true for
 20 IC4 and IC3?
 21 A. This is for the entire chart. Which is
 22 three panels, yes.
 23 Q. And you reported for each of these the
 24 Fisher's Exact Test P-value for IC3, IC4, and IC5,
 25 correct?

Page 196

1 A. Yes. Yes.
 2 Q. Am I correct that Fisher's Exact Test
 3 P-value is generally considered to be statistically
 4 significant only if it is less than -- less
 5 than .05?
 6 A. Yes.
 7 Q. Okay. So the results that you -- that
 8 this chart depicts for IC3, you were not finding
 9 those to be statistically significant differences in
 10 that chart, correct?
 11 A. That's correct.
 12 Q. Okay. And with respect to IC5, and the
 13 chart depiction of IC5, those were not statistically
 14 significant difference, correct?
 15 A. IC5. I'm sorry.
 16 Q. The bottom panel on chart R1.
 17 A. Right. Right. I'm -- that's correct.
 18 Individually.
 19 Q. Okay. And then flipping over to chart
 20 R2.
 21 A. Yes.
 22 Q. Okay. The results that you depict here
 23 for IC3, you did not find those to be statistically
 24 significant, correct?
 25 A. Individually, that's correct.

Page 197

1 Q. Okay. So if we could flip back to chart
 2 R1, again, these are just interpretive questions to
 3 make sure that I'm understanding what I'm looking
 4 at.
 5 You found that men were more likely
 6 than women to be moved up -- to be hired into a
 7 career level that was higher than the one that was
 8 originally associated with the requisition?
 9 A. Yes.
 10 Q. And you found that women in this IC3
 11 level were more likely than men to be hired into a
 12 career level that was lower than the career level
 13 originally associated with the requisition, correct?
 14 MS. FLORES: Objection. Compound.
 15 A. Could you read me those percents. I
 16 can't read it.
 17 Q. So what I see above the blue bar is 12.9
 18 percent, and what I see above the orange bar is 13.8
 19 percent?
 20 A. Okay. There's a very small likelihood
 21 that men were in the lower, yes.
 22 Q. Okay. And then looking at the results
 23 for IC4, you found that men were more likely than
 24 women to be hired into a global career level?
 25 A. Yes.

Page 198

1 Q. That was lower than the career level
 2 originally associated with the requisition, correct?
 3 A. The number says lower, but overall women
 4 are disadvantaged here by the Fisher's test.
 5 Q. Okay. So but they -- so the answer to
 6 my question is, yes, you found that in IC -- in this
 7 IC4 level, men were more likely than women to be
 8 hired into a global career level that was lower than
 9 the global career level originally associated with
 10 the requisition, correct?
 11 MS. FLORES: Objection. Misstates
 12 testimony. And vague. And compound.
 13 A. I mean, by definition they have to be
 14 equivalent because we wouldn't have gotten
 15 statistical significance for the overall
 16 distribution if they were not statistically
 17 basically equivalent. So that's why I'm objecting
 18 to it. The nominal number of what the counts were,
 19 but statistically, they were -- women were more --
 20 were disadvantaged.
 21 And there's only two ways to be
 22 disadvantaged; either you're less likely to get
 23 higher or you're more likely to get lower, and
 24 because lower looks pretty much the same, it has to
 25 be that the higher dominates.

Page 199

1 Q. But it's not as if when you're -- in
 2 your own analysis, the way you structured it of IC4,
 3 men are always being upped -- moved up and women are
 4 always being moved down, correct? That's not what
 5 this analysis shows.
 6 MS. FLORES: Objection. Vague.
 7 A. I didn't structure it so that men are
 8 always more likely to be move up and women are
 9 always more likely to be moved down.
 10 MS. FLORES: Objection. Vague.
 11 Q. And that's not the finding of the result
 12 of the analysis as you structured it; that men are
 13 more likely to move up and women are more likely to
 14 move down in this level, correct?
 15 A. I'm finding that women are more
 16 disadvantaged in terms of being placed relative to
 17 the -- the level of the job applied for. And that
 18 nominally, if we look at the absolute counts,
 19 there's a slight more percentage higher probability
 20 of men going lower, but it's so swamped by the
 21 higher, that overall women are disadvantaged. So
 22 these are probably statistically equivalent
 23 percentages moving to lower levels. But nominally
 24 that's the difference, it's just that statistically
 25 I suspect they're not different.

Page 200

1 Q. Okay. And so I -- I have what I think
 2 are discrete questions, and I'm hoping in
 3 particularly in the light of the fact that I
 4 understand you will be leaving at 3:00 to just focus
 5 in on the particular questions that I am posing.
 6 So looking at still on chart R1
 7 looking down at IC5, my question is: Did you --
 8 A. Which one are we looking at now, Asians
 9 or women?
 10 Q. Asians. So we're in -- I'm sorry.
 11 Women. I apologize. Women. Chart R1, IC5.
 12 The analysis you did showed that men
 13 were more likely than women to be hired at a lower
 14 global career level than the original requisition;
 15 is that a true statement?
 16 A. Nominally statistically they're
 17 equivalent.
 18 Q. Okay. So what do you -- that's what
 19 your chart shows. Your chart shows 20.3 percent of
 20 men being hired at a lower career level than the one
 21 originally associated with the requisition, and that
 22 happening to 17.4 percent of women, correct?
 23 MS. FLORES: Objection. Asked and
 24 answered.
 25 A. That's what happened, but --

Page 201

1 **Q. Okay.**
 2 A. -- statistically overall, these numbers
 3 are -- according to the Fisher's Exact Test are
 4 equivalent.
 5 **Q. And then looking -- and that's because**
 6 **it's not a statistically significant result?**
 7 A. Yes. That's all I'm saying.
 8 **Q. Okay.**
 9 A. The nominal numbers are correct as
 10 you've read them.
 11 **Q. Okay. And with respect to IC3 for**
 12 **Asians. Let's move to chart R2.**
 13 **You found that Asians in IC3 were**
 14 **more likely than whites to be hired at a higher**
 15 **career level than the career level originally**
 16 **associated with the requisition, correct?**
 17 A. The counts are that way. These are
 18 statistically identifiable -- statistically
 19 equivalent distributions between Asians and whites
 20 for this level.
 21 **Q. So why did you include statistically**
 22 **equivalent distributions in Chart R2 when I had been**
 23 **asking about Appendix B, when I asked you why things**
 24 **weren't included, you said, well, certain things**
 25 **aren't statistically equivalent, so I didn't include**

Page 202

1 **them?**
 2 A. Appendix B was my original presentation.
 3 This is responding to Dr. Saad's results, and this
 4 is what Dr. Saad included, so I included a response
 5 to all of his analysis, I believe, I think that's
 6 what his --
 7 **Q. Well, you -- Dr. Saad did an analysis of**
 8 **the career level that the original requisition had**
 9 **versus the hired employee had at the time of hire**
 10 **that looked across all levels, correct?**
 11 MS. FLORES: Objection. Assumes
 12 facts.
 13 A. I -- I don't know that. Let me look.
 14 MS. FLORES: Which one do you want?
 15 THE WITNESS: I want Dr. Saad's
 16 original report. I think -- here. I think it's --
 17 no. This is his rebuttal.
 18 MS. MANTOAN: We can mark that as an
 19 exhibit if it would help to you refer to it.
 20 THE WITNESS: It's not marked?
 21 MS. MANTOAN: It has not been marked
 22 yet. Correct.
 23 THE WITNESS: Oh, okay.
 24 (Madden Exhibit 23, Saad Expert Report, was marked
 25 for identification.)

Page 203

1 THE WITNESS: Do you know where in
 2 the report these are? Basically, these -- I mean,
 3 he's got graphs that look like this. That's what
 4 I'm responding to.
 5 BY MS. MANTOAN:
 6 **Q. So I believe they're -- I can direct**
 7 **your attention to page 117?**
 8 A. 117. Okay. Thank you.
 9 **Q. I believe that's what you're looking**
 10 **for, but let me know if that's not right.**
 11 A. No, that's not. He has ones that look
 12 like this. Oh, this is -- let's see. I thought he
 13 had some by IC level.
 14 MS. FLORES: Is it 120?
 15 THE WITNESS: No, that's M. That's
 16 M levels. IC levels.
 17 MS. FLORES: Oh, is it 115?
 18 THE WITNESS: Yeah, that's what she
 19 originally -- no, this is -- this is everything.
 20 And what is my table? My tables are... IC5. So I
 21 do IC3, IC4, and IC5. I see, that's what his big --
 22 I didn't do the management. But what his big -- if
 23 you look at a job applied for, page 115, that those
 24 are the big ones. I do IC3, IC4, and IC5, because
 25 those are the ones where most of the people are

Page 204

1 hired into, I believe.
 2 BY MS. MANTOAN:
 3 **Q. But you didn't do any analysis of the M**
 4 **levels, correct?**
 5 A. I didn't do the M levels. I don't think
 6 there's many hires into those. Maybe.
 7 I'm sorry, these are all percents.
 8 But I think that that's -- this is IC3, IC4, and IC5
 9 are where most of the hires were. I think that's
 10 why I did those.
 11 **Q. But just to confirm, you did not do any**
 12 **analysis that appears in chart R1 and chart R2 of**
 13 **your rebuttal report for any of the management**
 14 **levels?**
 15 A. I don't think there's enough people to
 16 do such and that, but I didn't, no.
 17 **Q. You didn't do it. Okay.**
 18 (Madden Exhibit 24, log:
 19 C:\client\Oracle\Saad\EconsultWork\Support\Log_ChartR
 20 1_R2.log, was marked for identification.)
 21 **Q. So my question about Exhibit 24 -- well,**
 22 **do you recognize Exhibit 24?**
 23 A. Yes.
 24 **Q. Okay. Is this the log file that was --**
 25 A. Yes.

Page 205

1 Q. That reflects the -- wait, let me just
 2 finish the question.
 3 Is this the log file that reflects
 4 the --
 5 A. Yes.
 6 Q. Why don't you tell me what Exhibit 24
 7 is.
 8 A. It's the log file that is the backup for
 9 the chart R1 and R2.
 10 Q. And the log file backup has results for
 11 other IC levels, correct?
 12 A. That there -- there's no people in them,
 13 yeah. That's my point. There are three people, 11
 14 people. You can't do a statistical analysis on
 15 that. I gave you the results for where I have
 16 enough data to say I have made -- IC5 has a 278
 17 people. This is the male/female. IC4 has 583. And
 18 IC3 has 349. IC1 has 11 people, and IC2 has 64
 19 people. The difference was that there wasn't enough
 20 people to do anything meaningful statistically.
 21 Q. Again, especially in light of time, I'm
 22 really asking whether certain things are in your
 23 backup or in your report or not. And I'm not --
 24 A. But you're asking me why and I didn't
 25 have them.

Page 206

1 Q. I actually didn't ask why it wasn't
 2 there. I just said was it there or not. So these
 3 are really --
 4 A. No.
 5 Q. Is this the log file or not?
 6 A. The record will speak, but my recall is
 7 back there you were asking me why I included them in
 8 one and not in the other.
 9 Q. I said the log file backup has results
 10 for other IC levels, correct? And that was your
 11 response.
 12 So and log backup file that's
 13 Exhibit 24 reports at least counts for black
 14 employees, correct?
 15 A. Yes.
 16 Q. And those -- there are no results for
 17 black employees presented in your rebuttal report of
 18 this analysis, correct?
 19 A. Yeah. There's just not enough people.
 20 Q. A few questions about -- other questions
 21 about your rebuttal report. Some questions about
 22 Table R5. What's reported in Table R5?
 23 A. Between 2013 and 2018 for all of the
 24 employees included in the case, what were the number
 25 that worked in one organizational name 2, 3, 4,

Page 207

1 through 12 organizational names in that time period.
 2 (Madden Exhibit 25, log:
 3 C:\Client\Oracle\Saad\EconsultWork\Support\LOG_
 4 TableR5.log, was marked for identification.)
 5 Q. Do you agree that Exhibit 25 is the log
 6 file that was used to generate Table R5?
 7 A. Yes. Apparently.
 8 Q. Okay. And again, I have made the
 9 modification of adding a page number and
 10 highlighting information, but otherwise, this
 11 appears to you to be your log file, correct?
 12 A. Yes.
 13 Q. Okay. The -- the line that I've
 14 highlighted that says, "duplicates drop person
 15 organization_name, force"?
 16 A. Yes.
 17 Q. Am I right that that's the command
 18 that's intended to get the list of unique
 19 organizations that a person has worked on in this
 20 time period?
 21 MS. FLORES: Objection. Vague.
 22 A. It's dropping anytime a person -- any
 23 subsequent years that the person is repeated in the
 24 same organization. So we're just counting unique,
 25 yes.

Page 208

1 Q. Right. So if a person had -- they have
 2 five records because they worked the entire time,
 3 their organization was the same. This is intended
 4 to de-duplicate that so they would be reflected as
 5 having one organization?
 6 A. Yes. That's right.
 7 Q. Okay.
 8 (Madden Exhibit 26, EmployeeTransactions.dta, was
 9 marked for identification.)
 10 Q. I'm going to represent to you that
 11 Exhibit 26 is an excerpt from this DTA file which
 12 your counsel produced to us as part of your backup
 13 here.
 14 A. I can't read this at all.
 15 Q. Okay.
 16 A. I don't know what we're going to do. I
 17 can't see this.
 18 Q. I did bring like a reading aid with me.
 19 Would that help you, like a magni -- like a
 20 magnifier?
 21 A. What's a reading aid?
 22 No. That's my problem, it's focus
 23 and magnification. Magnification, you can handle.
 24 Focus you can't with glasses. I cannot see this.
 25 Q. So would it help if we took maybe a two-

<p style="text-align: right;">Page 209</p> <p>1 minute break and you could go to a differently lit 2 area and look at this? 3 A. Possibly. Possibly. 4 Q. Okay. Let's try to take just a two- 5 minute break just for that purpose. 6 THE VIDEOGRAPHER: The time is 1:58 7 p.m. We're going off the video record. 8 (RECESS, 1:58 p.m. - 2:02 p.m.) 9 THE VIDEOGRAPHER: The time is 2:02 10 p.m. We're back on the video record. 11 MS. MANTOAN: So while we were off 12 the video record, we figured out that a place where 13 Dr. Madden would be better able to answer these 14 questions, given the typeface was by changing to a 15 different lighting position. So just for purposes 16 of posterity, that is the reason why we have 17 rearranged ourselves. 18 BY MS. MANTOAN: 19 Q. So Exhibit 26, Dr. Madden, I'm going to 20 represent is -- comes from this DTA file that your 21 counsel produced as backup to this report. And -- 22 A. Can I clarify, this is from employees 23 transactions .DTA? 24 Q. That's correct. That's the name of the 25 file that this was pulled from.</p>	<p style="text-align: right;">Page 211</p> <p>1 A. Yes. 2 Q. -- cloud net. Okay. 3 That -- so the Exhibit 25, I'm not 4 sure if you took that over there with you as well? 5 A. Yes. 6 Q. Okay. So based on your code that 7 de-duplicates by person and by organization name, 8 aren't I right, that this employee would be left 9 counting as if they worked if two organizations? 10 A. I don't know what she did with blanks. 11 So that's the question. 12 Q. Well, when you see the coding, when it's 13 just de-duplicating on person and on organization 14 name, wouldn't the function of that code be to treat 15 this person I.D. as having two organization names? 16 A. Possibly. I'm just not sure, because 17 I'm not sure what a blank was done -- doing with 18 this, so... 19 Q. Okay. 20 A. It may be the case. I can certainly get 21 a definite answer to you by calling my coder. 22 Q. Okay. But do you see anything in the 23 code that is Exhibit 25 that extracts missing 24 entries? 25 A. No. And I'm not sure what Stata does</p>
<p style="text-align: right;">Page 210</p> <p>1 And that data set had over 300,000 2 records in it, I'll tell you. It had like over 150 3 variables. So what I did was to filter this down 4 for a single person I.D. and filter it down to only 5 certain columns so that it could fit on one page. 6 A. Mm-hmm. Mm-hmm. 7 Q. With that explanation and understanding, 8 does this look like this -- your DTA data set or is 9 there anything about this that looks -- do you have 10 any reason to think this is not your DTA? 11 A. No, I've never looked at this. As I 12 said, I didn't review the DTA data sets. But I have 13 no reason to assume you were wrong or to expect you 14 were wrong. 15 Q. Okay. And if you look in the column 16 "organization name" for this employee. That's the 17 furthest column that's showing to the right. 18 A. Yes. 19 Q. Am I correct that there are -- there is 20 a single organization in which this employee worked 21 during the records reflected here? 22 A. Yes. 23 Q. Okay. But there were two values for 24 organization name in those rows, right, one value is 25 blank and one value is BC14 --</p>	<p style="text-align: right;">Page 212</p> <p>1 with that, so that's the question. 2 Q. Okay. But it's possible based on what 3 you're looking at that this employee was treated in 4 your table R5 results as having worked in two 5 organizations, although we've agreed that this 6 employee only worked in one organization? 7 A. Yes. That's correct. Okay. 8 MS. MANTOAN: Those are the 9 questions that I had about these documents. If we 10 want to go off the record briefly. 11 THE VIDEOGRAPHER: The time is 2:05 12 p.m. We're going off the video record. 13 (RECESS, 2:05 p.m. - 2:19 p.m.) 14 THE VIDEOGRAPHER: The time is now 15 2:19 p.m. We're a back on the video record. 16 (Madden Exhibit 27, log: 17 C:\Client\Oracle\Saad\EconsultWork\Support\Log_ 18 TableR10.log, was marked for identification.) 19 BY MS. MANTOAN: 20 Q. So Dr. Madden, I have some questions now 21 about Table R10 and some of the backup files 22 associated with Table R010. So if you could get R10 23 from your report in front of you and Exhibit 27, let 24 me know when you're ready. 25 A. I have it.</p>

Page 213

1 Q. So I'll represent to you that Exhibit 27
 2 was produced with this namelogTableR10.log. I have
 3 with other of the backup files made some
 4 modifications for ease of use. I've added page
 5 numbers and highlighting.
 6 Aside from that, does this appear to
 7 be the log file that generated the results in Table
 8 R10?
 9 A. Yes, it appears to be.
 10 Q. Okay. And the -- the regression model,
 11 the sort of scripts for the regression model -- I
 12 don't know if script is the right term, that's how I
 13 would think of it -- the script for the regression
 14 mod that you used to generate R10 is what's
 15 highlighted on page 1 of Exhibit 27?
 16 A. Yes.
 17 Q. Is that right?
 18 A. Yes.
 19 Q. So am I correct that the first part by
 20 year, colon, shows that you're setting the
 21 regression to be run separately for each year?
 22 A. Yes.
 23 Q. And then the next part, REG, is the
 24 command to run a basic OLS regression?
 25 A. Yes.

Page 214

1 Q. Then the first variable after REG is the
 2 dependent variable; is that right?
 3 A. Yes.
 4 Q. Okay. So the dependent variable here is
 5 LDIF base?
 6 A. Yes.
 7 Q. Okay. What do -- do you know what that
 8 stands for?
 9 A. The difference in base from year to
 10 year.
 11 Q. Okay. And then my understanding is that
 12 continuing on in the --
 13 A. The log. The log of the difference in
 14 the base.
 15 Q. Okay. All right. Thank you for
 16 clarifying.
 17 That's what the "L" means?
 18 A. Yes.
 19 Q. And then continuing in that same line,
 20 all of the additional variables that are listed
 21 after that dependent variable are the independent
 22 variables in this regressions, correct?
 23 A. Yes.
 24 Q. And so starting with "female" and then
 25 "patent bonus during year," these are the variables

Page 215

1 that you controlled for in the analysis that is in
 2 R10, correct?
 3 A. Yes. Yes.
 4 Q. Okay.
 5 (Madden Exhibit 28, TableR10.DO, was marked for
 6 identification.)
 7 Q. You will be pleased, I hope, to see that
 8 the typeface is slightly larger on Exhibit 28.
 9 A. Oh, very good.
 10 Q. So I will represent to you that this is
 11 a -- this is a printout of the file whose name
 12 appears in the upper right Table R10.DO.
 13 A. These two are the same, you're telling
 14 me?
 15 Q. One is a log file, right?
 16 A. This is the DO file?
 17 Q. Exhibit 27 is the log file.
 18 A. Yes.
 19 Q. And Exhibit 28 had this name when it was
 20 produced to us, table R10.DO.
 21 A. Okay. Okay.
 22 Q. I'll represent to you that I, again,
 23 with respect to Exhibit 28, added page numbers and
 24 highlighting.
 25 A. Mm-hmm.

Page 216

1 Q. But have you seen this DO file before?
 2 A. I saw this. I didn't --
 3 Q. You saw?
 4 A. I saw the log, I didn't see the DO.
 5 Q. Okay. So am I correct that if I look at
 6 Exhibit 28 in the first page, this is providing some
 7 instructions about how the variables were created
 8 that generated the data set that then Exhibit 27 was
 9 run on?
 10 A. Right.
 11 Q. Okay. So if we could look on Exhibit
 12 28, the first highlighted line. So that's telling
 13 us how the variable LDIF_base was created, right?
 14 A. Yes.
 15 Q. That's by taking the difference between
 16 L, base pay, and the log of --
 17 A. The prior.
 18 Q. -- the prior -- right.
 19 Okay. Then the second line
 20 highlighted below creates the L base pay_lag
 21 variable, right?
 22 A. Yes. Yes.
 23 Q. And that's an independent variable used
 24 in your regression, right?
 25 A. Yes.

Page 217

1 **Q. L base pay_lag?**
 2 A. Yes.
 3 **Q. And how is that variable created?**
 4 A. It's the prior year's base pay.
 5 **Q. Okay.**
 6 A. So it's basically looking at the
 7 percentage change, and one of the independent
 8 variables of the prior year base pay level, all in
 9 log forms.
 10 **Q. So I want to focus in on a specific item**
 11 **here, log base pay_lag.**
 12 A. Yes.
 13 **Q. Give how the variables were created,**
 14 **isn't log base pay_lag on both the right and**
 15 **left-hand side of the model that you're running?**
 16 A. It's the -- I mean, this is a classic
 17 way. We're measuring a difference. But it's not --
 18 it's -- I mean, it's used to compute the other one,
 19 but it's a difference. So it's looking at the rate
 20 of change relative to the level you were at before.
 21 And the rate of change, of course, is dependent on a
 22 level -- it's current minus the level you were at
 23 before.
 24 **Q. But the level you were at before is on**
 25 **both the right and left side of the equation?**

Page 218

1 A. No, it's used to form the variable
 2 that's on the left-hand side. The variable on the
 3 left-hand side is a different variable.
 4 **Q. Right. But given how it was used to**
 5 **form that variable. Functionally, you end up having**
 6 **that same log of prior base pay on both sides?**
 7 A. No. No, I will not agree to that.
 8 **Q. Okay. What would be the effect if you**
 9 **did have log base pay_lag on both sides of the**
 10 **equation?**
 11 A. It would blow up. It wouldn't compute.
 12 **Q. You think the program actually wouldn't**
 13 **run?**
 14 A. Right. I've published articles that use
 15 this technique. This is perfectly accepted in the
 16 research literature.
 17 (Clarification requested by the Court Reporter.)
 18 A. To think of change dependent on the
 19 level. That's where the idea of regression to the
 20 mean comes from.
 21 **Q. So we can set aside related -- the**
 22 **materials related to R10. I have another one of**
 23 **those questions sort of generally about statistical**
 24 **approaches --**
 25 A. Mm-hmm.

Page 219

1 **Q. -- and your statistical approaches.**
 2 **If I run a model on -- including**
 3 **gender as the only variable, I'm going to get a**
 4 **coefficient on gender, right?**
 5 A. If there's a gender -- yes, of course,
 6 you'll always get a coefficient, and it will be
 7 significance if there is a gender difference in the
 8 data; there's not -- it won't appear.
 9 **Q. And that's the table -- the first column**
 10 **of Table 1A in your initial report, right?**
 11 A. Yes.
 12 **Q. Okay. If I were then to add -- the**
 13 **number that I'm going to use in this example doesn't**
 14 **matter -- 10, 100, 200 variables that had zero**
 15 **correlation with gender, after adding all those in,**
 16 **I would get the same gender coefficient from the**
 17 **regression, correct?**
 18 MS. FLORES: Objection. Incomplete
 19 hypothetical.
 20 A. Yes.
 21 **Q. Okay. So if you add those --**
 22 A. Well, the same -- yes, you should get --
 23 if they have zero correlation, they should be --
 24 that's correct.
 25 **Q. Right. So only if there's a correlation**

Page 220

1 **between gender and one or more of those 10 or 100 or**
 2 **200 variables that are added, will it be the case**
 3 **that the gender coefficient changes after**
 4 **additional --**
 5 A. Yes. That's why we only have to worry
 6 about things that differ systematically by gender in
 7 a gender analysis.
 8 **Q. And you spoke briefly in responding to**
 9 **questions about Table R10 about sort of**
 10 **malfunctions, I'll call them, that these statistical**
 11 **programs can do if you try to run something on them,**
 12 **that they don't run.**
 13 A. That's correct.
 14 **Q. Is there any sort of warning that's --**
 15 **well, you are programming in Stata?**
 16 A. Yes.
 17 **Q. Okay. Is there any warning that's**
 18 **generated in Stata if you try to run a model where**
 19 **you've included more variables than Stata can handle**
 20 **given the data set you have?**
 21 A. I don't think so. I don't think so in
 22 Stata. There is in SAS. I don't think there is in
 23 Stata.
 24 **Q. You're not aware of any kind of flag or**
 25 **warning that Stata gives you if you're trying to**

Page 221

1 include more variables in a model than the model can
 2 meaningfully --
 3 A. Not that I recall. I must say, I never
 4 really looked for it, because as you a researcher,
 5 I'd never do it. And in these cases, if that's the
 6 case, I want it there, so...
 7 **Q. So I have a handful of questions about**
 8 **the concept of an R-squared value.**
 9 A. Mm-hmm.
 10 **Q. Let me give you a definition of**
 11 **R-squared and tell me if you agree with it or don't**
 12 **agree with it, why.**
 13 **But "R-squared is a measure of the**
 14 **magnitude of the effects of all of the predictors**
 15 **and their combined explanatory power."**
 16 A. I would prefer my own definition, which
 17 is that the R-squared measures the proportion of the
 18 variation across individual observations that's
 19 explained by the regression analysis.
 20 **Q. That's explained by the particular**
 21 **variables in that regression analysis?**
 22 A. Yes.
 23 **Q. That's actually very close, I will tell**
 24 **you, to the Federal Judicial Center's Reference**
 25 **Manual on Multiple Regressions which defines an**

Page 222

1 R-squared as a --
 2 A. They listened to my classes that I gave
 3 them.
 4 **Q. "A statistic that measures the**
 5 **percentage of variation in the dependent variable**
 6 **that is accounted for by all of the explanation**
 7 **variables."**
 8 A. Yes.
 9 **Q. Do you agree with that?**
 10 A. Yes.
 11 (Off the record.)
 12 **Q. So I'll represent to you that the**
 13 **Reference Manual on Multiple Regression continues,**
 14 **but it sort of doesn't matter. I'm going to ask if**
 15 **you agree with the statement or not, right?**
 16 **"The magnitude of R-squared depends**
 17 **on the characteristics of the data being studied and**
 18 **in particular whether the data vary over time other**
 19 **over individuals."**
 20 A. I don't like that.
 21 **Q. Could you tell me why?**
 22 A. Because the magnitude of the
 23 R-squared -- I mean, it's not that those things
 24 wouldn't, but they're not the important things that
 25 matter.

Page 223

1 The magnitude depends on how many
 2 observations there are. And in some sense, when
 3 you're varying over individuals rather than over
 4 time, there are usually more observations, so that
 5 may be what it's getting to, but it's the number of
 6 obs -- if you've got a lot of observations,
 7 R-squareds are lower than if you have got very few
 8 observations. It's an artifact of the analysis.
 9 **Q. What, if anything, does it mean to you**
 10 **if why your looking at a regression model and it has**
 11 **an R-squared that you would consider low, given the**
 12 **data being studied and the model being run?**
 13 A. If the R-squared's really low, you're
 14 probably missing something, but "low" is a relative
 15 concept. I have published in very prestigious
 16 journals models with R-squareds of .01 and .02
 17 and .03.
 18 As a reviewer, I have rejected
 19 models because the R-squareds are way too high to be
 20 credible. It must be the case that they've put
 21 endogenous variables in to get those kind of
 22 R-squareds.
 23 R-squareds are interpreted in the
 24 context of the research being studied, recognizing
 25 that more observations gives lower R-squared, but

Page 224

1 thinking about what the standard is generally.
 2 A model is good if it's doing better
 3 or as good as, or as well as is generally done in
 4 the research literature.
 5 **Q. So you said as part of your previous**
 6 **answer that in your view whether an R-squared is a**
 7 **low is a relative concept.**
 8 **Do you think it's relative among**
 9 **other things to whether you're looking at like**
 10 **economy-wide data as opposed to company-specific**
 11 **data?**
 12 A. That can be a factor.
 13 **Q. In what way can that be a factor?**
 14 A. Well, a company may have less variance
 15 than the economy overall, so it may be -- actually,
 16 it depends what you're looking at, it could be
 17 harder in economy to get as high an R-squared as you
 18 could overall, because overall, you've got more
 19 variation so, therefore, you might get more power
 20 from the variables within a company. If they're
 21 all -- if the population is pretty homogeneous, it's
 22 hard to get an R-squared, because there's not that
 23 much dependence in the independent variable.
 24 **Q. So I'm going to go back to the**
 25 **definition that you articulated earlier of an**

Page 225

1 R-squared. So if I see a statistical model whose
 2 R-squared is .5, that means that the model explains
 3 50 percent of the variation in the dependent
 4 variable if --
 5 A. That's right.
 6 Q. -- if it were the pay case, the pay
 7 model?
 8 A. That's right.
 9 Q. But it leaves 50 percent of the
 10 variation unexplained?
 11 A. That's right.
 12 Q. If I saw an R-squared that was .2, it
 13 would mean that the R-squared, that the -- the 20
 14 percent of the variation in play is explained by the
 15 model, 80 percent unexplained by the model?
 16 A. That's correct.
 17 Q. Okay.
 18 (Madden Exhibit 29, log:
 19 C:\Client\Oracle\Report\Analyses\Log_Regressions_1a2
 20 a3a1b2b.log, was marked for identification.)
 21 Q. So I'm going to have a few questions
 22 about Exhibit 29, Dr. Madden. They're really just
 23 designed to confirm that I'm reading Exhibit 29
 24 correctly.
 25 A. Mm-hmm.

Page 226

1 Q. So does Exhibit 29 appear to you to be
 2 the log file that underlies your tables from your
 3 initial report tables 1A, 2A, 3A, 1B and 2B?
 4 A. Yes.
 5 Q. And I'll again represent that I added
 6 page numbers, which are not cut off in this one, and
 7 added highlighting.
 8 With those modifications aside, does
 9 this appear to be your log file?
 10 A. Yes.
 11 Q. Okay. And if we could get out -- I
 12 think it will ease our conversation if we could go
 13 back to your original report and go back to Table 1A
 14 again. I just want to make sure I'm understanding
 15 this file vis-a-vis that table.
 16 A. Can I look at these bigger tables?
 17 MS. FLORES: You can have a copy,
 18 too, if you want.
 19 MS. MANTOAN: Yeah. That's fine.
 20 Thank you.
 21 THE WITNESS: They are Exhibit 2.
 22 It's just --
 23 MS. MANTOAN: Yeah, I -- I don't
 24 have any issue with this as not being Exhibit 2.
 25 It's for demonstrative purposes and enlargement of a

Page 227

1 portion of Exhibit 2.
 2 THE WITNESS: Yes.
 3 MS. MANTOAN: I agree.
 4 BY MS. MANTOAN:
 5 Q. So do you have Table 1A from Exhibit 2
 6 and Exhibit 29 sort of both available?
 7 A. Yes.
 8 Q. Okay. So Exhibit 29, the highlighted
 9 portion that starts on page 1 indicates that the
 10 regressions that immediately follow relate to the
 11 year 2013 and relate to gender differences?
 12 A. Yes.
 13 Q. Okay. And then I believe flipping over
 14 to page 4 of Exhibit 29, I want to make sure that
 15 the results that I'm reading at the top of page 4?
 16 A. Yes.
 17 Q. Those are the results that correspond to
 18 column 5 of Table 1A, for the year 2013. To me, the
 19 key statistic appears to be --
 20 A. Yes.
 21 Q. -- the national standard of deviations?
 22 A. Yes.
 23 Q. That's correct?
 24 A. Yes.
 25 Q. And then to the right and above on page

Page 228

1 4, the R-squared and adjusted R-squared values
 2 there, those are the R-squareds associated with that
 3 line and that column of Table 1A?
 4 A. That's correct.
 5 Q. Okay. And the same thing would be
 6 true -- as it appeared to me, the same thing is true
 7 sort of in the form of the -- this log file. So in
 8 other words, every time I see, you know, a female
 9 coefficient and a t-statistic, the R-squared that's
 10 above and to the right is the R-squared associated
 11 with that model?
 12 A. That's correct.
 13 Q. Okay. You testified earlier that you've
 14 published in prestigious journals models with an
 15 R-square of .01 or .02 or .03, correct?
 16 A. Yes.
 17 Q. The articles that you're thinking of
 18 there, were those articles that were assessing
 19 economy-wide data or labor force data or were they
 20 assessing company-specific data?
 21 A. Well, I don't tend to publish
 22 company-specific data. Though I think -- I think I
 23 may have done one with company-specific data. But
 24 most of the time it's economy-wide or city-wide
 25 data.

Page 229

1 **Q. Is there one publication that's coming**
 2 **to mind where you used company-specific data?**
 3 A. I believe the Merrill Lynch stuff might
 4 have had some R-squareds in that level.
 5 **Q. And this is -- am I correct that**
 6 **basically, you took the work that you had done in**
 7 **connection with your retention as an expert witness**
 8 **in that Merrill Lynch case, and then some of that**
 9 **work was repackaged and repurposed for an academic**
 10 **publication?**
 11 A. Yeah. I basically published my reports
 12 for that case. There were two cases, the race and
 13 the gender case. And they were both published as
 14 reports, the reports were both published journals.
 15 **Q. You made some modifications to the**
 16 **report before they were published?**
 17 A. Well, I had -- yeah, because I had to
 18 explain what it was coming from, I had to make
 19 them -- put them in the context of the literature a
 20 little more. But there was no -- there was no
 21 difference in the analyses or in the
 22 interpretations.
 23 **Q. Aside from the publication that you just**
 24 **talked about, is there any other time that you can**
 25 **recall as you sit here today that you've published**

Page 230

1 **any work that looked at company-specific data?**
 2 A. It's the -- is the National Football
 3 League a company? I don't know if that -- I don't
 4 know what the R-squareds were in my work for the
 5 National Football League.
 6 **Q. Were you evaluating -- to your**
 7 **understanding, were you evaluating a single**
 8 **employer, or were you --**
 9 A. That's why -- is the National Football
 10 League a single employer? I was looking at coaches.
 11 It was the NFL coaches.
 12 **Q. Okay. So potentially that one, although**
 13 **not certain whether that was a single company or**
 14 **not.**
 15 A. Yeah.
 16 **Q. Any others that come to mind?**
 17 A. No, I haven't done anything else that's
 18 a single company that I published, I don't think.
 19 **Q. Do you think any different approach is**
 20 **warranted when --**
 21 A. I'm just -- I'm just thinking a minute.
 22 I don't think so.
 23 **Q. Oh, sorry.**
 24 A. Yeah, I think that's -- I think that's
 25 the case.

Page 231

1 **Q. As a general matter, do you think that**
 2 **any different statistical approach is warranted when**
 3 **you're evaluating company-specific data versus labor**
 4 **force or economy-wide data?**
 5 A. I don't think so. I mean, you may have
 6 bits and better data -- well, you have better data
 7 to start out with, because you have everybody in the
 8 same company. So that's a big control that you
 9 don't have generally in other data.
 10 **Q. You talked earlier today about sort of**
 11 **like standard approaches to wage regressions or**
 12 **standard approaches?**
 13 A. Yes.
 14 **Q. In your view, is the standard approach**
 15 **to a wage regression the same if you're looking at**
 16 **economy-wide data or if you're looking at**
 17 **company-specific data?**
 18 A. Well, I don't -- I don't have to worry
 19 about controlling for metropolitan area or cost of
 20 living in the -- at least if the company is in the
 21 same place.
 22 **Q. Okay.**
 23 A. So you -- as you say, there's so many
 24 controls already in place once you're looking within
 25 company, that you don't have -- that in national

Page 232

1 data you have to worry about, and proxying makes it
 2 somewhat harder to get the same explanatory power.
 3 **Q. Another question about the journal**
 4 **articles with the .01 and .02 and .03 R-squared;**
 5 **what were the subject matters of that research?**
 6 A. The -- the low R-squareds in the Merrill
 7 Lynch, I believe it was predicting transfers or
 8 maybe -- I don't recall exactly. It might have even
 9 been on compensation. But what I used for the --
 10 the one I really remember that has been very low is
 11 trying to predict travel time to work, which I have
 12 done a lot of.
 13 **Q. Some of the articles we briefly looked**
 14 **at when I paraded them out earlier today involved**
 15 **that issue, correct?**
 16 A. Yeah. I'm not sure any of those were.
 17 I'm thinking of something in papers in regional
 18 science, that's where I remember it had a really low
 19 R-squared but had high explanatory power of the
 20 variables, which is what academic research and I
 21 think litigation research cares about, not the
 22 R-squared.
 23 **Q. In what context have you -- did you**
 24 **study travel time to work? Was there a particular**
 25 **question on that that you were trying to answer?**

Page 233

1 A. I say it came off of my dissertation
 2 where I had posited -- my dissertation, that this
 3 book is, was looking at monopsony or monopolization,
 4 non-competitive models of labor markets to generate
 5 discrimination.
 6 And I was -- I started being
 7 interested in travel time to think about constraints
 8 that men versus women have in travel times and it
 9 affects competition among employers for them. So
 10 that's what I was look -- that started it.
 11 But I've looked at a variety of
 12 questions with respect to travel time, for both --
 13 both by gender and by race and also by
 14 characterizing metropolitan areas.
15 Q. Why might travel time have an effect
16 that had -- imposed a different constraint on men
17 versus women?
 18 A. Because if women, particularly when I --
 19 I mean, I actually felt it didn't matter so much.
 20 But I thought it was going to matter. Women do
 21 travel less to work, but it turns out the primary
 22 reason my research established was because there was
 23 so little variation in their economic opportunities.
 24 That, yes, they did more housework and, yes, they
 25 had kids and that might restrict travel, but the

Page 234

1 real reason was there was no return to them
 2 travelling more. Men faced much more variable labor
 3 markets and that's what that work showed. That was
 4 done in the 1970s and '80s. And I don't think work
 5 since then has shown that because times have
 6 changed. Women are getting into more kinds of jobs
 7 than they used to.
8 Q. So are you aware of any literature since
9 that that revisits this question of whether there
10 are differential constraints imposed on men and
11 women by travel time to work?
 12 A. There's a huge literature, which my
 13 urban studies articles cited. It is the most cited
 14 article I have. Which has looked at gender
 15 differentials and what they mean.
 16 And that continues to this day.
 17 That's -- I'm still getting more cites on that
 18 article written in 1980 than the stuff I wrote in --
 19 much more recently.
20 Q. Is there a name for a score in academia
21 about how often your articles are cited or something
22 like that?
 23 A. Well, there's a citation -- there's
 24 total citations. I would never have predicted that
 25 one would have taken off the way it did.

Page 235

1 Q. And what are some of the findings in
2 this research literature that you describe about
3 gender differentials in the constraints imposed on
4 men and women by travel time to work?
 5 A. Well, what I found is that it really --
 6 again, it's just the jobs. If the jobs don't
 7 matter. There was no reason to beat along or
 8 commuting longer wouldn't have changed anything in
 9 any of the papers I did for women, because the
 10 job -- there weren't better job opportunities
 11 further down the road.
12 Q. Down the literal road?
 13 A. Yes. I guess so.
14 Q. But I thought you said that they -- you
15 thought there had been some change in the finds of
16 the research literature since you were publishing?
 17 A. Yes, my guess is that now as women have
 18 become more educated, there may be no difference.
 19 And I really haven't followed the research that much
 20 since then, so...
21 Q. When you say more difference, you mean
22 more difference between men and women?
 23 A. No, no, no, no, no, no. That women now
 24 are probably facing job markets more like men face
 25 than -- so there may be more reason to commute. And

Page 236

1 I suspect there's more commuting. I suspect, and
 2 it's part of the renaissance of the cities reasons,
 3 that men and women now live in the cities because
 4 that makes it easier for women to be next to their
 5 jobs.
6 Q. I have another question from whether you
7 agree with something that I'll represent to you is
8 from the Federal Judicial Center's Reference Guide
9 on Multiple Regressions.
10 Would you agree that in interpreting
11 the results of a multiple regression analysis, it is
12 important to distinguish between correlation and
13 causality?
 14 A. I certainly think that's true in the
 15 academic research. I don't think in the litigation
 16 kind of stuff there's ever a chance of being able to
 17 do that.
18 Q. Can you explain what you mean by that?
 19 A. Well, you just don't have -- well, I --
 20 I take that back. I guess I did it in the Merrill
 21 Lynch case.
 22 But you don't have the ability to
 23 sort of come up with the same kind of instrumental
 24 variables and other creative kinds of quasi-
 25 experiments that you can look across companies at --

Page 237

1 you might be able to have it, but causation -- most
 2 regression is showing correlation and the causation
 3 comes on the way to the evidence and other evidence.
 4 Outside of the multiple regression analysis.
 5 **Q. So does a correlation between two**
 6 **variables necessarily mean that one is causal with**
 7 **respect to the other?**
 8 A. No, it doesn't. You have to impose
 9 theory and other evidence to reach that result.
 10 **Q. Hypothetical question for, Dr. Madden.**
 11 **I want you to imagine a hypothetical company that**
 12 **employees only women. Not for discriminatory**
 13 **reason, maybe it operates in a city where there's**
 14 **only women or... I want the hypothetical to be**
 15 **neutral with respect to that.**
 16 **Would you expect to see that prior**
 17 **pay for those women would be highly correlated with**
 18 **starting pay for those women?**
 19 MS. FLORES: Objection. Incomplete
 20 hypothetical.
 21 A. Yes.
 22 **Q. Why?**
 23 A. Because companies -- all of the evidence
 24 suggests that starting pay determines your future.
 25 That part of the -- part of the problem and

Page 238

1 there's -- there's a butting -- and that's what I
 2 wrote in the work I did for the City of
 3 Philadelphia, there's a lot of evidence that
 4 whatever you start with, it's really hard to get
 5 further than, that the start determines your future.
 6 **Q. But you -- just so my question is clear,**
 7 **would you expect to see prior pay for these women at**
 8 **their prior employer, company X, to be highly**
 9 **correlated with their starting pay at company Y?**
 10 A. I'm sorry. I answered the question
 11 whether the starting pay was interp -- was to
 12 present pay. Prior pay with their starting pay.
 13 When employers routinely ask it, of course, it is.
 14 There is every reason in the world to do that.
 15 **Q. Okay. So imagine a company --**
 16 A. If they don't ask, there's still
 17 probably going to be correlation.
 18 **Q. You anticipated my next question.**
 19 **Why would you expect there to be a**
 20 **correlation?**
 21 A. Because both employers are looking at
 22 the same skill package.
 23 **Q. This next question I'm sure will require**
 24 **you to estimate, because I don't expect you to**
 25 **remember the exact date. But when were you first**

Page 239

1 **retained by the solicitor in connection with this**
 2 **case?**
 3 A. I think in 2016.
 4 **Q. So that 40 to 50 hours number that we**
 5 **discussed before in connection with preparation of**
 6 **your initial report, is that all work done from your**
 7 **retention until July 19th?**
 8 A. No, that was done from when I was told
 9 that mediation was over and we would go -- and it's
 10 taking out anything having to do -- can I say
 11 this -- with hiring claims?
 12 **Q. Right. I don't think it's a secret that**
 13 **hiring claims were resolved.**
 14 A. So it's taking out all mediation time
 15 and everything that I did with regard to hiring
 16 claims.
 17 **Q. Okay. And we have talked several times,**
 18 **I guess indirectly, if not directly, about the fact**
 19 **that you had a medical procedure recently that you**
 20 **developed some complications and it caused some**
 21 **issues; fair to say, it caused some issues?**
 22 A. Yes.
 23 **Q. Okay. I just wanted to make sure I'm**
 24 **clear on the date, the date of the procedures that**
 25 **you had, just so that --**

Page 240

1 A. The first procedure, which I had had,
 2 which was a repeat, I had the eye done was September
 3 5th. And then the second procedure had been
 4 scheduled for the 16th, but I was rushed into
 5 emergency surgery, because I was about to lose my
 6 vision on the 14th, on a Saturday. And I was
 7 operate on by somebody that looked like Doogie
 8 Howzer.
 9 **Q. And yet you are reading here today. So**
 10 **thank you, Doogie.**
 11 **And can I get a sense of, you know,**
 12 **I want to focus on the time between your rebuttal**
 13 **report on August 16th and the -- that first surgery,**
 14 **September 5th.**
 15 A. Yes.
 16 **Q. Did you do work on the case during that**
 17 **time period?**
 18 A. That's when almost all of the work was
 19 done. I have done hardly any -- I can count on two
 20 hands the hours I've devoted since the surgery.
 21 **Q. Okay. So when you say "almost all of**
 22 **the work was done," so you're saying almost all of**
 23 **the work that you have done to the extent you did it**
 24 **after your rebuttal report was done between August**
 25 **16th and September 5th?**

Page 241

1 A. Yes.

2 **Q. Do you have a rough estimate of the**

3 **amount of time you spent working between August 16th**

4 **and September 5th on this case?**

5 A. The hours I gave -- what did I tell you,

6 60 hours? So probably --

7 **Q. I understood the 60 to be between**

8 **initial and rebuttal report. I'm focusing on a**

9 **different range of time --**

10 A. Oh.

11 **Q. -- rebuttal report until September 5th.**

12 A. I don't know. That might have been

13 about 50 hours.

14 **Q. Okay. And without asking about the**

15 **substance of any work, did you generate any new**

16 **analyses during those 50 hours?**

17 A. Yes.

18 **Q. Did you generate any new tables during**

19 **those 50 hours?**

20 A. Yes.

21 **Q. And you already alluded to this, but**

22 **between the time of that first surgery and today, I**

23 **think you said, you could count on your two hands or**

24 **one hand the amount of time?**

25 A. No, two hands. I mean -- particularly

Page 242

1 because -- because in the last few days I have

2 gotten a little more up to speed and I have been

3 able to read up to two hours a day, so it's enabled

4 me to do a little more.

5 **Q. Okay. Subsequent to your surgeries,**

6 **have you generated any new analyses in connection**

7 **with the case?**

8 A. I don't think so.

9 **Q. Okay. Have you generated any new tables**

10 **in connection with the case?**

11 A. I think they were all in process.

12 Tabitha was working on them. I probably -- they

13 probably finalized them and okayed them during --

14 after -- after the surgeries. But they were all --

15 there was nothing new developed since September 5th

16 that I recall.

17 That's been the problem, I haven't

18 looked at this case since September 5th so, it's

19 been very hard to recall sometimes on your

20 questions, because it's not like I've been able to

21 be up to speed continuously.

22 MS. MANTOAN: Just mindful of the

23 time, Jessica, I know you said you wanted to revisit

24 later on the record the confidentiality issues. Are

25 you -- do you feel that we need to do that before

Page 243

1 Dr. Madden departs or should we continue talking

2 about that after?

3 MS. FLORES: I feel we should do it

4 after.

5 MS. MANTOAN: Okay. So we'll --

6 even after Dr. Madden leaves, we'll continue to

7 discuss that on the record. Okay.

8 BY MS. MANTOAN:

9 **Q. I have a few more questions, Dr. Madden,**

10 **about what I would call -- I don't know whether this**

11 **is right to call them sort of your primary analyses.**

12 **I'm thinking of like from your initial report, Table**

13 **1A, 1B. Does the structure of those analyses assume**

14 **that every factor that's included impacts pay the**

15 **same way for each individual in the population?**

16 MS. FLORES: Objection. Vague.

17 A. It assumes it impacts -- it impacts both

18 blacks and whites, Asians and whites, and women and

19 men in the same way.

20 I'm doing a group analysis, not an

21 individual analysis. So it's that those groups have

22 no different effect of education or of time or of

23 job descriptor.

24 **Q. It's not just for those groups, right.**

25 **The analysis is structured to treat individuals in**

Page 244

1 **different global career levels as being impacted by**

2 **the same pay factors in the same way regardless of**

3 **career level?**

4 A. My analysis is about groups, and what

5 I -- what the analysis assumes and is traditional in

6 the literature, is that when I estimate them in one

7 equation is that the effect of the characteristics

8 does not know -- does not differ systematically by

9 race and gender.

10 **Q. Okay. But if the effect of a**

11 **characteristic differed systematically across career**

12 **levels and if, in fact, there were differences in**

13 **career level between men and women, then --**

14 A. That would show up.

15 **Q. -- the model -- how would that show up**

16 **in the model?**

17 A. That would show up as a career level

18 coefficient. The coefficient on career levels

19 would... increase.

20 **Q. Would the coefficient on something else**

21 **decrease?**

22 A. No. Not necessarily.

23 **Q. Are there statistical tests that you're**

24 **aware of that can determine whether or not the**

25 **factors included in a regression model have the same**

Page 245

1 **impact for sub-sets of individuals in the data?**
 2 A. You can do interaction effects.
 3 **Q. I guess I was thinking of things more**
 4 **like I don't want to limit it to a Chow test, but**
 5 **let's start there. What's a Chow test?**
 6 A. Chow test looks at the overall
 7 explanatory power of all the -- all the variables or
 8 you can look at subsets of variables.
 9 **Q. Well, does it test whether the**
 10 **coefficients -- subsets of the data sets are truly**
 11 **equal or not?**
 12 A. Well, you can do two regressions and
 13 test whether the subsets are the same, but that's a
 14 very -- virtually any regression passes a Chow test
 15 and that kind of test. I think the better thing is
 16 to look at -- do interaction effects.
 17 **Q. But you didn't do any interaction**
 18 **effects in your primary pay models here, correct?**
 19 A. No.
 20 **Q. Okay. Is there something other than the**
 21 **Chow test that you think is less -- achieves the**
 22 **same objective but is less restrictive or has a less**
 23 **stringent requirement for similarity that you think**
 24 **is informative?**
 25 A. I think interaction effects. That's

Page 246

1 what I just...
 2 **Q. Do your analyses furnish evidence that**
 3 **every woman in the population you studied was paid**
 4 **less than some men performing substantially similar**
 5 **work?**
 6 MS. FLORES: Objection. Vague.
 7 A. No.
 8 **Q. Do your analyses furnish evidence that**
 9 **any woman in the population you studied was paid**
 10 **less than a man performing substantially similar**
 11 **work?**
 12 A. Yes.
 13 **Q. Why do you say that?**
 14 A. Women were systematically paid less,
 15 given the similar -- well, given that they are in
 16 similar -- not similar work, given that they have
 17 similar credentials.
 18 **Q. My question was about substantially**
 19 **similar work.**
 20 **So do your analyses finish evidence**
 21 **that any woman in particular in the population you**
 22 **studied, was paid less than a man performing**
 23 **substantially similar work?**
 24 A. Yes.
 25 **Q. How so?**

Page 247

1 A. Column 6, everything's significant. Not
 2 column 6. Column 8. I can't read.
 3 **Q. Which women does column 8 indicate -- so**
 4 **column -- let's look back at Table 1A. Let's look**
 5 **at the data.**
 6 A. Because women in general are, there has
 7 to be a woman that did. So you would have said any
 8 woman.
 9 **Q. Okay. Fair.**
 10 **So how many of the 4,327 -- oh, I**
 11 **guess I need to multiply that by 26. So we --**
 12 A. It's a little more.
 13 **Q. It's a thousand.**
 14 A. Yeah.
 15 **Q. How many of those thousand women that**
 16 **are included in your 2013 analysis does your model**
 17 **show were paid less than a man performing**
 18 **substantially similar work?**
 19 A. We know that on average that was the
 20 case. We could do quintile regressions to look at
 21 whether there's any difference over -- when I have
 22 done quintile regressions in these cases, it's never
 23 made a difference, but you could look at quintile
 24 regressions to get at whether it's everybody or not.
 25 **Q. Okay. And you haven't done that in this**

Page 248

1 **case?**
 2 A. No. There's no allegations about that
 3 that I have seen.
 4 **Q. Assume that a company has an aggregate**
 5 **statistical disparity in pay that's adverse to**
 6 **women.**
 7 **Is it your view that no women in**
 8 **that company could have been paid in a**
 9 **non-discriminatory manner?**
 10 MS. FLORES: Objection. Incomplete
 11 hypothetical.
 12 A. No, it's possible that somebody was paid
 13 in a non-discriminatory manner. Unlikely, but
 14 possible.
 15 **Q. How would you go about determining that?**
 16 A. You would have to look at individual
 17 cases that the presumption is at that point that
 18 everybody is underpaid and that -- I mean, when I
 19 have done through -- gone through some of these
 20 individual trials, that's always the case that
 21 everybody wins, so...
 22 **Q. Did you study whether tenure at Oracle**
 23 **is a job related factor for any positions at Oracle?**
 24 MS. FLORES: Objection. Vague.
 25 A. I think in general, it looks like -- is

Page 249

1 a requirement for -- wait a minute. Is it a job --
 2 for most positions, it is. At least high tenure
 3 seems to have gains in what I looked at in looking
 4 at how they -- regression -- looking at what kinds
 5 of tenure were associated with higher pay.
 6 **Q. So when you just said for the -- for**
 7 **most positions it is a job-related factor, is the**
 8 **understanding of job-related factor you're using**
 9 **there that tenure has a positive coefficient?**
 10 A. Yes, on pay. Controlling for jobs.
 11 **Q. Are there any jobs at Oracle, to your**
 12 **knowledge, that require any specialized or unusual**
 13 **skills?**
 14 A. Oh, of course.
 15 **Q. Okay. Can you give me some examples?**
 16 A. Well, I think most of them require
 17 specialized and unusual skills. I mean, this is --
 18 this is cutting edge. This is really a cutting-edge
 19 company. So people -- I mean, people here have --
 20 in the way that top-level universities do have very
 21 high-level skills.
 22 **Q. So let's ask you to assume that ability**
 23 **to program in artificial -- the artificial**
 24 **intelligence base is a specialized skill.**
 25 A. Yes.

Page 250

1 **Q. What in your analyses distinguishes**
 2 **employees who -- whose positions require those kind**
 3 **of skills from employees whose positions do not**
 4 **require those kind of AI skills?**
 5 MS. FLORES: Objection. Vague. And
 6 compound.
 7 A. I haven't seen any data showing me what
 8 positions require AI skills. So it was impossible
 9 with the data that Oracle -- that Oracle routinely
 10 keeps to make any such analyses or conclusions.
 11 **Q. Well, that's --**
 12 A. Oracle doesn't seem to be interested in
 13 these skills in terms of managing labor force.
 14 **Q. Well, that's true with respect to the**
 15 **data and documents that you reviewed.**
 16 A. Yes.
 17 **Q. That's your conclusion based on that,**
 18 **right?**
 19 A. Yes.
 20 **Q. So of course, you your conclusion can't**
 21 **be based on anything you didn't review or didn't**
 22 **look at?**
 23 A. Right. Yes.
 24 **Q. Are there any skills that are in**
 25 **particular high demand at Oracle or in the**

Page 251

1 **high-technology sector more generally?**
 2 A. I'm sure there are, but I certainly
 3 am -- I haven't been active in computer programming
 4 myself in a long time, and I don't know them.
 5 **Q. Okay. So does anything in the models**
 6 **that you've generated in this case account for the**
 7 **fact that there are some skills that are in**
 8 **particularly high demand at Oracle or in the**
 9 **high-technology sector more generally?**
 10 A. Because I was presented with no record
 11 or identification of these, I assumed that there was
 12 no sense that women had these skills less than men,
 13 Asians had them less than whites, or blacks had them
 14 less than whites.
 15 MS. FLORES: Counsel, just noting
 16 there's less than three minutes until 3:00.
 17 MS. MANTOAN: I appreciate that, and
 18 I thank you for the reminder. I'm going to use
 19 every bit of time I can have to speak with you,
 20 Dr. Madden, so you will tell me when you're ready to
 21 leave, and then it sounds like we'll just continue a
 22 little bit more on the record after that.
 23 BY MS. MANTOAN:
 24 **Q. So another sort of hypothetical, general**
 25 **question, I want to make sure that I have an**

Page 252

1 **understanding: Imagine a particular open position,**
 2 **it could be a position at Oracle or it could be a**
 3 **position on the faculty of your department at Penn.**
 4 A. Mm-hmm, yes.
 5 **Q. Do you agree that applicants with**
 6 **directly relevant prior experience for that position**
 7 **are more likely to be hired into that position than**
 8 **someone, other things equal, but without that**
 9 **directly relevant prior experience?**
 10 A. Other things equal, yes. I agree.
 11 **Q. Okay. Do you believe that applicants**
 12 **can directly relevant prior experience for a posting**
 13 **are likely to command higher pay for that job than**
 14 **applicants, even if successful, who lack that**
 15 **directly relevant prior experience?**
 16 A. Probably not, because somebody that
 17 didn't have that directly relevant prior experience
 18 is providing something else. That's why they're
 19 hired.
 20 **Q. In your work at Penn, has there ever**
 21 **come a time when a faculty member has said, come to**
 22 **you and said, I have a competing offer from another**
 23 **institution?**
 24 A. Yes.
 25 **Q. Have you ever responded to that**

Page 253

1 competing offer by making an increased pay offer to
 2 that particular person?
 3 A. Yes.
 4 Q. At the time that you did that, did you
 5 increase the pay of every other person in the
 6 department that was impacted?
 7 A. Pretty quickly. That would happen,
 8 particularly if it was a protected group. We'd look
 9 at that.
 10 Q. So you've sort of said that would happen
 11 and I'm unclear. It seemed like you were thinking
 12 factually of a time when you responded to a
 13 competing pay offer. And I'm wonder, I wasn't
 14 asking a hypothetical, I was asking when you have
 15 done it --
 16 A. Yes.
 17 Q. -- did you then adjust the salaries of
 18 everyone else in the department?
 19 MS. FLORES: Objection. Vague. And
 20 asked and answered.
 21 A. Yeah. I think that was done. I mean,
 22 all of these pay changes would take place July 1.
 23 So ultimately when they take place, they're all
 24 together, but when they actually get made, of
 25 course, there would be some period of time before

Page 254

1 they got made.
 2 Q. Does every Professor in your department
 3 at Penn earn the same salary?
 4 A. No.
 5 Q. Why not?
 6 A. Some of us are older than others and
 7 have more experience. Some of us have more
 8 publications than others. Some of us are taking on
 9 more duties that are well documented.
 10 MS. FLORES: Dr. Madden, I'm just
 11 noting that it's 3:00 p.m. now.
 12 THE WITNESS: Okay.
 13 MS. MANTOAN: Well, there's no
 14 question pending. Are you -- this is when you said
 15 you were leaving, so.
 16 MS. FLORES: It's my understanding
 17 that Dr. Madden did want to enter something into the
 18 record.
 19 MS. MANTOAN: We're not going to --
 20 if Dr. Madden can stay, I'm going to keep asking her
 21 questions. If she can't stay, then we're not going
 22 to keep doing that. If I have -- if there's more
 23 time with Dr. Madden, I'm going to use it; and if
 24 there's not more time with Dr. Madden, then I'm not
 25 going to use it.

Page 255

1 MS. FLORES: Sure. But she's also
 2 entitled to bring her own exhibits and information
 3 to the deposition.
 4 MS. MANTOAN: That's not correct.
 5 This is my deposition, and I'm entitled to my seven
 6 hours, and I haven't received it. So I'm not going
 7 to cut short my seven hours even more so you can
 8 conduct a direct.
 9 So I will terminate the deposition
 10 right now and we can, you know, I'm -- I will
 11 terminate it for today. I mean, as you know,
 12 there's motion practice being contemplated. There's
 13 a lot of things going on, and I do want to address
 14 anything about the provisional confidential
 15 designation of the transcript and exhibits before we
 16 go off the record.
 17 MS. FLORES: Well, one thing, I just
 18 wanted to make sure that we're insisting to include
 19 the charts that Dr. Madden referenced to you in her
 20 responses.
 21 MS. MANTOAN: So I don't -- if
 22 there's additional time for me to speak to
 23 Dr. Madden, then I will continue to do so. So if
 24 Dr. Madden is available to continue sitting here and
 25 talking, I will talk with her and it likely will not

Page 256

1 be with the charts. If Dr. Madden is not available
 2 to continue sitting here, then I don't believe
 3 there's anything else to enter as an exhibit or
 4 otherwise.
 5 MS. FLORES: So I just wanted to
 6 make a it clear that you're not letting Dr. Madden
 7 enter the exhibits that she referenced in her
 8 responses?
 9 MS. MANTOAN: So exhibits referenced
 10 in -- so I would move to strike all of that
 11 testimony, and I'm not -- I'm not -- Dr. Madden is
 12 the one who's leaving. The deposition has not run
 13 seven hours. Dr. Madden is leaving. So what I'm
 14 saying is if Dr. Madden is leaving, I -- she's
 15 leaving, I'm not going to be able to ask her any
 16 more questions today, but if she's leaving then
 17 she's leaving.
 18 MS. FLORES: Okay.
 19 MR. SONG: Thank you.
 20 MS. FLORES: I just want to make
 21 sure that that's your choice. Thank you,
 22 Dr. Madden.
 23 (The witness left the deposition.)
 24 MS. MANTOAN: So do you want to talk
 25 about anything before we wrap for today, given the

Page 257

1 contingencies, you know, I think those could impact
 2 the need to continue and reopen the deposition, the
 3 contingencies with respect to motion practice? And
 4 then I didn't know if there was anything you wanted
 5 to talk about with respect to the confidential --
 6 confidential treatment of the transcript. I know
 7 we're all under time pressure to file motions, but
 8 we also need time to review and designate.
 9 MS. FLORES: Yes. Two things.
 10 THE VIDEOGRAPHER: Also, do you want
 11 to keep going on the video?
 12 MS. MANTOAN: Yes, please.
 13 THE VIDEOGRAPHER: Okay.
 14 MS. FLORES: So two things, it's
 15 Oracle's decision not to have the eight hours. The
 16 Department of Labor provided three different options
 17 where Oracle could have had their eight hours with
 18 Dr. Madden and could have allowed her to admit the
 19 exhibits that she referenced in her responses, and
 20 we object to this blanket assertion of the
 21 deposition transcript and today's deposition to be
 22 completely sealed.
 23 The March 22nd, 2019 order on page 4
 24 states that the parties agreed that the analyses are
 25 not confidential. That's each party's analysis.

Page 258

1 On top of that, the protective order
 2 on Section 5.1 states that mass indiscriminate and
 3 routinized designations of confidentiality are
 4 prohibited.
 5 So if you want to mark -- if Oracle
 6 wants to mark, which portions of the deposition are
 7 confidential, then you can designate it separately;
 8 otherwise, a blanket assertion would be a violation
 9 of the judge's order and the protective order.
 10 We ask that Oracle use the separate
 11 procedures that we have outlined to designate which
 12 portions of today's deposition would be
 13 confidential, and object to today's deposition being
 14 confidential.
 15 MS. MANTOAN: Well, I -- I also
 16 think that same protective order provides a time
 17 period in which to make confidential designations --
 18 MS. FLORES: 14 days.
 19 MS. MANTOAN: -- and the challenge
 20 that both sides are encountering here is that
 21 motions are to be filed before that time window to
 22 which the parties are entitled runs.
 23 MS. BREMER: Actually, it's not a
 24 challenge here because there's a separate procedure,
 25 entirely separate procedure for sealing anything

Page 259

1 that is submitted to the court. So regardless of
 2 the designation of the deposition transcript, you
 3 could -- you will need to request to seal any
 4 portion, meet and confer with us, and file a motion
 5 to seal any portion of the deposition testimony.
 6 And so there's no need to go outside of that
 7 procedure and go against the protective order and
 8 sealing an entire transcript when the protective
 9 order clearly says that that's inappropriate.
 10 MS. MANTOAN: I take the point that
 11 confidential designations and sealing are different.
 12 Those are different issues, right? The idea of
 13 giving a partied a window in which to designate
 14 something confidential is to allow sufficient time
 15 for review. And I just -- I trust that the
 16 Department will treat the transcripts and the
 17 exhibits as confidential, not be showing them to
 18 anyone or winging them out the door or anything
 19 during that 14-day window, right, that seems fair.
 20 MS. BREMER: We never do that.
 21 MS. MANTOAN: I -- understood. I
 22 understood. I appreciate that.
 23 You know, with -- I think we're --
 24 we're already scheduled to meet and confer on Monday
 25 morning. I think then we'll have the rough -- and

Page 260

1 with some of the things, obviously, exhibits that
 2 are publicly available literature, there's not going
 3 to be an issue with respect to those, right? What's
 4 more challenging is going to be with respect to
 5 reports and testimony about specific numbers,
 6 specific differentials, things like that. And we
 7 don't need to hash out all of those -- all of those
 8 issues here, but I -- so we're already conferring on
 9 a separate issue at 9:00 a.m. on Monday. We're all
 10 going to be getting a rough, and then we're going to
 11 be getting the final, and then motions are due in
 12 fairly short order after the final if the transcript
 13 comes through.
 14 So I'm sure we will make ourselves
 15 available to discuss those issues once everyone has
 16 the finals in hand, and I hope that the parties can,
 17 you know, meet and confer as we need to in advance
 18 of a sealing motion. Just given the timing, that's
 19 likely to be mid- to middle of next week, right, if
 20 not sooner. We're not going to have the finals in
 21 hand until then. And so...
 22 MS. BREMER: Right. Although, I do
 23 think that the procedure is that there is a -- after
 24 the documents are filed, there is a time period
 25 under which you have a chance to meet and confer,

Page 261

1 and talk with -- talk about which portion should be
 2 sealed.
 3 So it doesn't have to -- under the
 4 procedures that are set up, it does not have to take
 5 place in advance of the documents being filed. It's
 6 actually afterwards.
 7 MS. MANTOAN: Yeah. Let's talk more
 8 next week. I also know there have been prior
 9 motions to seal and there have been prior rulings
 10 that certain types of information that the parties
 11 disputed, whether it's confidential or not, there's
 12 already been rulings about that, right? So I would
 13 think there may be some of these issues where we can
 14 agree that it should be treated as confidential
 15 given the judge's prior ruling.
 16 So we can -- I think we can discuss
 17 that all next week. Is there anything further that
 18 we need to discuss on the record today?
 19 MS. FLORES: No.
 20 MS. MANTOAN: Okay. Thank you.
 21 MR. SONG: Thank you.
 22 THE VIDEOGRAPHER: The time is now
 23 3:12 p.m. This is the end of today's deposition.
 24 (Signature not waived.)
 25 (CONCLUDED, 3:12 p.m.)

Page 263

DECLARATION UNDER PENALTY OF PERJURY

1 Case Name: OFCCP vs. Oracle America, Inc.
 2 Date of Deposition: 10/10/2019
 3 Job No.: 10061318
 4
 5
 6 I, JANICE MADDEN, PH.D., hereby certify
 7 under penalty of perjury under the laws of the State of
 8 _____ that the foregoing is true and correct.
 9 Executed this ____ day of
 10 _____, 2019, at _____.
 11
 12
 13 _____
 14 JANICE MADDEN, PH.D.
 15
 16 NOTARIZATION (If Required)
 17 State of _____
 18 County of _____
 19 Subscribed and sworn to (or affirmed) before me on
 20 this ____ day of _____, 20____,
 21 by _____, proved to me on the
 22 basis of satisfactory evidence to be the person
 23 who appeared before me.
 24 Signature: _____ (Seal)
 25

Page 262

CERTIFICATE OF COURT REPORTER

1
 2
 3 I, Marjorie Peters, Registered Merit
 4 Reporter, Certified Realtime Reporter, and Notary
 5 Public for the Commonwealth of Pennsylvania, before
 6 whom the foregoing deposition was taken, do hereby
 7 certify that the witness was placed under oath
 8 according to the law; that the foregoing transcript
 9 is a true and correct record of the testimony given;
 10 that said testimony was taken by me stenographically
 11 and thereafter reduced to typewriting under my
 12 direction and that I am neither counsel for, related
 13 to, nor employed by any of the parties to this case
 14 and have no interest, financial or otherwise, in its
 15 outcome.
 16 I further certify that signature was not
 17 waived by the witness.
 18
 19 IN WITNESS WHEREOF, I have hereunto set my hand and
 20 affixed my seal this 14th day of October, 2019.
 21
 22
 23 
 24 Marjorie Peters, RMR, CRR
 25 My commission expires March 13, 2020.

Page 264

DEPOSITION ERRATA SHEET

1 Case Name: OFCCP vs. Oracle America, Inc.
 2 Name of Witness: Janice Madden, Ph.D.
 3 Date of Deposition: 10/10/2019
 4 Job No.: 10061318
 5 Reason Codes: 1. To clarify the record.
 6 2. To conform to the facts.
 7 3. To correct transcription errors.
 8 Page ____ Line ____ Reason ____
 9 From _____ to _____
 10 Page ____ Line ____ Reason ____
 11 From _____ to _____
 12 Page ____ Line ____ Reason ____
 13 From _____ to _____
 14 Page ____ Line ____ Reason ____
 15 From _____ to _____
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 17 From _____ to _____
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 19 From _____ to _____
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 21 From _____ to _____
 22 Page ____ Line ____ Reason ____
 23 From _____ to _____
 24 Page ____ Line ____ Reason ____
 25 From _____ to _____

1 DEPOSITION ERRATA SHEET
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15 From _____ to _____
16 Page ____ Line ____ Reason ____
17 From _____ to _____
18 Page ____ Line ____ Reason ____
19 From _____ to _____
20 Page ____ Line ____ Reason ____
21 From _____ to _____
22 _____ Subject to the above changes, I certify that the
transcript is true and correct
23 _____ No changes have been made. I certify that the
transcript is true and correct.
24
25 _____
JANICE MADDEN, PH.D.

\$	205:13,18	18 151:7 161:13,16	2,000 174:22
\$690 14:3	11.6.2007 162:16	19 17:13 162:15,18	2.06 194:16
0	115 203:17,23	1931224 184:20	2.87 185:25
01 223:16 228:15 232:4	117 203:7,8	1970s 234:4	20 27:16 163:8,10 165:2 188:1 225:13
02 223:16 228:15 232:4	11:28 139:7,9	1972 15:22	20.3 200:19
0200689 186:23	12 154:5,8 207:1	1980 146:3,17 234:18	200 219:14 220:2
03 223:17 228:15 232:4	12.9 197:17	1985 147:6,20	200,000 28:24
05 196:5	120 203:14	1999-2000 153:23	2001 148:25 150:14 151:7 161:11
1	124-125 141:18	19th 34:18 36:1 41:15,17 49:2,6,10, 14 51:2 82:18 239:7	2004 154:6
1 10:4,6 22:18 44:10 46:4,6,9 50:2 104:19 105:20 132:4,7 133:5,18 134:2 154:18 213:15 227:9 253:22	12:19 139:9,11	1:11 179:14,16	2008 127:15 180:3
1,380 186:16,20	13 155:10,13 156:2 186:9,15	1:22 179:16	2013 119:14 180:3 206:23 227:11,18 247:16
1,746 194:8	13.8 197:18	1:24 179:18	2014 127:15 159:11
10 8:3 27:16 76:11 148:8,11,21 219:14 220:1	130 40:21 41:5	1:58 209:6,8	2015 22:21 159:12
100 28:24 219:14 220:1	14 158:1,4 186:20 258:18	1_r2.log 204:20	2016 159:12 239:3
103 183:22,25	14-day 259:19	1A 46:5 50:1 133:5,12 164:8,21 165:18 166:11,15,22 167:3 168:6 173:6 219:10 226:3,13 227:5,18 228:3 243:13 247:4	2017 158:21 159:7
10:00 76:13	1425737 88:12 89:11	1B 166:4,10,12 226:3 243:13	2017-OF-00006 8:9
10:01 76:13,14	14th 240:6	1C 165:25	2018 206:23
10:38 103:23,25	15 132:19,23,24 158:21,23 164:3,4 182:21 185:5	1D 168:10	2019 8:3 17:14,23 86:6 257:23
10:47 103:25 104:2	150 210:2		21 163:18,21
11 148:24 149:2 150:9,16,22,25	1500 8:10	2	22 181:5,17 186:7 189:9 191:17 194:6
	1562446 185:19	2 17:13,17 34:17 35:13 40:19 44:10 51:13 104:5,21 105:20 122:13,16,22 132:18 141:13,14 164:7 168:19 206:25 225:12 226:21,24 227:1,5	22nd 257:23
	16 17:23 133:10 149:20 159:20,22 160:1 183:15 184:11 185:5		23 163:5 202:24
	1683737 89:1		24 204:18,21,22 205:6 206:13
	16th 34:19 36:1 240:4,13,25 241:3		25 207:2,5 211:3,23
	17 160:4		26 208:8,11 209:19 247:11
	17.4 200:22		27 212:16,23 213:1, 15 215:17 216:8

<p>278 205:16</p> <p>28 194:11 215:5,8,19, 23 216:6,12</p> <p>29 163:14 225:18,22, 23 226:1 227:6,8,14</p> <p>2:02 209:8,9</p> <p>2:05 212:11,13</p> <p>2:19 212:13,15</p> <p>2A 168:14 226:3</p> <p>2B 166:10 226:3</p> <p>2C 166:2</p> <p>2D 168:20,21 169:2,4, 11</p> <p>2E 169:5,11</p> <hr/> <p style="text-align: center;">3</p> <hr/> <p>3 17:22,25 34:19 44:10 51:14 63:6 122:23 153:16,21 206:25</p> <p>3,000 174:24</p> <p>3,500 122:17</p> <p>30 78:13 111:23 112:9 122:23 138:5</p> <p>300,000 210:1</p> <p>3433 183:17 184:12</p> <p>349 205:18</p> <p>39 63:7</p> <p>3:00 10:14 200:4 251:16 254:11</p> <p>3:12 261:23,25</p> <p>3A 226:3</p> <hr/> <p style="text-align: center;">4</p> <hr/> <p>4 21:20 22:6,18 85:9,</p>	<p>19 132:7 138:23 157:12 158:9 164:16,21 169:17 206:25 227:14,15 228:1 257:23</p> <p>4,000-plus 122:8</p> <p>4,327 247:10</p> <p>4,698 188:12</p> <p>4,700 188:25</p> <p>40 35:2,6,11 77:6 86:18 239:4</p> <p>45 27:17 59:25</p> <p>47 162:10,11</p> <p>4s 85:8</p> <hr/> <p style="text-align: center;">5</p> <hr/> <p>5 44:11 86:5,8,24,25 104:7 132:4,8 133:5, 18,19 134:3 157:12 173:8 225:2 227:18</p> <p>5.1 258:2</p> <p>5.10.2013 163:19</p> <p>50 11:1 35:2,6,11 107:21 225:3,9 239:4 241:13,16,19</p> <p>51 179:23 184:5</p> <p>583 205:17</p> <p>596 154:6</p> <p>5th 240:3,14,25 241:4,11 242:15,18</p> <hr/> <p style="text-align: center;">6</p> <hr/> <p>6 44:11 132:6,8,11,14 133:11,18,20 134:3, 17 144:16,17,18,25 145:22 174:3 247:1,</p>	<p>2</p> <p>6.8.2005 163:9</p> <p>60 35:24,25 111:24 112:9 164:8 241:6,7</p> <p>609 14:6</p> <p>64 205:18</p> <p>660 189:25</p> <p>6823 185:12</p> <p>690 14:6,8</p> <hr/> <p style="text-align: center;">7</p> <hr/> <p>7 44:11 53:6 77:5 132:6,9,11 133:12 134:1 146:1,4,12</p> <p>70 169:3</p> <p>73 145:6</p> <p>75 184:5</p> <p>79 184:5</p> <hr/> <p style="text-align: center;">8</p> <hr/> <p>8 22:3 24:6,8 46:10, 11,20,21 50:2 132:6, 9,11 133:12,20 134:1 146:16,18,25 247:2,3</p> <p>80 184:5 225:15</p> <p>80s 140:10 234:4</p> <p>8:28 8:4</p> <hr/> <p style="text-align: center;">9</p> <hr/> <p>9 147:5,8 148:4 161:8</p> <p>9.18.2014 158:2</p> <p>9.8.2017 159:20</p>	<p>9:00 260:9</p> <p>9:28 65:7</p> <p>9:33 65:5</p> <p>9:47 65:7,9</p> <p>9:51 68:6,8,9</p> <hr/> <p style="text-align: center;">A</p> <hr/> <p>a.m. 8:4 65:6,7,9 68:7,8,10 76:12,13, 15 103:24,25 104:2 139:8,9 260:9</p> <p>a3a1b2b.log 225:20</p> <p>AAPSS 154:6,19</p> <p>abbreviation 9:25 10:1</p> <p>ABD 38:8</p> <p>ability 34:24 151:23 236:22 249:22</p> <p>able 27:4 87:25 94:11,14,15,22 98:6 108:4 119:18 153:9 193:14 209:13 236:16 237:1 242:3, 20 256:15</p> <p>Abowd 156:9</p> <p>absolute 77:4 199:18</p> <p>absolutely 132:7 167:10</p> <p>academia 234:20</p> <p>academic 22:4 98:12 145:9 153:24 167:14 229:9 232:20 236:15</p> <p>academics 157:24</p> <p>Academies 155:10</p> <p>academy 15:24 154:12,20 156:11</p>
--	--	--	---

accept 44:21 116:11 117:2	220:4 255:22	122:4,20,23,24	amended 64:11,15
accepted 218:15	address 255:13	afternoon 139:13,14	amendments 32:4,6
access 149:13,14	adds 164:22	age 103:7 104:20 106:12 170:3,11	America 8:7 9:15,20 18:18 88:7,8 89:4 173:11,14,24,25
account 62:23 129:18 251:6	adjust 124:10 126:17 253:17	aggregate 248:4	American 148:15 154:12,20
accounted 222:6	adjusted 228:1	aggregated 48:3,6 77:1	amount 29:11 30:9 90:23 128:5 241:3, 24
accrued 18:23	adjustment 127:1,5	aggressive 152:6	amounts 127:20
accurate 11:19 13:7 28:21 152:4	adjustments 124:7 126:15	ago 20:22 21:11 36:3 41:23 78:3,11 151:7 158:19	analog 98:12
achieves 245:21	admin 136:4,12,15	agree 10:1 13:23 36:18 78:1 87:10,18 89:8 90:10 170:14 184:10 191:3 207:5 218:7 221:11,12 222:9,15 227:3 236:7,10 252:5,10 261:14	analyses 34:25 35:22 36:4,6,10 52:8,24 63:24 64:6 71:5 78:20 97:22 150:17, 22,25 151:4,16 152:8,13,16,21 153:21 166:17 168:2 187:25 191:9,25 229:21 241:16 242:6 243:11,13 246:2,8, 20 250:1,10 257:24
acquired 105:21,24 106:6,14 108:19 115:17 173:18	administrative 8:8 9:18 136:21	admins 136:10	analysis 33:4,16 35:16 38:12 39:22 40:6 43:23 50:5 51:25 52:3,17 56:7, 15 59:14 65:21,22, 24 67:24 69:5 73:23 74:4 75:15 78:17,19 79:9 93:12 95:12 97:15 101:19 102:13 106:16 110:24 151:18 152:6 153:13,16 157:14 167:17 168:21 169:16,19 170:10,16 174:22 176:22 179:21 180:6,22 181:1 185:12 187:16 193:2,16 199:2,5,12 200:12 202:5,7
acquisition 115:15	admit 257:18	admission 26:4	
act 158:14	admonition 26:4	admonitions 10:24	
action 9:15,19 61:12 137:11	advance 260:17 261:5	adverse 25:14 62:9, 13 248:5	
actions 23:2,22,24	adversely-affected 66:1 69:7	adversely-impacted 68:1	
active 251:3	advise 31:12	affect 77:19 118:15, 23,25 121:11	
activity 149:7	affidavit 159:20,22	affiliate 173:23	
actual 39:14 84:12 142:14,15 143:3	affiliated 87:19	affirmative 137:11	
add 81:20 169:15 182:2 219:12,21	African-american 58:21 59:3 61:24	African-americans 57:24 59:1,7 62:3	
added 78:21 106:15, 18 133:5 173:7 213:4 215:23 220:2 226:5,7			
adding 132:19,25 138:6 175:17 207:9 219:15			
addition 11:22 29:21 105:20			
additional 29:21 78:21 119:4 169:16, 19 182:17 214:20			

204:3,12 205:14 206:18 215:1 220:7 221:19,21 223:8 236:11 237:4 243:20,21,25 244:4, 5 247:16 257:25	answering 17:10 answers 12:19 13:12 125:10 126:14 130:23,24 anticipated 238:18 anybody 126:8 anytime 164:16 207:22 apartment 136:11 apologies 153:19 186:10 apologize 200:11 App 178:13 179:6 apparent 93:11 Apparently 207:7 Appeals 140:16,22 appear 10:9 17:17,25 22:8 44:4,9 86:8,16 87:4 182:18 213:6 219:8 226:1,9 appeared 84:12 228:6 appears 22:10 77:19 99:10 204:12 207:11 213:9 215:12 227:19 appen 141:15 appendices 141:16 Appendix 178:6 179:21,24 180:7 181:23 182:19 183:4,20,24 184:2, 15,21,24 185:6,15, 22 186:1,4 187:22 188:4 189:4,24 191:20 192:4,5,15, 19,21 193:6,7,8,11 194:18 201:23 202:2 Apple 115:5	applicant 98:13,16 99:10 142:14,15,18, 21 143:4,7,10 applicant's 98:22 applicants 136:17 143:12 252:5,11,14 application 136:25 applications 109:9, 10 135:18 143:16,17 applied 33:16 79:10 136:14,22,24 142:25 199:17 203:23 apply 135:16 appoint 151:15 appraisal 95:24 110:16 111:6 appraisals 95:18 appraises 111:3 appreciate 19:7 102:7 153:17 182:10,22 190:21 251:17 259:22 approach 65:20 230:19 231:2,14 approaches 112:17 113:11 218:24 219:1 231:11,12 appropriate 72:19 73:12,21 92:17 99:14 125:14,18,25 126:19,22 127:3 177:19 appropriately 91:2 129:24 152:23 175:25 176:2 approximately 21:6 Apps 178:9,19,20 Aptus 8:11	arbitrariness 117:15 area 15:13 72:1 80:7 132:15 174:17 176:12 177:15 209:2 231:19 areas 168:5 177:19 179:2 233:14 arguably 172:16 argument 79:15 argumentative 59:17 61:20 79:23 91:22 article 144:23 146:5, 19 147:24 148:3,12 234:14,18 articles 98:20 99:1,2 145:19 147:10 218:14 228:17,18 232:4,13 234:13,21 articulate 104:25 articulated 16:9 224:25 articulating 75:5 articulation 105:4 artifact 223:8 artificial 249:23 asbestos 20:12,13 24:14 Asia 173:23 Asian 60:7 63:8,16 168:15,22 Asian/white 121:1 122:16 123:3 Asians 14:21 60:13, 17 62:9,13,24 64:16 91:12 122:3,18,19 130:5 171:13 180:11 200:8,10 201:12,13, 19 243:18 251:13
--	--	---	---

<p>aside 106:12 182:16 213:6 218:21 226:8 229:23</p> <p>asked 16:14,18,22 17:2 18:3,7,12,14, 19,25 26:6,11 29:15 30:12 31:7,11 32:21 34:8 36:4 41:21 43:25 45:23 46:18 51:8 58:9,16 59:21 60:24 61:6,11,19 64:24 83:24 84:20 91:24 100:24 111:13,25 119:24 150:6 153:5,7 160:9 173:3,5 191:7 193:10 200:23 201:23 253:20</p> <p>asking 11:24 25:4 29:8 31:23 32:7,17, 18 49:20 53:10 68:22 69:2 89:22,23 91:15,16 94:17 112:20 162:11 163:3 191:8 193:19,21,22, 23 194:2 201:23 205:22,24 206:7 241:14 253:14 254:20</p> <p>aspect 38:12</p> <p>aspects 150:7 153:7 162:5</p> <p>assertion 257:20 258:8</p> <p>assess 142:12</p> <p>assessing 228:18,20</p> <p>assessment 99:8</p> <p>assign 33:9 171:3</p> <p>assigned 54:7 56:21 129:10,15 131:3</p>	<p>assigning 177:17,21</p> <p>assignment 18:21 19:2 33:10 58:7,15, 23 59:5 60:10 63:9, 13,15 130:25</p> <p>assignments 57:22 62:23 134:4</p> <p>assisted 37:4,6</p> <p>associated 87:11 121:20 193:8 197:8, 13 198:2,9 200:21 201:16 212:22 228:2,10 249:5</p> <p>Association 148:15</p> <p>assume 68:21,23 69:23 112:7 114:21 150:8 171:2,8 189:1 210:13 243:13 248:4 249:22</p> <p>assumed 175:21,24 176:3 177:16 178:17 190:2 251:11</p> <p>assumes 64:18 77:2 78:14 84:19 85:12 89:21 90:16 92:18 94:2 116:6 117:5 123:15 128:23 130:12 202:11 243:17 244:5</p> <p>assuming 66:16 130:3</p> <p>assumption 52:25 69:2,14 71:15</p> <p>assumptions 31:24 34:7,12</p> <p>attach 98:2</p> <p>attached 33:6 98:5</p> <p>attachment 40:20,23 82:15 86:12,18,20, 24 88:10 89:10</p>	<p>141:17,18,24 184:8</p> <p>Attachments 141:17</p> <p>attainable 97:14</p> <p>attained 107:3</p> <p>attainment 67:14,22 68:25 69:1 107:16</p> <p>attempt 55:16 167:21</p> <p>attempted 34:3</p> <p>attempting 13:11</p> <p>attended 167:9</p> <p>attention 40:14 49:15 86:11 203:7</p> <p>attested 112:8</p> <p>attorneys 108:7</p> <p>attributed 141:3 156:7</p> <p>August 17:23 34:19 36:1 86:6,9 194:25 195:1 240:13,24 241:3</p> <p>authenticate 143:21, 25</p> <p>author 148:21 156:2, 4</p> <p>authored 33:13 146:19 148:12 156:13</p> <p>authority 145:23 146:13,25 148:4</p> <p>availability 142:18,19</p> <p>available 22:13 66:24 103:10 107:18 130:8,9 160:12 227:6 255:24 256:1 260:2,15</p> <p>average 247:19</p>	<p>averages 66:17</p> <p>award 180:4</p> <p>awarded 127:23</p> <p>aware 92:2 93:25 100:12 113:16 114:7 116:20 220:24 234:8 244:24</p> <hr/> <p style="text-align: center;">B</p> <hr/> <p>back 17:15 21:17 27:15,17 30:24 65:9, 11 68:4,10,12 74:3 76:15 89:9 104:2,4 121:14 125:10 126:14 130:24 135:4 138:6 139:11 157:17,18 160:13 164:6 173:6 179:18 186:6 194:5 197:1 206:7 209:10 212:15 224:24 226:13 236:20 247:4</p> <p>background 176:21 177:10 178:14</p> <p>backup 36:17 191:22 192:6 205:8,10,23 206:9,12 208:12 209:21 212:21 213:3</p> <p>backwards 166:8</p> <p>ballpark 28:25</p> <p>bank 21:3,10 24:15</p> <p>bar 197:17,18</p> <p>bars 195:13,14</p> <p>base 55:6 64:17,22 110:25 127:13,14 128:1,14,17,22 166:10,11 168:10,21 214:5,9,14 216:16, 20 217:1,4,8,11,14</p>
---	---	---	---

<p>218:6,9 249:24</p> <p>based 46:2 48:12 60:4 71:11 75:9,24 80:6 81:3,8,22 82:7 85:20 108:22 109:9 114:1 124:4 128:6, 10 129:14 134:5 142:24 164:25 172:5,6 175:9,22 194:12 211:6 212:2 250:17,21</p> <p>bases 72:10</p> <p>basic 102:6 112:24 213:24</p> <p>basically 33:8 105:7 175:15 187:1 198:17 203:2 217:6 229:6, 11</p> <p>basing 96:10</p> <p>basis 23:3 44:15 45:21 47:4 49:17,19 93:13 107:11 118:13 142:20,23</p> <p>BC14 210:25</p> <p>bears 66:25</p> <p>beat 135:19 235:7</p> <p>Becker's 162:13</p> <p>beginning 63:19 89:10</p> <p>begins 153:22 180:2 186:9</p> <p>behalf 9:2,3,7,12 28:12</p> <p>Behavior 148:9</p> <p>believe 12:14 20:20 24:17 36:13 38:11 41:11 42:14 43:11 44:25 48:23 49:5 56:14 57:4,9,10,17</p>	<p>67:23 69:4,13 71:2 72:8,15,18 75:24 76:21 81:1,5,7,21 82:6 92:5 99:13 100:11 124:21 125:3,14 126:19 145:22 146:12,25 147:11 148:3,20 156:3 160:25 161:5 164:20 169:18 171:4,19,20 181:2, 18 190:6 192:14 195:2 202:5 203:6,9 204:1 227:13 229:3 232:7 252:11 256:2</p> <p>benchmark 45:4</p> <p>benchmarking 45:9 49:8</p> <p>best 26:7 27:7,10 34:23 35:21 41:18 118:10 124:4 139:19 193:20,21</p> <p>bet 135:25</p> <p>better 38:18 169:1 209:13 224:2 231:6 235:10 245:15</p> <p>beyond 41:24 178:25</p> <p>big 191:5 203:21,22, 24 231:8</p> <p>bigger 226:16</p> <p>bill 29:23,24 39:4</p> <p>billed 30:16 39:11</p> <p>billings 29:1 30:21</p> <p>bills 28:20 38:24 39:7</p> <p>binds 121:18</p> <p>bit 10:12 20:7 43:14 46:7 97:1 251:19,22</p> <p>bits 231:6</p>	<p>black 206:13,17</p> <p>black/white 121:2</p> <p>blacks 14:22 130:5 171:14 243:18 251:13</p> <p>blank 210:25 211:17</p> <p>blanket 257:20 258:8</p> <p>blanks 211:10</p> <p>blinking 135:10</p> <p>blow 218:11</p> <p>blue 195:13 197:17</p> <p>board 147:11,17</p> <p>Boeing 163:8,12</p> <p>bonus 128:1 214:25</p> <p>bonuses 127:15 128:15,16</p> <p>book 144:18,24 145:3,16 233:3</p> <p>Books 145:8,12</p> <p>bottom 22:17 41:5 154:19 182:3 195:15,19 196:16</p> <p>bought 112:18</p> <p>break 35:18 65:4 103:21 133:18 134:21 135:9 138:4 179:13 209:1,5</p> <p>Bremer 9:7 258:23 259:20 260:22</p> <p>briefly 212:10 220:8 232:13</p> <p>bring 75:12 113:19 208:18 255:2</p> <p>brings 193:2</p> <p>broad 110:25</p> <p>broader 155:8 180:22</p>	<p>181:1</p> <p>broadly 35:8,10</p> <p>brought 9:19 49:15, 24 80:15</p> <p>Brunetti 9:5</p> <p>bucket 29:19</p> <p>bushes 135:19</p> <p>business 23:20 101:18 102:12 108:18 112:22 117:21 118:1,4,12, 14,18,20,23 119:2,5, 12,23 120:6,12 125:15,18 126:20,22</p> <p>businesses 118:7</p> <p>butting 238:1</p> <hr/> <p style="text-align: center;">C</p> <hr/> <p>C-A-R-S-E 37:12</p> <p>C-PLUS-PLUS 75:14 85:24 114:1</p> <p>C:\client\oracle\report\analyses\log_appendixb.log 181:6</p> <p>C:\client\oracle\report\analyses\log_regressions_1a2 225:19</p> <p>C:\client\oracle\saad\iconsultwork\support\log 207:3 212:17</p> <p>C:\client\oracle\saad\iconsultwork\support\log_chartr 204:19</p> <p>cal 28:22</p>
---	--	--	--

<p>calculate 28:22</p> <p>call 47:5 140:17 178:12 220:10 243:10,11</p> <p>called 88:19 170:23</p> <p>calling 211:21</p> <p>calls 16:11 19:12 20:18 25:19 26:23 28:4 29:16 31:17 33:21 38:15 39:1 53:8 54:10 55:10 101:6 109:11 112:13 115:12,25 119:16 121:8 123:9 125:7 128:9 136:8 192:24</p> <p>candidates 135:16</p> <p>capital 102:25 103:5 104:8 105:1,5 106:7</p> <p>capture 166:16 167:9,14</p> <p>Car 20:11 21:8</p> <p>care 70:6,19 80:8 102:20 177:12</p> <p>career 50:14 82:6 128:18 129:11,15 130:1,2 174:7 180:5, 6,10,15 183:8 189:12,14,17 191:13,25 194:6,13 197:7,12,24 198:1,8, 9 200:14,20 201:15 202:8 244:1,3,11,13, 17,18</p> <p>careers 123:7</p> <p>cares 69:11,23 232:21</p> <p>Carse 37:8 38:1,2,3, 11</p> <p>case 8:9 11:3 13:3 14:15,19 16:15 17:3,</p>	<p>18 18:1,7 19:11,15 20:12,23,25 21:9,10 23:9 31:1 34:9,13 38:13,21 39:23 40:6 41:2 42:6,10,13 44:12 48:24 51:4,22 52:18 54:21 63:25 64:7,12 69:11 71:6, 21,25 72:2,3,4 73:5 75:21,25 78:7 79:10, 15,18 83:13 84:1,5, 15 93:23 94:18 95:4, 18 96:20 97:23 99:18,20,23 100:1,4, 10,13 101:5 105:13, 14,15 106:13 108:11 113:9,10,20,21 118:2 119:11 120:25 121:1,2 122:16 128:13 131:24 132:11 137:19 139:23 140:3,9,12, 20 142:8,10,24 143:4 150:11 159:24 160:7,9,15,25 161:11,18,22 162:8, 19,24 163:11,22 164:1 169:7,20 179:11 193:25 206:24 211:20 220:2 221:6 223:20 225:6 229:8,12,13 230:25 236:21 239:2 240:16 241:4 242:7,10,18 247:20 248:1,20 251:6</p> <p>cases 16:3,4 19:18 20:17 23:14 25:9 28:22 29:2,13 30:10 52:9 60:1 75:7 111:1 140:15 141:6,8 142:1,6 165:12 221:5 229:12 247:22 248:17</p>	<p>categories 54:3 90:18 113:1 176:1,3 181:1</p> <p>categorization 47:19 176:18</p> <p>categorizations 175:16,18</p> <p>categorized 91:2</p> <p>category 74:10 80:24</p> <p>causal 237:6</p> <p>causality 236:13</p> <p>causation 237:1,2</p> <p>cause 57:10,18</p> <p>caused 56:17 239:20, 21</p> <p>Center 154:15</p> <p>Center's 221:24 236:8</p> <p>central 70:8,16</p> <p>centralized 51:15 69:16</p> <p>centrally 80:6</p> <p>cert 41:6</p> <p>certain 49:13 50:6 115:14,15 175:22 182:4 191:9 193:19 201:24 205:22 210:5 230:13 261:10</p> <p>certainly 12:9 15:12, 22 16:17 19:21 21:8 24:14 27:16,18 28:21 30:23 41:15 51:9,10 70:17 78:8 82:10 101:25 103:13 113:21 123:11 125:25 129:14 135:17 141:12 142:15 143:9 149:25</p>	<p>156:10 157:11 163:25 171:11 174:23 211:20 236:14 251:2</p> <p>certification 41:10</p> <p>chair 149:21 156:9</p> <p>chairs 150:5 153:7</p> <p>challenge 258:19,24</p> <p>challenging 114:13 260:4</p> <p>Chamber 159:23</p> <p>chance 143:24 236:16 260:25</p> <p>change 12:24 30:19 47:17 101:8 102:23 103:18,21 217:7,20, 21 218:18 235:15</p> <p>changed 13:3 234:6 235:8</p> <p>changes 12:25 182:1 220:3 253:22</p> <p>changing 209:14</p> <p>characteris 131:21</p> <p>characteristic 75:22 77:8,13 244:11</p> <p>characteristics 66:19 67:6 75:17 77:12,18 132:13,20 133:1,4,7, 13 166:6 187:12 222:17 244:7</p> <p>characterizing 134:17 233:14</p> <p>charged 14:11</p> <p>Charles 9:3</p> <p>chart 195:12,13,21 196:8,10,13,16,19 197:1 200:6,11,19 201:12,22 204:12</p>
---	--	--	--

205:9	clear 26:18 34:17 43:20 48:10 63:11 95:22 102:8 131:19 132:14 134:25 135:1,2 138:22 156:18 193:18 195:5 238:6 239:24 256:6	coefficient 151:18 184:18,21 185:17, 18,22 186:22,25 187:4 188:6 190:4, 12 219:4,6,16 220:3 228:9 244:18,20 249:9	coming 63:12 124:8 179:3 229:1,18
charts 143:25 194:25 195:3,6,8,18 255:19 256:1	clearly 62:25 88:6 127:4 132:8 134:2,3 259:9	coefficients 192:9 245:10	command 207:17 213:24 252:13
check 30:1,2 94:23 112:2 161:21 162:21 173:12,14 174:23	client 31:7 39:4	colleague 154:14	comment 13:2 151:3
checking 95:9	close 176:24 221:23	collecting 15:25 69:12,24 155:11,18 157:20	commentaries 92:7
choice 256:21	Closer 146:16	collection 147:14,25	comments 193:4
chose 152:3	cloud 109:3,6 211:2	collective 147:9	Commerce 159:23
Chow 245:4,5,6,14,21	cloud- 108:21	college 106:19 107:7 177:15 178:1 179:4	commitment 10:16
citation 234:23	cloud-based 108:25 109:9	colon 213:20	committee 148:25 149:6,10,12,14,19 151:10,14,15 152:11 154:2,3 155:17,20, 24 156:20,23 157:3
citations 234:24	clusters 74:6,8,11	column 46:10,21 47:14 133:11,25 134:17 164:16,21 167:2 173:8 174:3 210:15,17 219:9 227:18 228:3 247:1, 2,3,4	common 15:10,11 54:4 56:16,24 57:1, 8,16 168:7,11,16,22 169:5 171:12
cited 234:13,21	co-authored 146:5	columns 43:20 44:10, 11 50:2 132:4,5 133:5,18 210:5	commute 235:25
cites 234:17	coaches 230:10,11	combined 221:15	commuting 235:8 236:1
cities 236:2,3	coaxed 136:25	combining 175:13	companies 24:12 25:10 70:18 71:20 72:9 93:11 115:2,3 121:14 126:6 189:7 236:25 237:23
city 99:5,10 159:24 237:13 238:2	codable 107:10	come 21:16 24:25 68:4 74:22 75:1,4,17 152:20 159:14 230:16 236:23 252:21	company 15:17 20:15 24:18,19 69:15,18 70:4,6,21 71:23 72:7,12,16 89:7 90:17 91:6 102:13 103:6,7 108:11,15 114:19 115:10,23 116:7,8,12,13 140:11 160:7,22 167:17 172:21 173:19 190:3 224:14,20 230:3,13, 18 231:8,20,25 237:11 238:8,9,15
city-wide 228:24	code 46:9,16,22,23 47:2,3 48:6 49:5 54:8 55:15 58:1 74:7 85:7,18 90:11 121:18,20 123:21,22 124:1 211:6,14,23	comes 101:1 121:13 209:20 218:20 237:3 260:13	
claim 143:15	coded 106:20	comfortable 35:19	
claims 14:19,20 15:1 16:4 19:10 239:11, 13,16	coder 173:15 211:21		
clarification 30:7 119:5 218:17	codes 44:17,19,21 45:4 46:8 48:21 52:24 53:4,21 54:6, 13,20 90:20 175:10, 13		
clarify 12:2 49:21 209:22	coding 36:11,14 107:14,15 113:24,25 211:12		
clarifying 214:16			
class 41:6,10 61:12 137:10			
classes 222:2			
classic 217:16			
classification 47:20			
classifications 52:6			
classify 44:22			

248:4,8 249:19	complexity 90:18	condition 14:13	75:23 82:16 196:3
company's 101:17 102:11	Compliance 8:6 9:20, 24 23:1	conditionally 139:2	considering 124:22 125:4 168:4
company-specific 224:10 228:20,22,23 229:2 230:1 231:3, 17	complicated 119:7	conditions 65:13	consistent 60:17 62:21 66:13 71:3
comparably 15:5,16 126:2	complications 239:20	conduct 52:17 255:8	constraint 233:16
compare 176:4	component 129:20	conducted 71:5 97:3	constraints 233:7 234:10 235:3
compared 62:10 168:25 177:25 180:11	components 47:1,2 52:5 55:17 127:8,25 128:4,5 130:11	conducting 190:20	constructed 174:2
compares 43:23	composed 127:12	confer 259:4,24 260:17,25	consult 18:4
comparing 54:2	compound 15:20 50:9 55:23 62:17 66:4 67:3 69:9,20 70:13 72:23 73:17 79:24 83:7 87:22 90:15 91:9,21 101:21 102:15 124:18 167:25 176:8 197:14 198:12 250:6	conference 26:12 154:13	consultant 22:4
comparisons 123:4	compute 217:18 218:11	conferring 260:8	consulting 21:23
compensation 14:21 15:1,2,9,15 16:4,8,9 18:13,16,21,22 19:2, 4 20:17,21 33:9,10, 11 38:23 44:23 45:3 52:16 55:19,21,25 56:2,4,9 64:17,22 73:6 75:11 90:20 101:19 102:13 103:14 105:15 121:6 127:7 129:8 133:14 137:19 153:12 155:11 172:20 232:9	computer 37:16 72:13 251:3	confidential 138:11, 12,20 139:3 255:14 257:5,6,25 258:7,13, 14,17 259:11,14,17 261:11,14	contain 31:16 32:16, 24 33:4,14 42:21 43:5 63:23 64:5 74:16 87:18 94:24 95:11 110:3,9 167:20 174:19 175:2
competing 117:18,19 252:22 253:1,13	concept 137:4 221:8 223:15 224:7	confidentiality 157:13 242:24 258:3	contained 36:7,17 45:11 85:1,4 92:3,13 94:1,19 97:22
competition 233:9	conception 16:2	confine 190:23	contains 56:15 67:20 68:24
competitors 54:4	concern 168:3 183:5	confirm 163:6 164:3 191:10 204:11 225:23	contemplated 255:12
complaint 64:7,12,16	concerned 132:2	confused 12:8	content 162:12 163:4
complete 11:19 13:7	CONCLUDED 261:25	connect 127:4	contents 157:8,19
completed 95:24	concluding 70:4	connected 114:12 118:24,25	context 121:17 193:14 223:24 229:19 232:23
completely 257:22	conclusion 12:17 16:12 19:13 20:19 45:16 53:8 250:17, 20	connection 16:15 143:15 158:12,13 229:7 239:1,5 242:6, 10	contingencies 257:1, 3
completing 13:14	conclusions 74:23 180:10,17 191:8 250:10	conservative 189:5	continue 67:17 139:19 243:1,6 251:21 255:23,24 256:2 257:2
		consider 37:23 71:22 73:7,9 96:17 101:13 102:6 135:20 154:22 223:11	continues 89:15 222:13 234:16
		consideration 83:5	
		considered 40:24	

<p>continuing 183:12 214:12,19</p> <p>continuously 242:21</p> <p>contours 104:25</p> <p>contract 8:6 9:19,24 14:11 23:1</p> <p>contracting 23:19,23</p> <p>contracts 22:25 25:16 26:21 27:5,21</p> <p>contributed 150:6</p> <p>control 46:9,16,20 50:14 67:7,9 87:25 106:13 129:25 131:16 164:24 166:14,21 170:11 173:7 187:6 231:8</p> <p>controlled 133:19,21 170:1 215:1</p> <p>controlling 169:23 181:11,13 231:19 249:10</p> <p>controls 130:1,2 133:5 171:23 180:22,23 194:12 231:24</p> <p>conversation 226:12</p> <p>conversations 31:20 32:6,12,17</p> <p>conversely 82:19</p> <p>Cooper 140:12 160:4, 9,15 161:11</p> <p>copies 144:9 159:1</p> <p>copy 17:7,17 36:20 86:16 145:3 146:4, 18 148:11 161:1 226:17</p> <p>core 120:19 121:3</p> <p>Corporation 21:20,22</p>	<p>22:2,9,12 24:4 25:5 28:1 29:2,12 30:3,4, 10,22</p> <p>correct 10:15 12:24 13:25 14:3,16 16:5 21:12,13 28:7 29:10 33:20 34:5 36:5 38:7,8 40:6 41:7,16 43:24 44:2 50:15 51:19 54:15 60:19, 23 61:1,18 62:11 65:1 70:11 71:7,12, 17,18 77:1,24 78:13 79:5,20 81:17 88:16 89:14,19 91:19 92:17 93:16 99:18 106:9,11,21 107:18, 24 109:4 110:17,18, 20 117:3 118:22 123:2 126:2 128:22 129:3 130:11 132:6 135:16,24 137:23 142:14 143:2,6 145:3 149:10,23 155:2,25 159:4 160:15 164:16 165:1,5,10,13,14 166:16,24 167:6,9, 15,23 168:8,9,12,13, 17,23 170:3,19 172:24 173:2 174:7, 16,18 175:1 178:5,9 180:7,9,11,18 183:9, 19 185:2,16 186:13, 20,23 187:22 188:1 190:7 191:17,20 192:1 194:13 195:25 196:2,10,11,14,17, 24,25 197:13 198:2, 10 199:4,14 200:22 201:9,16 202:10,22 204:4 205:11 206:10,14,18 207:11 209:24 210:19 212:7 213:19 214:22 215:2</p>	<p>216:5 219:17,24 220:13 225:16 227:23 228:4,12,15 229:5 232:15 245:18 255:4</p> <p>corrections 13:1</p> <p>correctly 23:5 24:5 92:9 104:22 133:15 138:6 173:9 195:11 225:24</p> <p>correlated 82:11 237:17 238:9</p> <p>correlating 125:19 126:23</p> <p>correlation 81:5 219:15,23,25 236:12 237:2,5 238:17,20</p> <p>correspond 227:17</p> <p>correspondence 109:25</p> <p>corresponds 185:21, 25</p> <p>cost 231:19</p> <p>Council 155:21 156:16,22 157:1</p> <p>counsel 8:12,24 13:19 19:1 31:19 32:14 34:7 40:8 42:9,12 80:1 86:14 89:23 90:3 103:18 143:23 169:15 182:2,7 208:12 209:21 251:15</p> <p>count 19:20 240:19 241:23</p> <p>counted 173:13</p> <p>counting 207:24 211:9</p> <p>country 172:7</p>	<p>counts 198:18 199:18 201:17 206:13</p> <p>couple 21:9</p> <p>course 39:22 40:6 107:17 122:5 129:22 130:17 171:2 172:2 217:21 219:5 238:13 249:14 250:20 253:25</p> <p>court 8:12,13 10:17 12:18 13:10 30:7 139:22 140:3,15,16, 22 144:17 161:25 192:18 218:17 259:1</p> <p>cover 166:17</p> <p>create 47:12 50:13 52:24 157:4</p> <p>created 47:9,10,22 81:2 107:5 170:19, 20 174:5,19 175:2,6 178:5,9 216:7,13 217:3,13</p> <p>creates 216:20</p> <p>creating 48:11</p> <p>creative 99:3,8 236:24</p> <p>credentials 143:10, 15 246:17</p> <p>credible 223:20</p> <p>criterion 124:5</p> <p>criticism 141:23</p> <p>criticized 140:3</p> <p>cumulative 187:7</p> <p>curious 151:24</p> <p>current 14:5,10,12 33:11 62:23 63:13 217:22</p> <p>currently 111:20</p>
---	---	--	--

curve 116:14	database 106:9 108:20 109:1,2 112:23 171:20,21	decisions 18:20 44:23 48:12 50:6 61:5,16 62:1 69:18 70:5 98:9 133:8	21 217:21 218:18 222:5 225:3
customers 115:19	databases 92:10 108:16 109:8 165:5 172:8	declaration 41:5 48:19 112:3	depending 27:15 80:24
cut 86:16 88:11 102:16 182:8,22 226:6 255:7	Dataguard 88:13,22, 23	declarations 100:6,9, 13 101:4 112:1	depends 55:4 77:20 78:16,18 89:6 103:9 105:16 113:7,18 115:19 134:3 222:16 223:1 224:16
cutting 249:18	date 8:3 25:17 27:6 28:2 29:12 30:10 75:25 137:4 159:7 238:25 239:24	decrease 244:21	depict 196:22
cutting-edge 249:18	dated 34:17,19	deem 12:25	depiction 196:13
CV 98:13,16,22	day 9:25 13:21 234:16 242:3	defined 172:21	depicts 196:8
<hr/> D <hr/>	days 94:14 109:5 242:1 258:18	defines 15:15 45:16, 17 221:25	depo 10:19 138:24
D-U-F-F-Y 24:2	de-duplicate 208:4	definite 211:21	deposed 10:25 20:24
D.C. 20:12,13	de-duplicates 211:7	definition 16:8,9 43:17 44:3,14 72:6,7 198:13 221:10,16 224:25	deposition 8:4 9:18 10:10,14 11:3 12:17 13:8,21,22 20:7 21:16 34:1 48:19,23, 25 49:1 51:5 56:5 83:22 85:14 86:2,21 87:6 94:12 99:17,19, 25 100:3 112:7 138:19 143:18 144:4 169:20 182:6 255:3, 5,9 256:12,23 257:2, 21 258:6,12,13 259:2,5 261:23
damages 18:23	de-duplicating 211:13	degree 37:15,20 106:17,24 107:3 165:9 167:22 170:7	describe 46:3 90:12, 20 131:8,10 167:21 179:24 183:12 235:2
damn 140:24	deadline 138:17	degrees 55:13 117:11,12	described 84:7 105:8 113:4 132:11 165:1 176:9
data 15:25 33:5 40:13,16,17,24 46:23 48:13 61:12 65:24 66:7,11,14,18, 24 67:1,4,7,12,20,24 68:23 69:5,12,15,24 70:8,15,19,24 75:13 82:12,13 84:14 85:10 92:7,11 96:5 97:4,25 103:10 106:4 109:14,15,16, 23 110:25 111:6,8, 15 117:24 118:17 119:3,19,21 130:8 142:14,16 143:4 149:14,15,22,24 150:1 155:11 157:14 165:2,4 205:16 210:1,8,12 216:8 219:8 220:20 222:17,18 223:12 224:10,11 228:19, 20,22,23,25 229:2 230:1 231:3,4,6,9, 16,17 232:1 245:1, 10 247:5 250:7,9,15	deal 120:3 140:18 149:15	demand 116:14 250:25 251:8	describing 92:15 175:24
	dealing 112:14,16	demonstrable 73:2	description 47:19 89:13,17
	Dean 149:13,25 151:15	demonstrative 226:25	descriptions 84:10, 17 90:5,7
	December 148:25	Dennis 8:11	
	decide 93:1,5 123:21	department 8:8 9:2,4, 6,8 22:25 89:13,17, 21 90:4,7 135:7 136:5,11,13,15 252:3 253:6,18 254:2 257:16 259:16	
	decided 92:22	departs 243:1	
	decision 19:2 51:14 95:5 123:18 124:13, 23 257:15	dependence 224:23	
	decision-making 56:9	dependent 214:2,4,	

<p>descriptor 47:6,8,23 48:9,11 50:13 78:17, 18 81:1,7,8,16,21 106:17,18 170:15, 18,24 171:5,18 174:2,5,10,13,23 175:6,20 176:20,23 177:8,9 178:8,13,15 243:23</p> <p>descriptors 81:14 82:4 174:19 175:2 178:4</p> <p>design 79:3 150:21 157:12</p> <p>designate 138:19,24 139:2 257:8 258:7, 11 259:13</p> <p>designated 14:15 138:12</p> <p>designation 138:22 255:15 259:2</p> <p>designations 138:18 258:3,17 259:11</p> <p>designed 50:23 74:11 79:18 152:16,21,22, 23 174:13 225:23</p> <p>designing 74:16</p> <p>detail 16:18 45:25</p> <p>detailed 75:7 113:8</p> <p>determine 56:1 123:19 143:5 244:24</p> <p>determined 66:19 128:6 131:13,20,22</p> <p>determines 121:6 237:24 238:5</p> <p>determining 145:12 248:15</p> <p>develop 91:1 113:3</p>	<p>developed 115:16 239:20 242:15</p> <p>developer 74:7 81:16,20 82:3 85:8, 9,18,19 170:24 171:17 174:9,10 178:9,13 179:6,7</p> <p>developers 81:8,13, 16,22 82:7 178:19</p> <p>developing 120:19 172:7</p> <p>development 18:14, 16 59:3 60:8 61:24 62:14 63:17 81:6 88:13,22,23 118:22 120:13,18,22 122:4 178:5,15,21,22,23</p> <p>deviation 184:23 185:2 186:1</p> <p>deviations 188:7 190:2 194:16 227:21</p> <p>devoted 240:20</p> <p>differ 112:11,21 113:5,14 114:19,24 115:10,22 220:6 244:8</p> <p>differed 244:11</p> <p>difference 26:9 40:12 67:10 71:1 180:14 181:13 187:6,13,24 188:17,24 190:7 191:6 196:14 199:24 205:19 214:9,13 216:15 217:17,19 219:7 229:21 235:18,21,22 247:21,23</p> <p>differences 15:4,5,16 18:13,15,24 47:17 52:15 59:22 62:9,23 63:3,8,13 71:2,11</p>	<p>73:5,19 85:23 87:15 93:12 103:14 116:2 117:3 120:5,16 127:5 129:23 130:3, 4 148:8 163:19 178:13 179:5 196:9 227:11 244:12</p> <p>different 28:16 40:9 47:17 55:12,13,15 70:17 72:17,18,20, 25 73:1,11,12 75:12, 18 79:1 87:7,11,19 89:18 90:12,13,19 91:5,15,17 111:20 113:4,9,10,15,21,25 114:2,6,18,23 115:9, 19,21 117:11,12 118:21 121:12 123:5 124:13,14,15,16 127:8,18,20,25 128:6 130:10,11 134:18 140:1 162:3 171:6 189:7 190:3 199:25 209:15 218:3 230:19 231:2 233:16 241:9 243:22 244:1 257:16 259:11,12</p> <p>differential 234:10</p> <p>differentials 18:23 19:4 33:9,11 38:23 133:14 147:25 234:15 235:3 260:6</p> <p>differently 18:10 26:10 43:14 72:18 73:1 145:18 175:15 209:1</p> <p>diggers 70:23</p> <p>dilation 87:25</p> <p>dining 26:15</p> <p>direct 22:17 104:5 203:6 255:8</p>	<p>directed 193:19</p> <p>directly 239:18 252:6, 9,12,15,17</p> <p>director 154:14</p> <p>disadvantaged 198:4,20,22 199:16, 21</p> <p>disadvantages 190:17</p> <p>disagree 118:13</p> <p>disclosure 157:13</p> <p>discrete 200:2</p> <p>discretionary 134:6</p> <p>discrimination 11:3 14:21 15:1,2,9,16 16:2,4,8,10 20:17 23:3 52:9 63:18 66:1,8,13,23 67:11 68:1 69:7 71:4,13,15 117:14 137:10 144:19 148:1 233:5</p> <p>discriminatory 58:7, 15,23 59:5 60:10 61:5,16 62:1 237:12</p> <p>discuss 65:16 138:21 243:7 260:15 261:16,18</p> <p>discussed 10:12 32:8 34:25 35:22 49:24 50:23,25 102:25 109:14 138:10 239:5</p> <p>discussing 17:16 65:12</p> <p>discussion 94:25 107:9,12,13 118:8 134:13,14</p> <p>disparities 56:18 57:10,13,18 58:1 62:13 130:20 142:13</p>
---	---	---	---

disparity 248:5	128:13 137:13 144:2	draw 26:9,10	ease 182:3,6 213:4 226:12
disputed 261:11	151:15,21 152:6	drilling 178:24	easier 236:4
dissertation 15:22 144:25 233:1,2	175:11 211:17 224:2 243:20 254:22	drop 207:14	easily 92:25 93:18
distinction 26:18 131:10	dollar 54:7	dropped 169:11	eastern 10:15
distinguish 81:12 236:12	dollars 55:6 121:23	dropping 207:22	economic 102:6,24 148:15 233:23
distinguished 88:6	domain 150:20	DTA 40:2,5,10,13,15, 17 107:5 208:11 209:20,23 210:8,10, 12	economics 9:10 15:11,15 37:21 102:1,17,19 144:18 145:24 146:8,14 147:2 148:1,5,22 155:6,8
distinguishes 81:2,4, 8,13,21 82:2,3,7 250:1	dominates 198:25	due 10:16 131:17 260:11	economist 27:1 37:14,24 38:4,5 41:6 46:20 59:18 62:5 93:10 96:5 99:3,9 192:20
distribution 77:10,11 171:16 198:16	Doogie 240:7,10	Duffy 22:16 23:25 37:8,17,18,19,23	economists 16:2 116:10 155:9
distributions 201:19, 22	door 259:18	Duffy's 37:20	economy 224:15,17
divided 117:20	doubt 41:23	duly 8:16	economy-wide 224:10 228:19,24 231:4,16
docket 160:12 161:24,25	Dr 8:20 9:17 10:6 11:18 14:2 17:5,24 21:22 25:6,8 30:25 31:20 32:7,9,13,15, 23 33:2,16,18 36:25 37:18 38:1 41:10,13 42:1,5 51:19 65:11 67:19 68:20 74:11 76:17 83:24 85:16 86:7,9,23 99:23 104:4 139:13 143:24 144:22 146:4,18 147:8 148:11 149:2 154:8 155:13 158:4, 23 159:22 160:6 161:16 162:3,13,18 163:10,11,21 179:20 180:20 182:9 188:16 190:16 193:4 202:3, 4,7,15 209:13,19 212:20 225:22 237:10 243:1,6,9 251:20 254:10,17, 20,23,24 255:19,23, 24 256:1,6,11,13,14, 22 257:18	duplicates 207:14	Econsult 21:20,22 22:2,9,12 23:21 24:4 25:5,16 26:21 27:11 28:1,15 29:2,4,8,12, 17,23,25 30:3,4,9, 16,21 100:24 101:2, 4,12,14
doctoral 144:25	draft 156:25	duties 254:9	edge 249:18
document 17:6 34:5 39:12 83:8,20 89:24 157:8 160:10,20 162:1,4 163:5 195:3	drafting 35:13	<hr/> E <hr/>	edited 156:23
documentation 137:16	drafts 156:14,21 157:4	earlier 18:18 25:3 33:7,8 39:6 48:24 87:14 97:1 99:16,18 101:10 107:4 110:3 111:10 121:22 142:7 153:5 160:6 165:1 172:19,22 224:25 228:13 231:10 232:14	edition 145:5,7
documented 254:9		early 38:20	editorial 147:11,13, 17
documents 33:5 36:20 45:14 46:1,2 50:22 51:1 53:3,10 82:18 83:3,11 92:3 94:1,19,22 130:9,14 143:20 144:9,21 193:22 212:9 250:15 260:24 261:5		earn 254:3	educated 235:18
doing 23:13 27:3 39:22 40:15 43:24 44:22 45:6,20 65:20 112:18 126:12		earned 28:11,14 30:15	education 69:11,13, 24 70:24 74:10
		earnings 15:4,5 28:23 29:2,10 168:15	
		earns 66:8	

103:7,11 104:21 106:3 124:2 132:16 134:5 164:15,18,22, 24 165:8,21 166:6, 13,14,21 167:2,5,7, 12,19 168:4,7,12,16, 23 169:6,7,8,12,14, 17 170:9 172:4 177:13,19,22 187:7 243:22	element 56:8,23 elements 56:12 eligibility 129:25 130:21 eligible 129:8,20,24 130:6,10,15 embellish 102:4 emergency 240:5 empirical 73:18 75:13 empirically 73:2,10 120:9 employed 156:15 employee 43:2 58:5 60:8 76:2,20,25 78:10 95:19,25 96:22 98:2,5 107:19 108:2 110:4 116:3 120:6 121:4 123:19 125:5 127:11 133:19 143:5 149:5 152:24, 25 167:23 202:9 210:16,20 211:8 212:3,6 employee's 121:6 126:1 165:9 170:3 employees 42:22 43:6,7,23 45:19 55:20 56:17 57:2,8, 17 63:9,17 67:14,22 69:1 72:18,20 73:1, 12,13 75:17 81:2 100:7,10,14 101:5 107:22,23,25 109:7 110:12 112:9 116:10,21 117:1 121:3 122:1,25 123:6,12,14 125:20 127:7,17 128:4 129:7,19 149:6 153:2 156:11,25 165:16 166:5,12	167:18 168:8,12,15, 17,23 169:11,14 170:8 171:3,6 172:13 174:6,11,20 175:3 177:11 206:14,17,24 209:22 237:12 250:2,3 Employeetransaction s.dta 208:8 employer 53:17 54:5, 12 104:20 105:10 171:9 230:8,10 238:8 employers 21:25 54:5 104:21 106:1 155:11,19 172:15,19 233:9 238:13,21 employing 43:1 employment 116:15 160:21 enabled 242:3 encountering 258:20 encyclopedia 159:2, 3,15 endo 134:1 endogenous 131:6, 11,12,18,21 132:5,9, 11,13,20,25 133:13, 20 134:2 223:21 ends 125:19 126:23 engaged 21:24 engineering 75:10 90:24 enlargement 226:25 entail 63:10 enter 15:17 254:17 256:3,7 entered 15:6 25:16	26:22 entering 57:24 178:12,14 Enterprise 20:11 21:8 23:17 24:14 142:7,8 entire 76:2,20 119:13 134:23 138:19 195:21 208:2 259:8 entirely 127:12,24 175:9 258:25 entirety 139:3 entitled 26:6 32:3 255:2,5 258:22 entries 211:24 entry 22:21 159:4,15 equal 245:11 252:8, 10 equal-pay 105:13 equally 79:4,19 114:13 equation 217:25 218:10 244:7 equity 124:11 127:18 148:24,25 149:8,10, 12,19 151:10,17,20 equivalent 198:14,17 199:22 200:17 201:4,19,22,25 especially 205:21 essence 190:7 established 233:22 estimate 10:25 18:23 25:21 26:6,11,15,21 27:4 28:1 34:24 35:21 41:18 238:24 241:2 244:6 estimating 26:10
--	--	--	---

estimation 26:7 28:9	excerpt 208:11	existed 143:7	explained 221:19,20 225:14
estimations 97:18	excess 142:18	exists 47:8	explains 225:2
ethnicity 23:4	excluded 139:22	exogenous 131:11, 14,23 132:3,8,9 133:6,19 134:1,2,3	explanation 210:7 222:6
Europe 173:23	exclusion 140:17	expect 10:23 26:3 108:10 123:12 210:13 237:16 238:7,19,24	explanations 117:18, 19
evaluate 75:1 133:12	exclusions 139:1 141:21	expectation 75:4 79:1	explanatory 221:15 232:2,19 245:7
evaluating 75:10 160:21 163:18 230:6,7 231:3	exempt 50:12 81:19	expended 35:25	express 45:21,25
evaluation 172:20	exercise 97:2 106:21 165:1	experience 55:14 90:22 97:8,12,18,21 98:7 103:11 104:19, 20 105:9 106:5 110:10 124:3 132:15 169:23,24 170:2,12, 13,25 171:6,10,11, 16,23,24 177:16,18, 22 179:4 252:6,9,12, 15,17 254:7	expressed 34:9 40:25 45:19 136:1,23
even-handedly 171:13	exhibit 10:4,6 17:6, 13,17,22,25 21:20 22:6,18 34:17,19 35:13 40:19 51:13, 14 63:5 86:5,8,24,25 104:5 122:13 132:18 138:23 141:13,14 144:4,7,18 145:22 146:1,4,12,16,18,25 147:5,8 148:4,8,11, 20,24 149:2 150:9, 16,22,25 154:5,8 155:10,13 156:2 158:1,4,21,23 159:20,22 160:4 161:13,16 162:15,18 163:8,10,18,21 164:7 181:5,17 186:7 191:17 194:6 202:19,24 204:18, 21,22 205:6 206:13 207:2,5 208:8,11 209:19 211:3,23 212:16,23 213:1,15 215:5,8,17,19,23 216:6,8,11 225:18, 22,23 226:1,21,24 227:1,5,6,8,14 256:3	experiences 176:17	expresses 135:21
event 86:17	exhibits 17:8 138:20 255:2,15 256:7,9 257:19 259:17 260:1	experiments 236:25	extensive 115:1
everybody 80:16 109:6 125:17 128:14 231:7 247:24 248:18,21	exist 78:2,11	expert 14:15 17:13, 18,22,25 19:16,19 24:11 25:8,13 28:3, 12 29:3,13 30:11 39:8 71:21 79:16 86:5 139:23 140:4 141:6 142:1 144:24 160:5,14 161:13 162:7,15 163:8 202:24 229:7	extent 28:17 38:25 51:14 80:15 106:15, 17 129:10 137:17,22 153:13 177:1 191:1 240:23
everything's 184:4 247:1		expertise 105:21,24 106:6,13	external 54:3
evidence 33:4 60:16, 17 61:8 63:21 71:16 140:18,23 180:13 237:3,9,23 238:3 246:2,8,20		experts 79:11	externally 124:9 126:16
exact 26:8 176:13 195:24 196:2 201:3 238:25		explain 55:24 193:1 229:18 236:18	extra 159:1
exactly 103:15 118:10 120:21 232:8			extract 106:23
examination 8:18 144:14 190:20			extracts 211:23
examined 8:17			extremely 11:18
example 15:14 140:6 169:9 174:10 178:3 219:13			eye 87:23 88:1 240:2
examples 140:6 249:15			eyes 134:12
Excel 83:20 84:9,13 92:6			eyesight 169:1
			<hr/> F <hr/>
			face 235:24
			faced 234:2
			facing 235:24
			fact 13:2 23:17 41:9

51:5 60:17 80:16 87:24 129:19 130:10 145:2 200:3 239:18 244:12 251:7	fashion 47:21	fill 135:6,14	Fisher's 195:24 196:2 198:4 201:3
factor 73:2 76:24 77:24 224:12,13 243:14 248:23 249:7,8	features 167:20	filter 134:8 210:3,4	fit 210:5
factors 72:17,25 73:11 76:1,19 103:5 104:18 124:14,22 125:3 128:6,7,11 244:2,25	Federal 8:6 9:19,24 23:1 221:24 236:8	final 39:12 86:18 157:4 260:11,12	five 21:6 103:18 158:19 208:2
facts 32:9 40:24 64:19 77:3 78:15 84:19 85:13 89:21 90:16 92:19 94:3 116:6 117:5 123:16 128:24 130:13 202:12	feel 65:15 101:16 102:10 123:24,25 242:25 243:3	finalized 41:19 242:13	five- 179:12
factually 253:12	fees 13:20	finals 260:16,20	flag 220:24
faculty 135:6,14 151:12 153:22 252:3,21	felt 233:19	Finberg 42:14,18	flip 88:24 133:10 164:2,8 183:11 185:8 186:6,15 197:1
fair 12:15,16 166:1,3 239:21 247:9 259:19	female 58:5,12 146:2 184:17 185:18 187:4 214:24 228:8	find 70:20 73:10,19 75:21 102:18,21 118:17 119:3,18 133:24 134:12 135:19 183:23 188:16,23 196:23	flipped 186:19
fair- 171:8	females 190:17	finding 169:1 181:12 196:8 199:11,15	flipping 157:17,18 160:1 162:10 163:4 188:8 196:19 227:13
fairly 260:12	field 89:24 109:16 145:24 146:14 147:2,3 148:6,22 155:6 166:16,24 174:15	findings 235:1	Flores 9:1 13:24,25 15:19 16:11,16 19:12 20:18 24:13 25:11,18 26:23 27:14 28:4,13 29:15 30:12 31:2,17 32:5, 20 33:21 35:1 36:8, 23 38:15 39:1,9,17, 19 40:3 41:1,21 42:24 43:8,25 45:23 46:18,25 48:1,15,22 50:8 51:7,16 52:10 53:7,13,23 54:9,16, 22 55:10,22 56:10, 19 57:12,20 58:8,16, 24 59:6,16 60:11,24 61:6,19 62:2,16 64:1,8,18,24 66:3,9 67:2,15,17 68:2 69:8,19 70:9,13 71:8,24 72:14,22 73:16,24 76:4 77:2 78:4,14 79:6,22 80:4 81:10,24 82:9 83:6, 16 84:18 85:2,12,21 86:13 87:13,21 88:17 89:20 90:2,15
fairness 91:16 191:7	figure 117:24 119:8,9	finds 235:15	
faith 137:5,7,9,13,15, 17,18,22	figured 209:12	fine 135:12 138:4 158:17 226:19	
familiar 137:3 143:19	figuring 52:5	finish 57:5 93:3 205:2 246:20	
familiarity 108:10	file 83:20 84:9,13 92:10 95:10 181:19, 22 182:18 183:3 184:11 185:5,19,24 188:1 191:17 192:16,22,25 193:8, 12,13 194:6 204:24 205:3,8,10 206:5,9, 12 207:6,11 208:11 209:20,25 213:7 215:11,15,16,17 216:1 226:2,9,15 228:7 257:7 259:4	finished 13:14	
families 176:4,7	filed 138:17 258:21 260:24 261:5	firm 20:13 21:23 23:13 25:23,24 27:1 57:25 74:19 75:8,11, 12,18,22	
Fanning 8:5,15 144:18 158:1	files 39:18,21 40:2,5, 9,10,12,16,17 84:15 92:13 107:5 212:21 213:3	first 8:16 18:11 19:15 30:23 33:3 68:21 72:24 88:10 89:9 102:16 123:21 133:4 144:23 145:4,7 156:14,21,24 157:15 164:14 179:22 181:19 192:8 213:19 214:1 216:6,12 219:9 238:25 240:1, 13 241:22	
far 27:15 30:24 160:13		first-level 123:13	

<p>91:8,20 92:4,18 93:21 94:2,8 95:7, 14,20 96:3,12,23 97:9,24 98:17,24 99:21 101:6,20 102:14 103:8 105:11 106:10 109:11,19 110:6 112:12 113:6, 17 114:9,16,20 115:11,24 116:5,24 117:4,22 118:16 119:16,24 120:8 121:7 123:8,15,20 124:17,24 125:6,23 127:9 128:8,23 129:9 130:12 136:6, 8 138:7 139:4 143:8, 23 144:3,8,13 162:2 164:19 166:25 167:24 169:15 171:1 172:23,25 175:8 176:6 178:16 182:7, 13 183:22 189:14 192:23 197:14 198:11 199:6,10 200:23 202:11,14 203:14,17 207:21 219:18 226:17 237:19 243:3,16 246:6 248:10,24 250:5 251:15 253:19 254:10,16 255:1,17 256:5,18,20 257:9, 14 258:18 261:19</p> <p>flow 142:14,16,18 143:4</p> <p>focus 50:1 77:22 85:6 104:10 135:4 200:4 208:22,24 217:10 240:12</p> <p>focuses 104:16 172:22</p> <p>focusing 85:17 136:9 167:4 241:8</p>	<p>follow 119:9 227:10</p> <p>followed 235:19</p> <p>following 68:13 104:18 183:16 188:15</p> <p>follows 8:17</p> <p>fools 53:15</p> <p>Football 230:2,5,9</p> <p>force 146:2 172:4 207:15 228:19 231:4 250:13</p> <p>forces 76:24</p> <p>form 35:18 39:24 48:19 96:7 152:20 158:25 159:6 218:1, 5 228:7</p> <p>format 36:21 39:25 69:16 70:17 87:7 93:18 149:17</p> <p>formed 43:6,17 62:12</p> <p>forming 34:8,12 40:24 41:12</p> <p>forms 129:6 217:9</p> <p>forward 25:1 75:1,4</p> <p>found 18:24 34:4 77:18 93:16 109:16 176:24 197:5,10,23 198:6 201:13 235:5</p> <p>foundation 39:20 40:4 42:25 43:9 54:23 57:21 64:2,9 76:5 78:5 81:25 87:22 96:24 130:13</p> <p>foundational 71:14</p> <p>founding 22:3</p> <p>four 21:15 27:8,10 141:22</p>	<p>FRCP26 32:4</p> <p>free 65:15 123:25 162:22 163:23</p> <p>frequently 75:21</p> <p>front 17:8 20:3 22:6 26:14 141:15 181:17 195:7 212:23</p> <p>full 13:15,16</p> <p>fully 151:19</p> <p>function 18:14 48:21 59:3 60:8 61:24 62:14 63:17 118:21 211:14</p> <p>functionally 117:21 218:5</p> <p>functions 18:17 58:5, 13,21,25 61:3,14 120:12,17 121:5 122:3</p> <p>funded 154:16</p> <p>fungible 91:7,11,18</p> <p>furnish 246:2,8</p> <p>further 89:5 93:20,23 138:21 235:11 238:5 261:17</p> <p>furthest 210:17</p> <p>future 127:23 237:24 238:5</p> <hr/> <p style="text-align: center;">G</p> <hr/> <p>gains 249:3</p> <p>gap 65:24 66:6,12 67:24 69:5 158:21</p> <p>GCL 80:24 82:1 130:5 175:13</p> <p>GCLIC3 183:8</p>	<p>GCLIC4 185:9</p> <p>gee 154:16</p> <p>gender 18:15,22 19:3 23:3 75:19 120:25 125:19 126:24 129:23 130:4,20 133:13 148:8,24,25 149:8,10,11,19 151:10,18,25 152:1 153:23 155:19 163:19 181:13 184:20 185:17,21 186:22 187:6 219:3, 4,5,7,15,16 220:1,3, 6,7 227:11 229:13 233:13 234:14 235:3 244:9</p> <p>genders 126:25</p> <p>general 16:17,20 98:7 105:15 112:17,25 113:22 117:6 172:17 231:1 247:6 248:25 251:24</p> <p>generalized 97:18</p> <p>generally 25:5 90:25 105:1 148:19 177:17 196:3 218:23 224:1, 3 231:9 251:1,9</p> <p>generate 39:14 115:22 207:6 213:14 233:4 241:15,18</p> <p>generated 38:24 39:21 40:5 186:12 187:17 189:24 191:16 213:7 216:8 220:18 242:6,9 251:6</p> <p>generating 151:11</p> <p>Georgia 140:11 160:7</p> <p>getting 32:12 178:24 223:5 234:6,17</p>
---	---	---	---

260:10,11	goes 39:12	19 93:12 124:12	handled 125:16
give 12:18 13:7 15:14	going 8:23 25:1 27:25	128:14,15 180:20	hands 240:20 241:23, 25
16:22 19:20 22:20	30:19 52:4 65:6	187:20,24 243:20	
25:21 35:4 41:18	68:7,14,21,22 76:12	253:8	happen 21:6 126:25
46:1 97:17 103:10,	78:9 88:2 92:24	group-based 62:12	151:25 156:17
11 139:19 149:12	101:8 103:24 110:5	grouped 47:23 48:17	253:7,10
151:3 160:14,17	111:12 124:9 126:16	143:9,12 174:6	happened 23:12
184:6 191:22 217:13	134:7,11 135:15,23	grouping 48:13 52:6	24:18 27:22 148:19
221:10 249:15	136:13 138:18	143:11	177:25 200:25
given 54:8,14 56:20	139:2,8 143:24	groupings 143:5,7	happening 200:22
63:9 65:24 66:7	144:23 149:7 151:21	170:21	happens 80:25
109:17 121:4 123:19	153:3 164:15 171:11	groups 48:5,17 58:1	116:15
125:2 138:16 171:22	179:15 181:3	65:25 66:7,17,18	happily 96:16
192:6 209:14 218:4	192:11,14 193:1,5,	67:8,25 69:6 70:24,	happy 47:15 80:12
220:20 223:11	12,17 194:21 199:20	25 126:9 243:21,24	93:14
246:15,16 256:25	208:10,16 209:7,19	244:4	hard 35:14 36:20
260:18 261:15	212:12 219:3,13	growth 63:8	72:24 107:10 111:15
gives 220:25 223:25	222:14 224:24	guess 23:9 28:24,25	114:10,11 118:18
giving 11:4 158:11	225:21 233:20	35:2,5 40:13 74:3	145:2 224:22 238:4
259:13	238:17 251:18	75:2 98:12 108:8	242:19
glasses 65:17 88:2	254:19,20,21,23,25	117:13 123:17 130:6	harder 224:17 232:2
208:24	255:6,13 256:15	235:13,17 236:20	hardware 108:22,24
glean 99:1	257:11 260:2,4,10,	239:18 245:3 247:11	109:4
global 50:14 82:6	20	guessing 26:11	Harrisburg 158:2
128:18 129:11,14	good 8:20,21 99:3,9	guesstimate 30:14	hash 260:7
130:1,2 174:7 180:5,	137:5,7,9,13,15,17,	Guide 236:8	head 80:4
6,10 183:8 189:12,	18,22 138:4 139:13,	Gutierrez 161:13,17	header 132:19,25
14,17 191:13,25	14 168:3 177:23	162:7	headquarters 58:6,
194:6 197:24 198:8,	215:9 224:2,3	H	14,22 59:4 60:9
9 200:14 244:1	gotten 23:15 184:4	half 165:16,20	61:4,15,25 62:14
go 12:12 20:5 25:1	198:14 242:2	hand 241:24 260:16,	119:13 121:5
27:15,17 30:24 44:5	government 21:25	21	hear 141:3
46:4 65:16 68:3	grade 47:20 48:7	handed 181:18	heard 10:23 26:4
73:19 76:9 89:5	128:18	handful 144:21 221:7	117:23,25
98:19 102:21 104:7	graphs 203:3	handle 88:1 208:23	hearing 158:7
132:18 138:9 141:13	grave 70:23	220:19	heart 90:9 161:7
156:7 209:1 212:10	greater 127:1 159:24	help 102:4 141:5	
224:24 226:12,13	group 47:17,25 48:3,		
239:9 248:15 255:16	12 58:10 59:7,22		
259:6,7	60:13,19 61:8 62:3		
goals 137:12,14	66:2,8,19,20 68:1		
	69:7 71:1,3,11 73:5,		

202:19 208:19,25	171:9,10 239:11,13, 15	hypothetical 67:20 68:23 69:9,10,23 70:22 72:23 73:17 78:5 81:11 125:24 219:19 237:10,11, 14,20 248:11 251:24 253:14	116:1 218:19 259:12
helpful 184:1	history 27:18 79:14 80:7 118:2	hypothetically 67:12	ideal 65:13
hiding 191:22	hold 126:25		ideas 35:15
high 223:19 224:17 232:19 249:2 250:25 251:8	holds 131:4 167:23	<hr/> I <hr/>	identical 85:20
high-level 65:19 249:21	home 26:16 146:17 148:9		identifiable 201:18
high-technology 251:1,9	homogeneous 224:21		identification 10:5 17:14,23 21:21 86:6 144:19 146:3,17 147:7 148:10 149:1 154:7 155:12 158:3, 22 159:21 160:5 161:15 162:17 163:9,20 181:7 202:25 204:20 207:4 208:9 212:18 215:6 225:20 251:11
higher 113:12 121:24 129:2 180:5,10 197:7 198:23,25 199:19,21 201:14 249:5 252:13	honors 167:15	I.D. 88:12 210:4 211:15	identified 56:18 57:9, 11,18 98:5
highest 103:6 106:16 107:3 165:9 174:12	hope 53:15 124:11 145:25 154:16 215:7 260:16	I.d.s 88:25	identify 40:23 82:10
highlight 182:4,17	hopefully 124:4	IC 129:2 188:12 198:6 203:13,16 205:11 206:10	illustration 47:16
highlighted 183:17 185:9 207:14 213:15 216:12,20 227:8	hoping 99:1 200:2	IC1 174:11 205:18	imagine 67:20 114:12 237:11 238:15 252:1
highlighting 182:5,23 207:10 213:5 215:24 226:7	hourly 14:2	IC2 182:24 186:6,13 187:18,19,21 190:4, 14 205:18	immediately 104:13 183:16 227:10
highly 237:17 238:8	hours 35:2,6,11,24, 25 239:4 240:20 241:5,6,13,16,19 242:3 255:6,7 256:13 257:15,17	IC3 180:5 182:24,25 183:9,18,20 184:24 186:13 195:20,24 196:8,23 197:10 201:11,13 203:21,24 204:8 205:18	impact 72:17,25 116:4 120:7 245:1 257:1
hire 18:21 19:3 33:10 92:14,15,17 98:11 105:21,25 106:7,14, 18 111:9 137:12 170:15 173:10 202:9	housekeeping 138:8, 9	IC4 180:5 185:14,22 186:1 195:20,24 197:23 198:7 199:2 203:21,24 204:8 205:17	impacted 244:1 253:6
hired 143:1 170:23 171:17 197:6,11,24 198:8 200:13,20 201:14 202:9 204:1 252:7,19	housework 233:24	IC5 188:1,4,12,18 189:19 195:19,24 196:12,13,15 200:7, 11 203:20,21,24 204:8 205:16	impacts 243:14,17
hires 124:16 204:6,9	Howzer 240:8	IC6 188:18	Implications 146:1
hiring 20:20,22 52:16 98:8 99:6,14 136:3, 12 142:10,13 143:15	huge 72:10 234:12	iconic 115:13,18,20	importance 114:19, 24 115:9,10
	human 102:25 103:5 104:7 105:1,5 106:7 112:15 136:18	idea 25:20 27:2 29:4	important 11:18,23 13:12 104:19 114:22 115:15 191:5 222:24 236:12
	hundred 122:18,22		impose 237:8
	hundreds 112:8,10 123:13 175:2		imposed 233:16
	hurt 152:18		
	hypothesis 71:7,10, 17		

234:10 235:3	independent 43:18 74:22 158:18 189:1, 6 214:21 216:23 217:7 224:23	107:6,16,23 110:3,9, 20 111:3,11 119:5 120:24 124:8 126:1 155:18 157:20 170:13,22 171:5 172:10 173:4 183:12 185:4 193:20 207:10 255:2 261:10	instructions 216:7 instrumental 236:23 Insurance 162:16 intelligence 249:24 intend 10:14 144:7,11 193:23 intended 53:4 82:19 207:18 208:3 interact 74:2 75:15 interacted 73:23 interaction 73:14,20 74:4,8 245:2,16,17, 25 interactions 74:21 interactive 74:17 interdisciplinary 147:4 interest 135:22 136:1,23 interested 96:14 97:11 98:22 119:1 120:1,4 151:13 233:7 250:12 internally 151:16 interp 238:11 interpret 194:2 interpretations 229:22 interpreted 223:23 interpreting 236:10 interpretive 195:6 197:2 interrupted 83:22 interrupting 85:14 interruption 68:17,18
impossible 250:8 impression 111:22 inadvertently 18:9 inappropriate 175:11 259:9 Incidentally 188:10 include 77:24 93:18 97:19,20 106:5 173:17,21 174:11 187:21 188:3 189:23 191:19,21 201:21,25 221:1 255:18 included 46:9 47:5 63:25 64:7 75:20 97:15 103:5 106:8 167:11 177:8 185:6, 22 186:4 191:21 194:18,25 201:24 202:4 206:7,24 220:19 243:14 244:25 247:16 includes 166:24 173:25 188:12 including 157:3 173:14 219:2 incomplete 69:8 72:22 73:17 78:4 81:10 125:24 219:18 237:19 248:10 inconsistent 71:17 incorporate 66:24 129:16 incorrect 62:18 increase 104:17 244:19 253:5 increased 253:1 increases 125:11 126:8 146:2	indicate 12:11 31:4 247:3 indicated 109:25 indicates 147:21 227:9 indirectly 239:18 indiscriminate 258:2 individual 59:8 60:22 61:10,12 77:8 111:12 113:20 124:2 221:18 243:15,21 248:16,20 individual-by- individual 59:13 individually 191:3 196:18,25 individuals 62:5 66:25 67:6 77:12 104:16 111:1,2 126:3,24 127:6 128:19,20 131:15,18 136:14 157:20,23 222:19 223:3 243:25 245:1 industrial 51:18,22 inference 65:25 66:7, 22 67:10,25 69:6 71:4 inferior 91:12 info 169:12 information 18:16 22:13 23:23 26:8 49:8 67:13,21 68:24 70:7 87:8 89:15,25 92:13 93:17 96:6,9 97:7,20,21 106:2	informative 245:24 informed 75:20 192:25 initial 17:18 18:12 33:19,20,23,24 34:16,18,25 40:20, 25 42:20 43:4 44:6,8 46:4 56:14 57:22 58:7,15,23 59:5 60:10 62:22 63:9,13, 14,19,22 64:4 82:14 84:4 104:6 122:15 123:23 132:10,18 133:3,22 141:25 166:22 167:8,13,20 169:22 177:5,7 178:6 179:22,23 219:10 226:3 239:6 241:8 243:12 initially 135:22 136:22 innately 66:18 input 151:3 insignificant 187:14 insisting 255:18 institution 38:9 252:23 instruct 50:3,4 instructed 50:10,12 instructing 45:2 instruction 50:19	

<p>interrupts 86:2,21 87:6</p> <p>introduce 8:25 104:7</p> <p>introduced 174:3</p> <p>introducing 8:23</p> <p>introduction 154:17</p> <p>investing 115:4</p> <p>investments 67:5 104:16</p> <p>invited 159:17</p> <p>involve 91:6</p> <p>involved 23:7,19 27:9 38:12,25 70:5 71:22 77:7 79:11 92:14 98:8 150:21 157:10 232:14</p> <p>involves 114:14</p> <p>involving 23:2 25:9 71:25</p> <p>iphone 115:5</p> <p>isolation 188:19</p> <p>issue 16:5 17:16 54:20 55:20 56:17 57:2,9,17 58:6,13,22 60:2 61:3,14 96:19 117:17 121:5 129:22 142:19,25 170:17 226:24 232:15 260:3,9</p> <p>issued 49:10 51:3 94:18 177:7</p> <p>issues 239:21 242:24 259:12 260:8,15 261:13</p> <p>issuing 82:18 83:13 84:1,4 95:3,17 96:2</p> <p>item 217:10</p>	<p style="text-align: center;">J</p> <hr/> <p>Jacobs 154:13</p> <p>James 9:11</p> <p>Janice 8:5,15 29:22 30:2 158:1</p> <p>Java 85:25 112:17,18 113:25</p> <p>Jerry 154:13</p> <p>Jessica 9:1,11 242:23</p> <p>Jewett 42:5,9,13 99:20 100:10,13 101:5</p> <p>job 18:14,17,20 19:2 33:9,10 44:17,19 45:2,4,5 46:8,9,16, 22,23 47:2,3,6,8,10, 13,15,19,20,23 48:6, 8,11,20 49:5 50:13 51:25 52:2,4,6,7,17, 23,24 53:4,21 54:3, 6,8,13,20 55:5,13, 14,15 57:22 58:1,7, 15,23 59:5 60:10 62:14 63:9,13,15,17 74:9 78:16,17 80:23 81:1,7,14,20 82:3 83:14,25 84:3,4,10, 16 85:7,17,18,19 87:4,10 90:11,18,19 105:10,17 106:17,18 110:2 114:14 116:21,23 118:21 120:12,16 121:18,20 123:21,22 124:1 128:12 131:2,3 134:4 170:15,18,24 171:4,18 174:2,5,10, 13,14,18,22 175:6, 10,20 176:3,7,20,23</p>	<p>177:8,9 178:4,8,13, 15,18 187:8 199:17 203:23 235:10,24 243:23 248:23 249:1 252:13</p> <p>job-related 249:7,8</p> <p>jobs 44:22 47:24,25 48:6 52:14,15 75:10, 16 90:19 91:6,18 117:11 121:3,24 124:10 126:17,25 127:6 171:10 175:25 176:2 177:16,17,22 234:6 235:6 236:5 249:10,11</p> <p>John 156:8,9</p> <p>Johnson 72:3 161:14,17 162:8</p> <p>joining 173:19</p> <p>journal 145:19 147:4 232:3</p> <p>journals 98:19 223:16 228:14 229:14</p> <p>judge 140:19 141:4</p> <p>judge's 258:9 261:15</p> <p>Judges 8:9</p> <p>judgment 134:7 179:10</p> <p>Judicial 221:24 236:8</p> <p>July 17:13 34:18 36:1 41:15,17 49:2,6,10, 14 51:2 82:18 146:17 239:7 253:22</p> <p>justification 94:20</p> <p>justifications 92:3 94:1 95:1,5,13 111:10</p>	<p style="text-align: center;">K</p> <hr/> <p>Kathryn 9:13</p> <p>Kathy 22:15 23:25 37:8</p> <p>keep 138:5 254:20,22 257:11</p> <p>keeps 250:10</p> <p>kept 14:13</p> <p>key 227:19</p> <p>kids 233:25</p> <p>kind 10:23 19:9 75:7 85:23 87:4 91:5 92:7 96:9 98:15 112:24 113:11,22 126:12 147:18 175:14 220:24 223:21 236:16,23 245:15 250:2,4</p> <p>kinds 112:15 113:4 172:15 234:6 236:24 249:4</p> <p>knew 74:25 175:10</p> <p>know 12:1,9 13:6 14:10 19:6 20:3 22:14,22 23:10,13 25:22 27:20,24 29:18,19 30:11,15, 16,20,24 32:9 36:18 37:6,22 38:17 39:3 42:12,15 43:2 50:20 51:25 58:18 60:4,12, 13 65:15 67:8 70:16 72:24 83:2 87:15 100:15 101:3,4,9,17, 24 102:11 103:9 107:9,11 108:24,25 109:7 110:19 111:2 112:19 113:2,12 114:4,17,23,24</p>
---	--	--	---

<p>12 235:2,16 244:6 260:2</p> <p>litigation 21:24 77:6 232:21 236:15</p> <p>little 24:24 70:3 122:10 174:24 229:20 233:23 242:2,4 247:12 251:22</p> <p>live 236:3</p> <p>Livermore 72:5</p> <p>living 231:20</p> <p>located 43:12</p> <p>location 58:6,22 59:4 60:9 61:15,25 62:15 119:13</p> <p>locations 58:14 61:4</p> <p>log 40:10 181:5,19,22 182:18 183:3 184:2, 11 185:5,19,24 188:1 191:17 192:16,22,25 193:8, 12,13 194:5 204:18, 24 205:3,8,10 206:5, 9,12 207:2,5,11 212:16 213:7 214:13 215:15,17 216:4,16 217:9,11,14 218:6,9 225:18 226:2,9 228:7</p> <p>LOG_APPENDIXB. LOG 181:20</p> <p>logs 40:1,7</p> <p>long 41:23 92:7,12 125:16 127:3 129:12 150:1 151:16 159:10 251:4</p> <p>longer 118:2 235:8</p> <p>look 16:25 17:6 35:3 43:13,15 52:14,15</p>	<p>59:10,22 61:12 62:5, 19 74:7 78:22,23 80:24 82:14 84:14, 20 86:23 87:3 88:3 89:9 92:21 93:14 94:13,15 98:7,12 100:21,25 102:1 103:21 110:14 118:5 119:1 123:21 124:1, 2,3 131:24 134:1,21 140:23 141:5,12 154:18 162:10 163:3 169:6,8,13 170:6,16 174:14 176:16 177:14 178:25 179:2 181:18,22 184:17 199:18 202:13 203:3,11,23 209:2 210:8,15 216:5,11 226:16 233:10 236:25 245:8,16 247:4,20,23 248:16 250:22 253:8</p> <p>looked 55:1 59:9,23 61:10 62:4 82:25 83:3,4,19 85:3 94:16 100:19,21 106:15 107:4 111:21,23 120:23 142:13,15, 16,17 143:11 169:7 177:25 180:21,25 185:5 188:19 202:10 210:11 221:4 230:1 232:13 233:11 234:14 240:7 242:18 249:3</p> <p>looking 15:8 22:5 52:4 66:16 69:14 70:23,25 71:16 74:9 78:19 88:15 89:2,3 97:4,7,11 98:15,18 100:17 103:22 120:4 122:12,13 124:15 126:16 130:21</p>	<p>132:3,5 142:24 143:3 151:20 157:7 164:21 169:4 171:9 184:11 189:20 191:2 197:3,22 200:6,7,8 201:5 203:9 212:3 217:6,19 223:10 224:9,16 230:10 231:15,16,24 233:3 238:21 249:3,4</p> <p>looks 39:4 101:1 198:24 210:9 245:6 248:25</p> <p>Los 72:4</p> <p>lose 240:5</p> <p>lost 80:10</p> <p>lot 168:24 223:6 232:12 238:3 255:13</p> <p>lots 93:10</p> <p>low 223:11,13,14 224:7 232:6,10,18</p> <p>lower 116:11 140:15 197:12,21 198:1,3,8, 23,24 199:20,23 200:13,20 223:7,25</p> <p>lunch 134:21 138:4</p> <p>Lupinetti 36:16,25 37:2,13</p> <p>Lynch 140:15,21 229:3,8 232:7 236:21</p> <hr/> <p style="text-align: center;">M</p> <hr/> <p>M2 188:9,14 189:12, 13,16,17,23</p> <p>M3 191:14</p> <p>M4 191:25</p> <p>M5 194:6,13</p>	<p>M6 174:11</p> <p>M7 174:12</p> <p>machine 36:21 69:16 70:8,16</p> <p>madden 8:5,15,20 9:17 10:4,6 11:18 14:2 17:5,13,22,24 21:20,22 25:6,8 29:23 30:2,25 31:20 32:7,9,13,15,23 33:2 51:19 65:11 67:19 68:20 76:17 83:24 85:16 86:5,7,23 104:4 139:13 143:24 144:18,22,25 146:1, 4,16,18 147:5,8 148:8,11,24 149:2 154:5,8 155:10,13 158:1,2,4,21,23 159:20,22 160:4,6 161:13,16 162:3,15, 18 163:8,10,18,21 179:20 181:5 188:16 202:24 204:18 207:2 208:8 209:13,19 212:16,20 215:5 225:18,22 237:10 243:1,6,9 251:20 254:10,17,20,23,24 255:19,23,24 256:1, 6,11,13,14,22 257:18</p> <p>magni 208:19</p> <p>magnification 208:23</p> <p>magnifier 208:20</p> <p>magnitude 221:14 222:16,22 223:1</p> <p>mail 109:24</p> <p>main 108:18</p> <p>maintain 27:19,20,23</p>
---	---	--	---

<p>major 72:1 106:16,19 107:8 174:17 176:23 178:1,24,25</p> <p>majority 128:21</p> <p>majors 106:16 176:17</p> <p>makers 123:18 124:13</p> <p>making 44:23 47:16 51:15 53:1 78:2 124:6 156:16 158:12 253:1</p> <p>male 126:4</p> <p>male/female 123:4 205:17</p> <p>malfunctions 220:10</p> <p>man 246:10,22 247:17</p> <p>management 48:7 50:14 129:2 203:22 204:13</p> <p>manager 124:21 125:2</p> <p>managers 56:21 123:13,14</p> <p>managing 22:15 250:13</p> <p>manner 248:9,13</p> <p>Mantoan 8:19,22 9:13,14,16 10:3 13:23 14:1 17:11,20 21:18 31:22 32:14, 22,25 65:10 68:3,11 76:9,16 80:1 83:23 85:15 86:3,15,22 89:22 103:20 104:3 138:3,8,15 139:6,12 144:1,5,11,14,20 162:6 169:18,21 176:25 177:4 179:12,19 181:15</p>	<p>182:10,14,15 193:5, 17 194:4,21,23 202:18,21 203:5 204:2 209:11,18 212:8,19 226:19,23 227:3,4 242:22 243:5,8 251:17,23 254:13,19 255:4,21 256:9,24 257:12 258:15,19 259:10,21 261:7,20</p> <p>Manual 221:25 222:13</p> <p>mapped 54:14</p> <p>March 257:23</p> <p>Marjorie 8:13</p> <p>mark 10:3 17:8,12,21 21:18 86:3 140:17, 22 144:3,7,15 181:4 202:18 258:5,6</p> <p>marked 10:4 17:14, 23,24 21:21 86:6,7 144:19 146:3,17 147:6 148:9 149:1 154:6 155:12 158:2, 22 159:21 160:5 161:14 162:16 163:9,19 181:7 202:20,21,24 204:20 207:4 208:9 212:18 215:5 225:20</p> <p>market 8:10 124:9 126:16 127:1,4</p> <p>market-based 126:15</p> <p>markets 111:20 233:4 234:3 235:24</p> <p>marquee 115:3</p> <p>mass 258:2</p> <p>match 126:5</p> <p>matches 183:19</p>	<p>185:14</p> <p>material 38:22 138:10 182:4</p> <p>materials 82:16,20, 22,24 171:21 175:23 218:22</p> <p>mathematics 90:24</p> <p>matter 8:6 30:19 69:13 73:22 74:21, 23 102:22 106:24 137:25 138:9 177:13 219:14 222:14,25 231:1 233:19,20 235:7</p> <p>mattered 74:25</p> <p>matters 21:13,15 23:8 28:2 39:7 76:1, 19 138:9 232:5</p> <p>mean 15:3,10,11 16:1 25:1 26:25 27:15 28:6 29:4,5 35:3 38:20 42:15 44:19, 20 47:16 53:16 54:4 55:5,25 56:11,23 59:9 66:15 70:23 74:20 75:2 78:18 85:3 92:23 93:8,9 94:10 95:8 101:24 102:24 105:16,23,24 109:16 112:17,25 113:7,14 114:1,11 115:16,18 126:4 131:3,7 134:10 143:9,11 145:18 149:25 152:3,18,25 159:10,11 167:16 170:8 176:12 180:12 187:2 198:13 203:2 217:16,18 218:20 222:23 223:9 225:13 231:5 233:19 234:15 235:21 236:18 237:6</p>	<p>241:25 248:18 249:17,19 253:21 255:11</p> <p>meaning 53:6</p> <p>meaningful 205:20</p> <p>meaningfully 221:2</p> <p>means 69:16 114:24 164:18 167:5 169:13 183:8 187:5 214:17 225:2</p> <p>meant 14:7 67:19 118:19 119:2</p> <p>measure 26:14 132:15 221:13</p> <p>measured 78:24 104:19 105:9</p> <p>measures 221:17 222:4</p> <p>measuring 155:18 157:19 172:8 217:17</p> <p>mediation 239:9,14</p> <p>medical 239:19</p> <p>Medicare 168:14</p> <p>meet 137:11 259:4,24 260:17,25</p> <p>meeting 137:14</p> <p>meetings 155:23</p> <p>member 149:18 155:24 252:21</p> <p>member's 153:22</p> <p>members 66:20 97:2 154:3 156:13,14,15, 21,24 157:2</p> <p>memorialize 31:5</p> <p>men 14:23,24 57:23 122:9 171:14 180:4 188:17 194:12</p>
---	---	---	---

<p>195:13 197:5,11,21, 23 198:7 199:3,7,12, 20 200:12,20 233:8, 16 234:2,10 235:4, 22,24 236:3 243:19 244:13 246:4 251:12</p> <p>mention 85:25 125:5 156:12</p> <p>mentioned 20:23 49:4 71:19 87:16 118:11 125:10 126:14 128:1 130:23,24 160:7 188:11</p> <p>mentioning 26:3</p> <p>Merrill 140:15,21 229:3,8 232:6 236:20</p> <p>messed 184:4</p> <p>methodology 157:13</p> <p>metropolitan 231:19 233:14</p> <p>Michael 9:5</p> <p>mid- 260:19</p> <p>middle 260:19</p> <p>mind 195:1 229:2 230:16</p> <p>minded 171:9</p> <p>mindful 242:22</p> <p>mine 179:10 182:8,12</p> <p>minimal 172:12</p> <p>minimum 100:25</p> <p>minus 217:22</p> <p>minuscule 172:4,12</p> <p>minute 179:13 180:23 183:21 184:6 209:1, 5 230:21 249:1</p>	<p>minutes 68:18 103:18 251:16</p> <p>Miranda 112:4</p> <p>missing 211:23 223:14</p> <p>misspoke 14:8</p> <p>misstates 36:8 39:9 46:25 48:1,15 51:7 58:8 66:9 67:2 69:19 70:9 77:3 79:6,23 91:20 94:8 96:12 99:22 109:19 117:4 173:1 198:11</p> <p>mistake 20:4</p> <p>misunderstanding 12:4,6</p> <p>Mm-hmm 89:12 104:9 180:8 183:6 184:13,19 189:18 191:18 210:6 215:25 218:25 221:9 225:25 252:4</p> <p>mod 213:14</p> <p>model 46:17,24 66:23 72:21 73:3,14 76:24, 25 77:1,4,15,21,24 78:9 79:3,8 80:24 92:25 93:6,19 96:9, 15,18 102:6,17,20, 24,25 103:6 143:6 186:12 187:3 189:3 213:10,11 217:15 219:2 220:18 221:1 223:10,12 224:2 225:1,2,7,15 228:11 244:15,16,25 247:16</p> <p>modeled 77:9</p> <p>models 71:15 73:4 74:15,16 79:17 80:14,20,22,23 106:12 129:16,18,</p>	<p>24,25 130:2 172:8 223:16,19 228:14 233:4 245:18 251:5</p> <p>modification 207:9</p> <p>modifications 213:4 226:8 229:15</p> <p>modifiers 175:17</p> <p>moment 12:14 13:9, 14 22:20</p> <p>Monday 259:24 260:9</p> <p>money 28:11 114:25 116:22</p> <p>monopolization 233:3</p> <p>monopsony 233:3</p> <p>month 28:21 41:20</p> <p>months 41:20,24</p> <p>Moore 163:22</p> <p>morning 8:20,21 139:16 259:25</p> <p>motion 138:16 255:12 257:3 259:4 260:18</p> <p>motions 257:7 258:21 260:11 261:9</p> <p>move 89:1 181:3 190:18 193:5,18 194:21 199:8,13,14 201:12 256:10</p> <p>moved 169:10 197:6 199:3,4,9</p> <p>movement 186:13</p> <p>moving 177:3 180:10 199:23</p> <p>Mullen 8:11</p> <p>Multi-year 22:25</p>	<p>multiple 79:9 181:1 221:25 222:13 236:9,11 237:4</p> <p>multiply 247:11</p> <hr/> <p style="text-align: center;">N</p> <hr/> <p>name 8:11 9:13 24:1 37:10 78:7 88:5,9, 13,20 155:17 181:20 206:25 209:24 210:16,24 211:7,14 215:11,19 234:20</p> <p>namelogtabler10.log. 213:2</p> <p>names 88:7 207:1 211:15</p> <p>narrative 96:8,15,17 107:10</p> <p>narratives 110:16</p> <p>narrower 178:23</p> <p>national 15:24 155:10,19,20,21 156:15,22,25 227:21 230:2,5,9 231:25</p> <p>nature 12:3</p> <p>necessarily 47:25 117:13 237:6 244:22</p> <p>necessary 12:25 65:17</p> <p>need 35:17 62:18 65:15,16 70:20 73:3 75:14,15 101:17 102:5,11 110:21,24 123:24 135:9 143:4, 20 192:15,21 193:2, 8 242:25 247:11 257:2,8 259:3,6 260:7,17 261:18</p>
--	--	---	--

<p>needed 31:5,24 32:1 85:4 113:3 179:6</p> <p>needn't 11:7</p> <p>needs 19:10 102:18</p> <p>negative 166:19 184:18 185:19,25 188:5,7 190:1,11 192:9 194:20</p> <p>negatives 190:13</p> <p>net 29:7,18 211:2</p> <p>neutral 160:23 237:15</p> <p>never 28:21,22 39:5 103:13,16 108:7 119:18 136:22 151:17 152:1,17 158:25 159:5 160:16 167:16 176:13 184:6 210:11 221:3,5 234:24 247:22 259:20</p> <p>new 75:22 111:9 120:20 124:15 241:15,18 242:6,9, 15</p> <p>new-hire 92:3</p> <p>Newmark 41:6 42:1,5 99:23</p> <p>Newmark's 41:10,13</p> <p>newsletter 149:5 152:24 153:1</p> <p>NFL 230:11</p> <p>nine 68:18 122:18,22</p> <p>nods 80:4</p> <p>nominal 198:18 201:9</p> <p>nominally 199:18,23 200:16</p> <p>non-cloud 109:9</p>	<p>non-competitive 233:4</p> <p>non-discriminatory 248:9,13</p> <p>non-exempt 50:13 81:19</p> <p>non-responsive 194:22</p> <p>noon 138:6</p> <p>normally 94:12</p> <p>note 119:9 161:6</p> <p>noted 8:12</p> <p>notice 10:4,9 62:7 63:25 138:24</p> <p>noting 90:2 251:15 254:11</p> <p>notion 130:25</p> <p>November 146:2 154:6</p> <p>null 71:7,10</p> <p>number 8:9 16:3 23:11 55:4 80:9,10 86:14 171:24,25 183:16 184:12,14 185:11,14 198:3,18 206:24 207:9 219:13 223:5 239:4</p> <p>numbered 86:17 104:11,13 163:5</p> <p>numbers 86:15 88:11 182:2,8,17,22 183:4 186:10 189:11 201:2,9 213:5 215:23 226:6 260:5</p> <p>numeral 153:16 156:7</p> <p>numerals 157:18</p> <p>numeric 95:23</p>	<p>nuts 53:17</p> <hr/> <p style="text-align: center;">O</p> <hr/> <p>oath 10:18 11:17,23 139:16</p> <p>object 257:20 258:13</p> <p>objecting 198:17</p> <p>objection 15:19 16:11,16 19:12 20:18 24:13 25:11, 18 26:23 27:14 28:4, 13 29:15 30:12 31:2, 17 33:21 35:1 36:8, 23 38:15 39:1,9,17, 19 40:3 41:1,21 42:24 43:8,25 45:23 46:18 48:1,15,22 50:8 51:7,16 52:10 53:7,13,23 54:9,16, 22 55:10,22 56:10, 19 57:12,20 58:8,16, 24 59:6,16 60:11,24 61:6,19 62:2,16 64:1,8,18,24 66:3,9 67:2,15 68:2 69:8,19 70:9,13 71:8,24 72:14,22 73:16,24 76:4 77:2 78:4,14 79:6,22 81:10,24 82:9 83:6,16 84:18 85:2,12,21 87:13,21 88:17 89:20 90:3,15 91:8,20 92:4,18 93:21 94:2,8 95:7, 14,20 96:3,12,23 97:9,24 98:17,24 99:21 101:6,20 102:14 103:8 105:11 106:10 109:11,19 110:6 112:12 113:6, 17 114:9,16,20 115:11,24 116:5,24</p>	<p>117:4,22 118:16 119:16,24 120:8 121:7 123:8,15,20 124:17,24 125:6,23 127:9 128:8,23 129:9 130:12 136:6 143:8 164:19 166:25 167:24 171:1 172:23,25 175:8 176:6 178:16 192:23 197:14 198:11 199:6,10 200:23 202:11 207:21 219:18 237:19 243:16 246:6 248:10,24 250:5 253:19</p> <p>objective 151:10 245:22</p> <p>obs 223:6</p> <p>obscured 182:16</p> <p>observations 183:17 184:12 185:11 186:16,20 188:25 194:8 221:18 223:2, 4,6,8,25</p> <p>observed 57:19</p> <p>obtained 160:11</p> <p>obvious 139:1 152:2</p> <p>obviously 95:15 151:23 160:19 260:1</p> <p>occasion 104:24 136:19</p> <p>occupation 105:18</p> <p>occupational 105:21, 24 106:6,13</p> <p>October 8:3</p> <p>OFCCP 9:25 13:19 19:1,10,16,19 20:1, 25 21:13 23:2 24:11</p>
---	--	---	--

<p>25:8,14,17 26:22 27:5 28:2,8,12,20 29:3,12,14,22,23,24 30:1,9 31:4,7,20,23 32:11 34:11 63:24 64:6 79:14 80:8 137:4,14 142:7</p> <p>OFCCP's 14:18</p> <p>off-cycle 95:4,12 124:5 125:11</p> <p>offer 62:8 72:6 126:1, 4,5 135:24 136:20 252:22 253:1,13</p> <p>offered 51:12 79:14, 16 139:23 140:4</p> <p>offering 63:16</p> <p>offers 124:6 125:12, 21 136:1 137:2</p> <p>Office 8:6,8 9:19,23 23:1</p> <p>oh 11:9 67:18 100:11 101:13 110:21 118:6 143:23 154:16 158:24 166:7 202:23 203:12,17 215:9 230:23 241:10 247:10 249:14</p> <p>okay 11:16 12:7 13:10 14:14 17:20 20:9,23 21:12 22:5, 12,24 27:4 28:14 30:8 31:9 35:6 41:4 43:11,18,19 44:13, 18,24 46:22 48:10 51:3,12 53:3,14 54:25 55:2 57:15 58:2 59:2,11 60:3,15 61:13,23 62:6 63:5, 14,22 65:4,18 68:15 69:22 71:14 74:15 76:23 78:9 79:13 80:3,13,19,21 81:1</p>	<p>82:5 83:2,10,18 84:8,25 87:2,10 88:4 90:8 91:25 93:15 97:6,19 101:23 102:7 103:3 105:23 108:6 110:23 111:18 117:7 118:13 119:4 123:5 125:2 128:3 130:16 131:2 132:10,25 133:10,17 134:24 135:3,12,21 136:19 137:21 138:2 139:6 141:2,11,17, 19,24 144:8,13 148:20 150:16 159:14 161:1,4,10 162:23,25 164:2,13 165:4,7 166:1,3,14 167:4,12 168:10 171:4 172:10 176:19 178:11 180:15 182:13 184:5,9,10 186:3,6 187:2,10,15, 25 188:8,12,20,23 191:12,24 192:3,10, 13 194:5 195:5,17 196:7,12,19,22 197:1,20,22 198:5 200:1,18 201:1,8,11 202:23 203:8 204:17,24 207:8,13 208:7,15 209:4 210:15,23 211:2,6, 19,22 212:2,7 213:10 214:4,7,11, 15 215:4,21 216:5, 11,19 217:5 218:8 219:12,21 220:17 225:17 226:11 227:8,13 228:5,13 230:12 231:22 238:15 239:17,23 240:21 241:14 242:5,9 243:5,7 244:10 245:20</p>	<p>247:9,25 249:15 251:5 252:11 254:12 256:18 257:13 261:20</p> <p>okayed 242:13</p> <p>old 14:13 145:25 147:16,20 151:6</p> <p>older 254:6</p> <p>OLS 213:24</p> <p>omitted 161:9</p> <p>on-premise 108:22</p> <p>once 187:11 231:24 260:15</p> <p>ones 150:11 203:11, 24,25</p> <p>online 161:25</p> <p>open 252:1</p> <p>opening 136:14</p> <p>operate 88:1 240:7</p> <p>operated 176:4</p> <p>operates 29:5 109:3, 4 237:13</p> <p>operation 109:1</p> <p>operations 23:20 101:18 102:3,4,12</p> <p>operative 64:7</p> <p>opine 16:14 44:18</p> <p>opining 43:23</p> <p>opinion 16:23 19:16, 19 42:21 43:5,11 45:15,18,22 49:19 51:12 58:4,12,20 59:2 60:7,21 61:2, 17,23 62:8,12,21 63:11,16 137:21</p> <p>opinions 31:5 32:1,2 34:9,13 40:25 41:13</p>	<p>46:2 49:18 62:7 63:23 64:5 96:10 139:22,23 140:2,4 142:23</p> <p>opportunities 233:23 235:10</p> <p>opportunity 12:24 13:2 150:24</p> <p>opposed 47:12 50:21 64:22 83:4 96:8 101:12 224:10</p> <p>options 127:16,21 128:16 257:16</p> <p>Oracle 8:7 9:12,14,20 15:6 18:17 42:2,6, 10,22 43:6,24 44:21, 25 45:6,15,17,19 46:23 47:9,24 48:13, 20,21 51:15 52:22 53:4,22 54:3,6,11 55:19 56:2 74:1,18, 25 75:3 77:23 78:2, 10,21,22,24 80:16 83:15 84:4,15 88:7,8 89:4 91:3 92:2 93:1, 4,7,12,25 94:19 95:6,19 96:21 100:7, 10,13 101:5 108:6, 11,14 109:7,25 110:12 111:4,16,20 112:8 114:7,18 115:9,16,17,21 116:8,21 117:20 119:10,23 120:6,19 121:4 123:7,18 124:13,22 127:8,17 129:15 131:3,4,8 133:6,8,14,21 137:23 167:23 171:7 172:11,14 173:7,10, 13,17,19,21,22,24, 25 175:7,10,16,21, 24 176:9 177:17,21</p>
---	---	--	--

<p>178:18 179:7,9 180:3 187:7 248:22, 23 249:11 250:9,12, 25 251:8 252:2 257:17 258:5,10</p> <p>Oracle's 18:20 19:2 43:17 44:3,14,17,19 48:17 56:9 110:12 118:1 119:13 137:17 138:11 170:21 175:9 176:3 177:16 257:15</p> <p>orange 195:14 197:18</p> <p>order 17:12,21 66:22 101:18 102:12 137:11 138:18 142:12 162:3 257:23 258:1,9,16 259:7,9 260:12</p> <p>organization 52:23 56:22 88:5,7,9,13, 18,20 89:8 207:24 208:3,5 210:16,20, 24 211:7,13,15 212:6</p> <p>organization_name 207:15</p> <p>organizational 51:18, 23 206:25 207:1</p> <p>organizations 87:12, 19 207:19 211:9 212:5</p> <p>organized 154:14</p> <p>origin 155:20</p> <p>original 33:17 36:13 62:22 63:12 164:6 181:10 182:5,9 200:14 202:2,8,16 226:13</p> <p>originally 197:8,13 198:2,9 200:21</p>	<p>201:15 203:19</p> <p>Orrick 9:11,14</p> <p>outcome 131:16</p> <p>outlined 258:11</p> <p>outputs 52:19,20</p> <p>outreach 135:23 136:22 137:23</p> <p>outset 10:22 26:3</p> <p>outside 45:5 124:6 125:12,21 177:21 237:4 259:6</p> <p>overall 176:7 181:14 188:22 190:16 191:4 194:20 198:3,15 199:21 201:2 224:15,18 245:6</p> <p>overcome 194:20</p> <p>overseas 173:23</p> <p>overseeing 123:14</p> <p>overwhelmingly 180:19</p> <p>owner 24:3 25:24</p> <hr/> <p style="text-align: center;">P</p> <hr/> <p>P-A-L-A-N-T-I-R 24:22</p> <p>P-L-A-N-T-I-R 24:20</p> <p>P-VALUE 195:24 196:3</p> <p>p.m. 10:14 139:9,11 179:15,16,18 209:7, 8,10 212:12,13,15 254:11 261:23,25</p> <p>PA 8:11 68:13,18 79:25 83:22 85:14 86:2,21 87:6</p>	<p>package 238:22</p> <p>page 22:9,18 40:21 41:5 63:7 86:13,15 88:10,11,14 89:14 104:7 132:17,18,22, 24 133:10 141:18 147:21 154:18 157:17 158:9 160:1 161:8 162:10,11 163:5,14 164:3,4,8 169:3 179:23 181:19 182:2,8,17 183:12, 15,25 184:11 185:18 186:9,10,15,19 188:1 189:9,11,19, 20 195:16 203:7,23 207:9 210:5 213:4, 15 215:23 216:6 226:6 227:9,14,15, 25 257:23</p> <p>pages 86:18 185:5,8 195:3</p> <p>paid 28:2 29:6,9,12, 18 30:9,16 127:12, 16 246:3,9,14,22 247:17 248:8,12</p> <p>Palantir 24:21</p> <p>panel 155:18 157:19 196:16</p> <p>panels 46:6 195:22</p> <p>paper 35:7,13</p> <p>papers 148:14,18 232:17 235:9</p> <p>parade 143:19</p> <p>paraded 232:14</p> <p>paragraph 18:11 133:11 180:2</p> <p>Pardon 103:17</p> <p>part 23:18 24:3 25:24 47:4,22 72:24 92:5</p>	<p>96:10 106:5 109:1 120:25 122:1 137:19 143:18 153:16,21 156:2 208:12 213:19,23 224:5 236:2 237:25</p> <p>partial 182:16</p> <p>participation 172:9</p> <p>particular 15:7 40:21 45:25 54:14 56:8,12, 16,23 57:1,7 60:22 69:17 70:6 74:9 77:22 80:23 91:13 95:5,19 96:21 101:17 102:11 103:6 104:10 105:10,17 110:10,25 111:1 112:2 129:20,21 130:5 153:10 157:6, 9 167:22 179:2 200:5 221:20 222:18 232:24 246:21 250:25 252:1 253:2</p> <p>particularly 70:20 104:18 126:9 127:15 129:1 200:3 233:18 241:25 251:8 253:8</p> <p>partied 259:13</p> <p>parties 257:24 258:22 260:16 261:10</p> <p>parts 155:7</p> <p>party's 257:25</p> <p>passes 245:14</p> <p>patent 214:25</p> <p>Paul 154:15</p> <p>pay 15:16 40:14 50:5 56:17,21 57:10,13, 18 63:8 64:17,22 65:24 66:1,6 67:10, 24,25 69:5,6,15,17</p>
--	---	--	---

70:5 71:3,11 72:17, 19,25 73:11,15 74:15,16 75:18 76:1, 18,24 92:16,21 95:4, 5,12 111:9 116:4,11, 17 117:2 118:7,15, 23,25 120:7 121:18 123:19,22,23 124:23 125:4,11 126:8 127:12,13,14,21 128:14,17,21 129:6, 20 130:11 147:25 155:18 157:20 158:21 163:18 166:11 168:11,21 176:23 216:16 217:4,8 218:6 225:6 237:17,18,24 238:7, 9,11,12 243:14 244:2 245:18 248:5 249:5,10 252:13 253:1,5,13,22	149:6,7,10,12 151:16 154:15 252:3,20 254:3 Pennsylvania 98:9 150:18 158:7 people 25:22 29:6 44:22 45:2,5 53:5 55:12,13,14 70:5,24 79:1 90:21,25 111:7 114:14 116:19 128:14,15 129:5 135:18,19 136:1,10 137:1 145:23 146:13 147:1,10 148:5,21 149:20 155:6,8 171:9,17 174:22 176:4,10,16 177:17, 21 178:12,17,18,19 187:11 188:12 189:25 203:25 204:15 205:12,13, 14,17,18,19,20 206:19 249:19 Peoplesoft 108:19 112:15 115:17 percent 22:4 24:6,8 107:22 122:23 165:2 194:11 197:18,19 200:19,22 225:3,9, 14,15 percentage 199:19 217:7 222:5 percentages 199:23 percents 197:15 204:7 perception 15:11 perfectly 47:15 218:15 perform 90:13 performance 95:18, 24 110:16 111:3,5	167:14 performed 131:8 168:20 175:7,21 176:4 performing 42:22 43:7,16 128:12 246:4,10,22 247:17 period 114:25 119:14 207:1,20 240:17 253:25 258:17 260:24 Persistence 147:25 person 22:3,15 37:11 79:5,20 110:10 128:11 129:15 131:4 134:5 136:21 207:14,19,22,23 208:1 210:4 211:7, 13,15 253:2,5 personally 83:12 persons 15:6,17 perspective 65:14 Peters 8:14 Ph.d. 8:5,15 38:6 Philadelphia 8:11 159:24 238:3 photo 86:16 pick 127:21 168:2 picked 107:11 piece 70:6,7 pivoting 120:11 place 119:12 120:19 127:22 129:4 138:4 209:12 231:21,24 253:22,23 261:5 placed 10:17 22:5 199:16	placing 178:18 plaintiff 11:5 75:7 plaintiff's 42:9,12 plaintiffs 8:24 plan 9:25 planner 99:5,10 planning 190:22 Plantir 24:20 platform 109:3 play 119:23 225:14 please 8:25 10:3 12:1 13:13 17:11 21:19 76:10 86:4 141:13 182:25 257:12 pleased 152:5 215:7 point 38:20 41:12 49:15 54:8,14 103:3 134:13 152:14 177:6 188:11,15 192:7 193:15 205:13 248:17 259:10 points 49:21 169:22 policy 45:1,8 49:4 99:4,9 126:6 Political 154:12,20 pool 73:13 142:21 pools 143:7,10 181:1 poorly 152:16,21,22 population 76:2,20 122:2 128:20 129:7 165:16,21 172:3 224:21 243:15 246:3,9,21 portion 150:3 153:6 157:9 227:1,9 259:4, 5 261:1
---	--	--	---

portions 153:10 258:6,12	practices 55:21 56:2 57:16 62:7 101:17 102:11 135:5 160:22	presumption 91:11 248:17	120:18 138:24 147:23 150:6,11,13, 15 153:7,14 158:15 199:22 223:14 235:24 238:17 241:6 242:12,13 252:16
posed 16:18,21	practitioners 157:24	pretty 61:9 72:24 97:25 118:18 145:25 151:6 175:14 176:24 198:24 224:21 253:7	problem 208:22 237:25 242:17
posing 200:5	pre-oracle 171:24	previous 61:21 173:14 224:5	procedure 239:19 240:1,3 258:24,25 259:7 260:23
posited 233:2	preceding 104:13	previously 87:5 89:25 138:12	procedures 239:24 258:11 261:4
position 85:19 135:7, 15,16 136:21,23 167:22 181:12 209:15 252:1,2,3,6,7	precise 97:17	primary 72:12 131:25 170:4 233:21 243:11 245:18	proceed 161:22
positions 84:17 90:14 248:23 249:2, 7 250:2,3,8	predict 232:11	print 153:17 158:25	Proceedings 148:15, 18
positive 77:16 186:25 187:4 190:5,10 192:12 249:9	predicted 131:17 234:24	printout 21:21 22:8 215:11	process 35:20 41:12 47:22 50:25 136:3 145:11 152:14 163:25 242:11
possible 59:9,11 65:23 107:7,8,11 191:1 212:2 248:12, 14	predicting 232:7	prior 10:16 82:18 83:12 84:1,4 95:3,17 96:1,19 97:7,12,20, 21 169:23 170:2,12, 13,24 171:6,11,16, 24 173:19 177:15, 18,22 179:3 183:7,8 185:9 187:8 189:14, 17 191:13,25 194:6 216:17,18 217:4,8 218:6 237:16 238:7, 8,12 252:6,9,12,15, 17 261:8,9,15	processes 56:9
possibly 16:18 24:21 82:11 119:20 209:3 211:16	predictors 221:14	prior_gclequalsic3 182:23	produce 114:22,25
posterity 209:16	preface 154:5,11,23 155:1,5 156:6,8,12	private 157:24	produced 84:15 92:2 93:25 94:19 96:7 98:18 110:9 111:4 177:2 182:1,2 208:12 209:21 213:2 215:20
posting 252:12	prefatory 10:23	probability 199:19	product 18:14,16 59:3 60:8 61:24 62:14 63:17 78:7,11, 12,18 79:5,19 80:18 81:3,9,22 82:8 109:14,15,17,23 113:2 114:12,21 115:3,4 116:12 118:22 120:2,12,18, 22 122:3
postings 83:14,25 84:3 87:4,18 90:11	prefer 221:16	probably 11:1,12 15:21 19:23 20:2 21:10 22:15 27:9 35:24 37:4 64:13 75:19 83:19 115:19	productive 104:18
potential 124:16	premised 80:9		productivity 66:25
potentially 38:13 82:1 133:23 144:6 230:12	preparation 239:5		
power 140:11 221:15 224:19 232:2,19 245:7	prepared 158:6		
Powerpoints 45:3 56:3,7	preparing 34:24 35:9, 22 38:12 51:22		
practice 55:19,25 56:16 57:1,8,16 125:15,19 126:20,22 255:12 257:3	present 8:24 43:21, 22 119:14 125:21 238:12		
	presentation 202:2		
	presented 33:5 79:17 80:14 98:1 160:20 206:17 251:10		
	Press 155:10		
	prestigious 172:16 223:15 228:14		
	presumably 26:13		
	presume 12:13 52:22 70:22 91:12 99:13 153:11 175:10 176:9		

67:5,9	191:5	10,23	176:2 178:19
products 72:12 78:1 79:2 82:12,13 108:22,25 110:4,9, 20 111:12,20 112:8, 10,21 113:4,15,23 114:7,18 115:9,18, 21 116:3 120:20 172:22	proof 19:10	publications 254:8	
Professor 254:2	proper 170:10	Publicist 163:22	<hr/> Q <hr/>
professorial 136:10	properly 147:16 169:19	publicly 260:2	qualified 15:5,17
profit 29:5,7,18	proportion 221:17	publicly-available 161:24	qualify 130:6
profitability 115:22 116:13	propriety 63:24 64:5	publish 145:12 153:4 228:21	qualities 115:13
profitable 116:12	protect 32:6 126:9	published 145:1,8,21 146:7,21 148:14 149:24 151:5 152:10 155:16 218:14 223:15 228:14 229:11,13,14,16,25 230:18	quality 174:14
program 114:13 142:25 218:12 249:23	protected 253:8	publisher 145:9	quarter 122:9
programmer 36:10, 15	protective 138:18 162:3 258:1,9,16 259:7,8	publishing 235:16	quasi- 236:24
programming 37:16 40:15 87:16 112:24 114:15 178:20,21 220:15 251:3	prove 19:10	Puffer 162:19,25	question 11:25 12:12,15 13:15 16:17,20 17:10 18:3, 18 25:3 27:13 30:20 32:15,20,22 33:1 43:14 46:15 57:5 58:11,12,19 59:1,10 60:13 61:13,17 63:2 68:14,20,22 70:10 72:25 73:8,18 76:18 80:2,11 84:2,21 91:15,16,19 102:9 106:19 113:13 114:4 119:20 127:10 130:17,18,21 140:1 144:22 164:14 166:19 173:3,4 181:9 189:22 190:24 193:6 198:6 200:7 204:21 205:2 211:11 212:1 232:3,25 234:9 236:6 237:10 238:6,10,18,23 246:18 251:25 254:14
programs 8:7 9:20,24 23:1 36:5 39:13 106:2,3 220:11	provide 19:16,19 27:12 30:22 31:1 32:1 34:7,11 93:13 119:6 170:12	pulled 161:23,25 209:25	questioning 90:9 191:11
progressed 93:23	provided 40:9 82:20, 24 86:9 100:18,23 101:4,11,14 141:24 144:9 192:6,16,19, 22 257:16	purely 134:5	questions 11:24 12:19 13:11 16:15 17:15 22:21 28:16 32:10 33:7 34:15
progression 180:16 183:13	provides 171:5 258:16	purpose 44:22 209:5	
prohibited 258:4	providing 101:13,14 216:6 252:18	purposes 53:5,21 68:22 112:7 142:17 190:20 209:15 226:25	
promising 98:6	provisional 255:14	put 17:8 31:24 33:1 46:23 73:21 75:14 77:20 82:2,23 88:2 92:25 93:5,18 96:8, 15,17 107:10 143:6 151:12,22 166:19 173:15 176:25 188:21 190:15 191:9 193:15 223:20 229:19	
promoted 194:13	provisionally 138:19	puts 47:1	
promotion 52:16 57:24 61:5,16 62:1, 9,13 63:2,18 94:1, 20,25 105:13 188:18	proxying 232:1	putting 35:7,12,19 79:14 138:22 175:25	
promotions 63:10,11	psychologist 51:19, 23		
	public 99:4,9 138:23 149:16 150:20 151:1 162:4		
	publication 145:15 146:10,23 148:17 154:24 159:7 229:1,		

<p>36:3 60:3 65:20 82:15 104:11 108:6 135:5 164:7,10 174:1 179:21 181:16 183:5 184:1 190:25 193:19,21,24 194:24 195:6 197:2 200:2,5 206:20,21 209:14 212:9,20 218:23 220:9 221:7 225:21 233:12 242:20 243:9 254:21 256:16</p> <p>quick 103:21</p> <p>quickly 253:7</p> <p>quintile 247:20,22,23</p> <p>quite 20:7 46:7,15 77:19 121:14 143:10</p> <p>quote 140:17,25</p> <p>quoted 140:22</p> <hr/> <p style="text-align: center;">R</p> <hr/> <p>R-SQUARE 228:15</p> <p>R-SQUARED 221:8, 11,13,17 222:1,16, 23 223:11,25 224:6, 17,22 225:1,2,12,13 228:1,9,10 232:4,19, 22</p> <p>R-squared's 223:13</p> <p>R-SQUAREDS 223:7, 16,19,22,23 228:2 229:4 230:4 232:6</p> <p>R010 212:22</p> <p>R1 195:3,7,12 196:16 197:2 200:6,11 204:12 205:9</p> <p>R10 212:21,22 213:8, 14 215:2 218:22 220:9</p>	<p>R10.DO. 215:12,20</p> <p>R2 195:3,7 196:20 201:12,22 204:12 205:9</p> <p>R5 206:22 207:6 212:4</p> <p>R7 74:13</p> <p>race 23:3 75:19 125:20 126:24 130:4 151:18,25 155:19 187:7 229:12 233:13 244:9</p> <p>races 126:25</p> <p>Rachel 37:8,11</p> <p>racial 18:13,22 19:3 129:23 130:20 142:13</p> <p>Racially 160:23</p> <p>raise 123:23</p> <p>raises 124:16</p> <p>ran 187:25 191:9,24</p> <p>randomly 177:21</p> <p>range 11:1 54:15,19 241:9</p> <p>ranges 55:3,5 121:19</p> <p>ranks 136:10</p> <p>rate 14:2,5,11,12,13 127:1 217:19,21</p> <p>reach 180:9 237:9</p> <p>read 22:20 23:5 33:7, 8 44:25 48:24 49:1, 6,9 50:17,20,21,24 51:5,9,11 53:3 56:3, 4 65:2 69:10 94:15 98:19 104:15,22 117:25 133:15,17 134:23 158:15 197:15,16 201:10</p>	<p>208:14 242:3 247:2</p> <p>readable 36:21 69:16 70:8,16</p> <p>reader 192:14 193:2, 10,13</p> <p>readily 66:24</p> <p>reading 51:1 53:20, 25 56:6 99:8 168:24 175:22 208:18,21 225:23 227:15 240:9</p> <p>ready 212:24 251:20</p> <p>real 35:4 149:13 234:1</p> <p>realize 35:17 126:5</p> <p>really 20:3 24:24 59:9 65:2 70:19 75:13 77:15 94:14 121:9 140:16 151:24 205:22 206:3 221:4 223:13 225:22 232:10,18 235:5,19 238:4 249:18</p> <p>rearranged 209:17</p> <p>reason 13:6 71:2 91:12 120:1 139:18 160:25 161:4 209:16 210:10,13 233:22 234:1 235:7,25 237:13 238:14</p> <p>reasonable 13:20 52:23 66:11,14 73:20 102:17 142:22</p> <p>reasonably 97:14</p> <p>reasons 45:21 92:15 236:2</p> <p>rebuttal 17:22,25 33:25 34:16,20 35:23 42:21 43:5 44:7 56:15 62:24 63:6,23 64:4 74:13</p>	<p>86:5,8 116:9 134:15 166:23 167:8,13 177:5 180:21 194:25 195:2 202:17 204:13 206:17,21 240:12,24 241:8,11</p> <p>recall 11:14 16:19 20:22 23:15,19 25:12 29:9 34:10,14 38:17,18 41:14 42:19 49:3,7,11,22 51:2,11 53:19,25 64:14,15,21 65:1,3 73:25 83:21 92:9,20 94:4,6,10,17,21 95:9,10 96:25 97:3 100:2,5,17 107:14 110:11,13 111:6,11 112:5 118:3,5,10 134:14 136:19 137:20 138:1 139:25 141:23 147:16 151:6,8 153:9 156:12 158:11 159:8,13 169:24 206:6 221:3 229:25 232:8 242:16,19</p> <p>recalled 24:16 110:2</p> <p>recalling 21:15 92:8 118:9,10</p> <p>receive 125:21 127:18,20 128:5</p> <p>received 127:23 128:4 165:5 255:6</p> <p>recency 30:23</p> <p>RECESS 65:7 68:8 76:13 103:25 139:9 179:16 209:8 212:13</p> <p>recognize 149:2 154:8 155:13 158:4, 23 204:22</p>
--	---	---	---

recognizing 223:24	REG 213:23 214:1	81:13 122:21 168:4	repackaged 229:9
recollection 34:1 158:18	regard 174:6 239:15	199:16 217:20 223:14 224:7,8	repeat 240:2
recommendation 99:7,14 121:13	regarding 17:4 42:2, 6,10 63:23 64:5 109:22	release 149:16 150:20	repeated 207:23
record 8:3,13 10:13 53:18 60:6 65:6,9, 13,16 68:4,7,10,12 70:19 76:8,10,12,15 103:24 104:2 122:12 134:23 139:8,11 177:1 179:15,18 206:6 209:7,10,12 212:10,12,15 222:11 242:24 243:7 251:10,22 254:18 255:16 261:18	regardless 43:21 79:4,19 80:17 106:8 244:2 259:1	relevance 167:21 177:14	repeatedly 9:23 28:8
recorded 166:6,13 169:6,7,8,14 186:1	regional 232:17	relevant 18:18 61:11 69:17 91:23 93:11 106:7 120:25 121:9 124:19,25 125:8 178:20,22 190:25 252:6,9,12,15,17	rephrase 12:2
records 27:11,16,19, 20,23 30:21 35:4 208:2 210:2,21	regress 180:6	reliable 119:19	report 11:6,13 14:8 16:24,25 17:4,13,18, 22,25 18:12 31:1,6, 8,21,25 32:19 33:4, 6,13,16,17,19,20,23, 25 34:16,19,20,25 35:8,9,23 40:20,25 41:5,10,13,19,24 42:20,21 43:4,5,22 44:6,7,8,19 45:11 46:1,5 49:2,6,10,14, 18,23 51:4 56:15 62:19,22,24 63:6,12, 20,23 64:5 74:13 79:16 80:6,8,9 82:14,16,19 84:5 86:5,8 94:24 95:16 104:6 122:7,15 130:25 131:7,25 132:10,18 133:3,17, 22 134:15,23,25 141:6,25 148:25 149:6,23,24 150:2,4, 5,9,14 151:5,11 152:9,12,15 153:6 156:17 160:5,12,14, 16,17,19,21 161:1,5, 7,10,13,16 162:7,15, 18,20,24,25 163:8, 10,21 164:1,7,17,20 166:15,22,23 167:8, 13,14,20 169:22 177:5,6,7 178:6 179:22,23 181:10 184:14 190:16 191:10 192:3,15 195:1,2 202:16,24 203:2 204:13 205:23
refer 34:18,19 202:19	regression 72:20 73:3,4,15 79:9 174:22 186:12 187:3,15,16 189:24 191:25 213:10,11, 13,21,24 216:24 218:19 219:17 221:19,21 222:13 223:10 231:15 236:11 237:2,4 244:25 245:14 249:4	reliance 45:13	
reference 17:9 161:9 182:3,6 221:24 222:13 236:8	regressions 214:22 221:25 227:10 231:11 236:9 245:12 247:20,22,24	relied 34:12 45:14,15 136:17 145:23 146:13 147:1 148:5, 21 155:6	
referenced 49:9 255:19 256:7,9 257:19	regulatory 21:24	rely 34:8 179:10	
references 22:24	rejected 223:18	relying 99:7	
referring 52:21 56:13 177:1	relate 49:5 72:12 193:24 227:10,11	remainder 10:19 164:17	
reflect 38:25 67:8 171:24	related 73:5 137:17 175:20 218:21,22 248:23	remember 11:10 26:7 27:8 28:18 50:24 157:9 158:14,15,20 159:19 176:15 180:25 232:10,18 238:25	
reflected 51:13 208:4 210:21	relates 16:9 175:6 176:20 177:10	reminder 251:18	
reflects 43:22 165:9 188:1 205:1,3	relational 108:16,20 109:1,2,8 112:23	remiss 26:2	
refresh 33:25	relationship 18:20 19:1 22:1 175:22	remotion 41:6	
	relative 14:22,23	removal 20:13	
		renaissance 236:2	
		Rent-a-car 142:8	
		Rental 20:11 21:8	
		reopen 257:2	

206:17,21 209:21 212:23 219:10 226:3,13 229:16 239:6 240:13,24 241:8,11 243:12	24 114:8 130:20 238:23 249:12,16 250:2,4,8	responded 156:16,19 252:25 253:12	reveal 65:24
reported 39:15 74:13 150:22,25 151:2 152:4 179:24 183:20 189:4 192:5 195:23 206:22	required 31:1,3,25 90:12 113:23	responding 202:3 203:4 220:8	revealed 67:24 69:5
reporter 8:13 10:17 12:18 13:10 30:7 144:17 218:17	requirement 245:23 249:1	response 44:13 135:22 180:20 190:16 193:4 202:4 206:11	review 12:20 28:19 33:24 34:4 36:19 39:12,13,18,25 40:2, 17 41:9,13 49:21 50:22 82:17 83:12, 18 84:3 85:20 91:25 94:12,22 95:4,8,15, 18 96:1,4,5,20 99:16,25 100:3,6,9 110:16 112:3 147:6, 10,12,13,19 149:7 150:24 210:12 250:21 257:8 259:15
reporting 8:12 149:6, 9,11 184:21,24	requirements 32:19 129:12	responses 255:20 256:8 257:19	reviewed 36:11 39:7, 11 40:1 48:18 49:13 56:22 64:11 82:21 83:25 87:5,8 90:1 94:13 99:19 103:4 111:25 112:1 121:13 137:16 148:19 149:12 151:4 156:23 157:3 250:15
reports 18:5 31:9,11, 13,16 32:16,24 36:7 39:15 45:7,21 51:13, 22 83:13 84:1 94:18 95:3,11,17 96:2,19 103:1 104:25 105:6, 8,19 131:7 150:11, 16 154:13 193:25 206:13 229:11,14 260:5	requires 59:12	rest 122:19	reviewer 223:18
repository 70:8,15	requisition 197:8,13 198:2,10 200:14,21 201:16 202:8	restate 68:14 80:12	reviewing 68:23 94:6, 18 98:25 99:2 110:3
represent 40:9 112:6 160:10 161:23 181:25 195:13,14 208:10 209:20 213:1 215:10,22 222:12 226:5 236:7	requisitions 83:14,25 84:3,24 85:1,4,9,17 87:5,11 89:19 110:2	restrict 233:25	reviews 49:25 145:20
representing 9:14	research 35:15 77:5 79:12,15 80:6,7,8 154:15 155:21 156:15,22,25 160:11 218:16 223:24 224:4 232:5,20,21 233:22 235:2,16,19 236:15	restrictive 245:22	revised 157:4
represents 117:14	researcher 221:4	result 194:18 199:11 201:6 237:9	revising 157:10
repurposed 229:9	Resolution 9:9	results 36:6 39:14 74:12 133:7 150:17 152:2 155:22 186:3, 12 187:16,21 188:3, 9 189:23 191:16,19 192:3 196:7,22 197:22 202:3 205:10,15 206:9,16 212:4 213:7 227:15, 17 236:11	revisit 242:23
reputable 157:24	resolved 239:13	resume 36:19 37:2 38:13 97:1,25 98:12 106:21 107:23,25 108:1,2,5 164:25	revisits 234:9
request 259:3	resources 112:16 136:18	resumes 97:5,8,12,22 98:3,4 106:24 107:2, 16,17 110:8,11,14	right 13:17 25:25 32:5,20 34:21 47:4 62:20 63:6 64:23 96:11 107:21 108:3 116:20,23 118:11 133:8 134:9,19 135:10,13 136:15 139:19 141:17 142:10 144:11
requested 30:7 218:17	respect 9:18 19:9 63:2 79:13 104:20 137:25 143:14 180:15 189:22 191:13 196:12 201:11 215:23 233:12 237:7,15 250:14 257:3,5 260:3,4	retained 11:4 19:16, 18,25 20:25 21:12 42:17 239:1	
require 59:13 113:16,	respond 33:15 56:13 83:9 124:6 125:11 126:1 145:20	retention 229:7 239:7	
		retentions 21:5	
		return 234:1	

<p>145:17 147:22,23 152:10 153:20 161:8 166:5,9 180:1 184:9 185:7 189:5 190:8 194:9 196:17 203:10 207:17 208:1,6 210:17,24 211:8 213:12,17 214:2,15 215:12,15 216:10, 13,18,21,24 217:14, 25 218:4,14 219:4, 10,25 222:15 225:5, 8,11 227:25 228:10 239:12 243:11,24 250:18,23 255:10 259:12,19 260:3,19, 22 261:12</p> <p>road 235:11,12</p> <p>role 33:10 38:22 52:14,15 62:4 119:23 157:16</p> <p>Roman 153:16 156:7 157:18</p> <p>room 26:15</p> <p>rough 25:21 111:19 241:2 259:25 260:10</p> <p>roughly 10:24 103:18 122:1</p> <p>routinely 238:13 250:9</p> <p>routinized 258:3</p> <p>rows 210:24</p> <p>rules 31:25</p> <p>ruling 261:15</p> <p>rulings 261:9,12</p> <p>run 39:14 73:15 151:17,25 194:8 213:21,24 216:9 218:13 219:2 220:11,12,18 223:12</p>	<p>256:12</p> <p>running 77:1 122:22 217:15</p> <p>runs 157:18 258:22</p> <p>rushed 240:4</p> <hr/> <p style="text-align: center;">S</p> <hr/> <p>Saad 9:9 33:16,18 74:11 86:5,9 182:9 202:4,7,24</p> <p>Saad's 180:20 190:16 193:4 202:3,15</p> <p>safely 150:8</p> <p>salaried 127:7</p> <p>salaries 126:2,17 253:17</p> <p>salary 54:2,3,7,15,19 55:3,5,7 57:22 58:1 77:16,20 121:19 124:6,10 125:12 150:17,22,25 153:12,16,21,23 254:3</p> <p>sample 169:8</p> <p>SAS 220:22</p> <p>satisfy 137:14</p> <p>Saturday 240:6</p> <p>saw 11:13 109:24 149:22,24 152:8,9 190:14 216:2,3,4 225:12</p> <p>saying 9:23 24:25 45:12 46:12 51:4 58:3 66:22 75:3 89:6,7 94:21 109:18, 21 117:1 192:18,20 193:11 201:7 240:22 256:14</p>	<p>says 14:8 44:21 104:15 109:22 120:21 133:22 164:21 170:22 180:3 182:23 183:7,15 184:11 195:15 198:3 207:14 259:9</p> <p>scheduled 240:4 259:24</p> <p>school 167:9</p> <p>science 15:24 72:1 75:10 90:23 154:20 159:3 232:18</p> <p>Sciences 15:25 154:12</p> <p>scientifically-based 72:9</p> <p>score 95:23 185:24 190:5 234:20</p> <p>scrape 107:22</p> <p>scraped 107:2</p> <p>scraping 36:19 37:3 38:14 97:2 106:21 164:25</p> <p>scratch 100:7</p> <p>script 213:12,13</p> <p>scripts 213:11</p> <p>seal 161:20 259:3,5 261:9</p> <p>sealed 257:22 261:2</p> <p>sealing 258:25 259:8, 11 260:18</p> <p>Sears 140:8,9</p> <p>second 33:13 37:11 64:11,15 89:14 182:4 216:19 240:3</p> <p>secret 239:12</p>	<p>Section 153:21 258:2</p> <p>Sections 157:12</p> <p>sector 251:1,9</p> <p>see 24:24 41:4 49:21 66:6 70:25 71:16 84:16 85:23 88:5,12, 25 89:2 90:8 91:10 92:25 93:4,7,23 112:19 117:24 135:9 141:16 149:18 152:2 154:19 157:2 160:18 164:18 168:3 178:7 180:6 181:9,19 183:17,21 184:7 189:20 190:9 197:17,18 203:12,21 208:17,24 211:12,22 215:7 216:4 225:1 228:8 237:16 238:7</p> <p>seeing 92:20 94:5 111:11 118:3 134:14</p> <p>seen 10:6 22:11 39:5 53:10 70:18 149:13 158:25 159:6 170:22 216:1 248:3 250:7</p> <p>select 135:15 136:13</p> <p>selected 167:18</p> <p>self-appraisals 96:20,21</p> <p>self-thousand 123:3</p> <p>senate 151:12</p> <p>send 135:18</p> <p>sense 16:10 28:9 29:11 30:5,8 77:10 82:25 111:16,19 117:13 121:16 128:10 153:2 172:21 223:2 240:11 251:12</p> <p>sent 28:20 39:4 136:18 143:25</p>
--	---	---	---

sentence 133:4,11 154:1	shifting 116:14	143:13 176:5,7,12, 17 246:4,10,15,16, 17,19,23 247:18	small 120:24 153:17 187:20 197:20
sentences 104:12 150:9,10	short 65:4 92:12 255:7 260:12	similarity 245:23	smaller 128:13,15 186:17
separate 47:18 48:5 63:14,16 258:10,24, 25 260:9	show 46:8 47:16 65:22 83:8 96:16 137:15 144:22 191:4,16 244:14,15, 17 247:17	similarly 53:5 90:21 126:3,8,10 143:13, 14	Social 154:12,20 159:2,15
separately 47:2 55:16 56:8 123:25 213:21 258:7	showed 73:4 130:14 190:15 192:8 194:11 200:12 234:3	simply 66:16 116:11 162:6 191:8	sociologist 99:4,9
September 240:2,14, 25 241:4,11 242:15, 18	showing 145:2 210:17 237:2 250:7 259:17	single 54:6 55:19 72:20 73:14 76:1,18 77:1 84:9 85:18 90:11 210:4,20 230:7,10,13,18	software 72:11,13 81:6,8,12,15,16,20, 22 82:3,7 85:7,9,18, 19 112:16 170:24 171:17 172:22 174:9,10 178:5,15, 22 179:7
series 50:2 143:20 151:16 183:5	shown 234:5	sit 12:13 16:19 17:1 54:18 78:6 94:4,7,22 100:16 229:25	solicitor 239:1
serve 151:14	shows 56:16 65:22 66:18 67:4 75:13 199:5 200:19 213:20	sitting 255:24 256:2	solution 189:6
served 25:13 71:20	sic 33:19	situated 126:3,9,11 143:13,14	somebody 23:12 99:4 240:7 248:12 252:16
service 160:11	side 217:15,25 218:2, 3	situating 53:5	somewhat 232:2
services 72:12 78:2	sides 218:6,9 258:20	six 41:20,23	Song 9:3 68:5 256:19 261:21
set 65:24 66:7 67:13, 20,24 68:24 69:5 75:11 76:1,18 77:18 124:4 131:12,22 210:1,8 216:8 218:21 220:20 261:4	signature 158:9 160:2 162:11,13 163:6,16 164:4 261:24	sixth 133:25	sooner 260:20
sets 91:13 210:12 245:10	signed 156:8	skill 55:15 91:13 113:19,21,23 116:19 117:2,14 118:24,25 120:3,10 238:22 249:24	sorry 14:7 20:4 29:1 43:13 67:18 87:23 88:11,14 97:20 101:13,22 156:18 158:16,20 166:7,19 168:25 180:24 185:18 186:19 189:12 193:9 196:15 200:10 204:7 230:23 238:10
setting 26:12 45:2 54:2 57:23 213:20	significance 194:20 198:15 219:7	skills 90:12,19,25 91:5,6,17 104:17 113:16 116:11 117:8,10 119:2 124:3 126:13 127:6 131:18 134:5 178:20,21 179:6 249:13,17,21 250:3, 4,8,13,24 251:7,12	sort 27:8 47:18 90:8 92:6,7,9 94:13 104:25 113:24 120:19 133:25 187:12 195:10 213:11 218:23 220:9,14 222:14
settings 56:4	significant 61:9 167:17 185:1 187:13 188:17,22,24 190:5 191:6 194:15 196:4, 9,14,24 201:6 247:1	slight 199:19	
settled 20:6	significantly 190:17	slightly 140:1 215:8	
seven 23:2,8,22,23 255:5,7 256:13	similar 42:23 43:1,7, 16,24 44:4,14,22 45:6,16,17,20 87:9 90:20,21 126:8		
Sex 144:19 148:1			
share 56:24 116:21, 22 152:3			
shared 169:16			

227:6 228:7 231:10 236:23 243:11 251:24 253:10	26:16,24 28:5 29:16 31:18 33:22 38:16 39:2 54:10 55:11 101:7 109:12 112:13 115:12,25 119:17 121:8 123:9 125:7 128:9 192:24	starts 227:9	stenographic 8:13
sotto 17:3	speed 242:2,21	Stata 211:25 220:15, 18,19,22,23,25	Steve 112:4
sound 147:22	spell 24:1 37:10	stated 15:21 62:21 68:16 180:17	stock 127:16 128:1, 15,16
sounded 18:9	spelled 175:15	statement 44:16,25 47:5 70:12 79:20 158:1,6,13,15 200:15 222:15	stocks 130:15
sounds 175:21 251:21	spend 34:24 121:23 134:11	statements 45:1,8 49:4	stop 78:20 80:16
source 15:7 183:3	spent 35:7,8,12,22 173:18,22 241:3	states 103:4 257:24 258:2	straightened 101:22
South 21:3,10	spoke 142:7 220:8	static 119:15	Street 8:10
Southern 21:3 140:13,14 160:4,7, 15,22 161:11	spoken 42:1,4,8,16	statistic 222:4 227:19	strike 55:17 92:1 129:16 164:22 165:7 177:3 181:3 190:18 193:6,18 194:22 256:10
span 55:5,6 121:23	spotty 98:3	statistical 39:13 63:24 64:6 65:20,21, 23 66:23 67:23 69:4 93:19 96:9,15,18 110:24 140:18 143:6 157:12 198:15 205:14 218:23 219:1 220:10 225:1 231:2 244:23 248:5	strikes 138:3
spanning 55:19	spreadsheets 92:6	statistically 73:13 76:7,21 77:14,16,17, 19 185:1 188:17,24 194:15 196:3,9,13, 23 198:16,19 199:22,24 200:16 201:2,6,18,21,25 205:20	stringent 245:23
Spatial 146:1	staff 49:14 50:3,5,10 82:23,25 83:4 84:21, 22 97:2 100:21,24 101:1 136:4 184:6	statistician 37:13,23 38:3 59:19 62:5 96:5	strong 38:22
speak 123:24 206:6 251:19 255:22	standard 77:4 79:8 102:1,2,17,19,24 121:15 184:23 185:2,25 188:7 190:1 194:16 224:1 227:21 231:11,12,14	statistics 37:20 140:25 155:20	strongly 77:19
speaking 140:20	stands 214:8	stay 254:20,21	structure 101:18 102:3,4,12,20,21 183:13 199:7 243:13
specialization 179:3	stapled 184:4,7	STEM 90:22,23 172:7,8,15,17,18	structured 187:3 199:2,12 243:25
specialized 249:12, 17,24	start 23:15 35:16,17 46:5 57:6 102:19 195:12 231:7 238:4, 5 245:5		studied 15:18 61:18 76:3,20 127:11 177:15 222:17 223:12,24 246:3,9, 22
specific 16:14 18:8 27:12 57:1,8,15 62:7 75:16 83:14,25 84:2, 17 85:7 86:17 87:4 89:24 90:10,13 91:5, 6,18 97:7,12,19,21 110:2,4 111:12 112:14 113:2 172:11 177:13 178:2 193:22 217:10 260:5,6	started 233:6,10		studies 121:10,11 124:20 146:21 165:20 234:13
specifically 18:19,25 25:6 38:19 108:7	starting 111:9 181:12 214:24 237:18,24 238:9,11,12		study 55:16 56:1 91:4,17,19,23 93:19, 22 94:25 95:12 103:6 115:2 125:1,9 166:16,24 175:5,19 176:20 177:9 178:12 232:24 248:22
specifics 31:21 114:2			studying 122:2
speculate 26:9			
speculation 25:19			

stuff 75:16 229:3 234:18 236:16	supervisor 121:12	survey 157:12	Tabler5.log 207:4
style 35:15	supervisors 123:6	surveys 45:5,9	tables 44:5,9,10 122:6,14 131:25 161:6,9 164:17 168:25 184:7 203:20 226:2,3,16 241:18 242:9
sub-sets 245:1	supply 116:14	suspect 30:22 60:3 160:22 199:25 236:1	take 9:17 13:15 43:16 65:4 74:3 76:24 85:6 94:6 101:25 103:20 127:22 134:11 135:9 141:5 159:1 179:12 187:11 209:4 236:20 253:22,23 259:10 261:4
subject 106:23 127:1 232:5	support 18:17 21:24 66:22 67:25 69:6 118:22 120:13,21,24 151:19	swamped 199:20	take-home 127:12 128:21
submit 162:24,25	supporting 65:25	swear 8:14	taken 8:5 234:25
submitted 159:23 160:20 161:17 162:19,20 163:11, 22,25 259:1	supports 66:7 67:10 120:22	sweeps 72:8	takes 96:7
subsequent 18:22 19:3 63:20 80:20,22 135:23 166:17 168:2 193:16 207:23 242:5	suppose 138:23 158:13	swore 139:16	talk 11:10 13:12 23:21 32:8 45:3,8 85:7 97:6 105:17 133:25 138:25 139:4 151:23 164:15 169:23 172:18 178:2 190:22 255:25 256:24 257:5 261:1, 7
subsequently 193:3	supposed 31:16 32:16,24 33:13,15 137:12	sworn 8:16 48:18	talked 32:8 49:22 97:1,4 99:16 111:10 229:24 231:10 239:17
subsets 245:8,10,13	sure 15:21 27:18,23 28:20 35:3 38:18,21 41:25 43:19 49:15 58:2 88:5 94:4 101:10 113:14 115:14 126:7 129:13 132:1 137:25 141:2 143:10,22 147:15,18 151:17 163:23 164:11 178:3 179:9 183:2 195:9 197:3 211:4,16,17,25 226:14 227:14 232:16 238:23 239:23 251:2,25 255:1,18 256:21 260:14	system 68:13 79:25 131:20	talking 16:1 36:22 50:18 63:1 74:12 85:16 92:21 95:23 113:19 118:20 120:11 121:19 123:22 140:24 166:4 243:1 255:25
substance 85:20 241:15	surgeries 87:24 242:5,14	systematic 129:23 130:4	talks 118:6
substantially 42:22 246:4,10,18,23 247:18	surgery 240:5,13,20 241:22	systematically 73:6 220:6 244:8,11 246:14	tape 26:14 103:19
substantive 17:16 174:14	surprise 78:8	Tablert10.d0 215:5	
substantively 176:10,11	surprised 137:1	Tablert10.log 212:18	
successful 252:14	surprising 174:25		
sued 151:21 153:4			
sufficiency 137:22			
sufficient 259:14			
suggest 117:7			
suggests 237:24			
summarizing 62:6			
summary 155:22			
Sun 108:19 112:18 115:14			
		T	

tasks 38:19 112:15	195:24 196:2 198:4	theory 104:8,15	230:18,19,22,24
teach 137:10	201:3 245:4,5,6,9, 13,14,15,21	105:1,5 159:15	231:1,5 232:21
team 106:20,23 107:1		237:9	233:7 234:4 236:14, 15 239:3,12 241:23
tech 70:17 71:19,22 72:7	testified 8:17 16:3	thing 59:15 63:2	242:8,11 245:15,21, 23,25 248:25 249:16
technique 218:15	36:3 39:6 46:7 99:23	77:22 98:21 105:20	253:21 257:1 258:16
technology 18:17	121:22 141:25	164:18 171:12	259:23,25 260:23
24:11,17 25:9 72:10, 11 90:24 120:23	160:17 172:19	175:14 181:14	261:13,16
172:21	173:25 190:6 228:13	228:5,6 245:15	
tell 40:21 55:2 56:12	testify 17:3 18:7	255:17	thinking 20:5 23:14
74:18 84:22,25	29:20 161:21 162:5, 22 163:4,23	things 15:23 23:11	93:13 96:14 126:12
140:6 189:10 205:6	testifying 10:18	27:21 35:18 98:15	140:7 166:11 193:12
210:2 221:11,23	11:22 27:18 28:12	109:21 150:17	224:1 228:17 230:21
222:21 241:5 251:20	39:8 60:1	190:21,22 201:23,24	232:17 243:12 245:3
telling 50:21 215:13	testimony 11:19	205:22 220:6	253:11
216:12	12:24 13:1,3,8 14:3	222:23,24 224:9	third 20:23 105:20
Temple 38:10	27:9,19 36:9 39:10	245:3 252:8,10	147:21
ten 20:1 21:6 41:4	46:24,25 48:2,16,18	255:13 257:9,14	thorough 83:5
78:2,11	50:17 51:8 53:20	260:1,6	thought 39:6 92:16
tend 128:17 228:21	58:9 66:10,21 67:3	think 11:12 19:22	93:1,4,7 100:22
tender 13:20 19:10	69:20,25 70:3,10	20:11,13 21:2 22:10	120:2 172:19
tens 55:6 121:23	77:3 79:7,23 84:8	24:6 25:1 27:2 29:19	173:13,15 193:9
tenure 79:4,18 80:16	91:21 94:9 96:13	32:2 40:14 44:11,20	203:12 233:20
104:19 105:9,17	99:22,25 100:3	59:12 60:16 61:11	235:14,15
248:22 249:2,5,9	109:20 114:5 117:5	62:18,24 64:13 65:2	thousand 85:9
term 36:18 213:12	118:4,14 134:24	66:5 81:4 85:4 89:23	122:10,21,25 187:11
terminal 165:9 170:7	139:19 142:17	91:2 100:16 106:25	247:13,15
terminate 255:9,11	158:12 173:1 177:3	109:22,23,24 111:7, 15 112:1 115:4	thousands 55:6
terminologically	181:4 190:19 198:12	116:2 118:6,7 120:5	81:15 84:16,23
34:17	256:11 259:5 260:5	122:6,7 124:10,11	121:23 123:6,12
terminology 132:1	testing 71:6,7,11	126:6,15 127:3	174:19
terms 28:23 73:14,20	77:15	134:4,16 140:21	threaten 153:3
74:17 91:13 93:15	tests 244:23	141:9,20 147:15,17	three 19:22 21:5,10, 13,15 27:8,9 58:5, 13,21,25 61:3,14
113:10 115:13 119:2	Texas 21:2,4	152:15,22,23 155:4	94:14 120:16 122:3
199:16 250:13	text 50:21,24 95:24	156:11,13 160:6	127:25 157:15
test 73:19 77:8 82:12	96:4 155:5	172:14 173:12	195:22 205:13
	thank 11:16 12:10	176:14 177:20	251:16 257:16
	24:3 68:4 80:13	180:12,24,25	three-quarters
	139:6 141:19 154:16	181:10,11 191:4	122:17
	203:8 214:15 226:20	192:25 193:18 200:1	
	240:10 251:18	202:5,16 204:5,8,9, 15 210:10 213:13	
	256:19,21 261:20,21	218:12,18 220:21,22	
		224:8 226:12 228:22	

time 8:4 11:2,8,13,25 12:8,23 13:20 17:8 33:19 34:23 35:7,8, 21 51:3 54:8,14 65:5,8 68:6,9 71:20 76:11,14 77:23 78:10,21,22,23 100:22 103:7,23 104:1 115:6 134:11, 22 135:25 139:7,10 144:6 147:12 150:1 151:4,5 159:10 172:12 173:7,10,13, 17,18,21,22,25 179:14,17 202:9 205:21 207:1,20 208:2 209:6,9 212:11,14 222:18 223:4 228:8,24 229:24 232:11,24 233:7,12,15 234:11 235:4 239:14 240:12,17 241:3,9, 22,24 242:23 243:22 251:4,19 252:21 253:4,12,25 254:23, 24 255:22 257:7,8 258:16,21 259:14 260:24 261:22	255:11 256:16,25 261:18 today's 8:3 34:1 257:21 258:12,13 261:23 told 14:4 30:14 84:21 100:17,20 119:6 130:9 239:8 tools 102:1,2 top 181:18 227:15 258:1 top-level 249:20 topics 16:22 17:2 18:6 total 27:4 29:11 30:9, 17 64:16,21 234:24 totally 43:20 tracking 48:13 traditional 244:5 training 75:9 106:2 179:4 transactions 209:23 transcribe 13:11 transcript 51:6 139:3 255:15 257:6,21 259:2,8 260:12 transcription 12:18 92:11 transcripts 259:16 transfers 232:7 travel 232:11,24 233:7,8,12,15,21,25 234:11 235:4 travelling 234:2 treat 78:9,21 79:4 211:14 243:25 259:16	treated 60:14,18,19 79:18 212:3 261:14 treatment 257:6 tremendous 90:23 trial 19:22,23 20:5,6, 10,24 trials 248:20 tried 34:2 78:18 117:23 119:8 135:1 136:17 151:25 trivial 188:6 trouble 168:24 true 60:22 73:11 76:21 108:12 129:1, 4 165:19,24 167:1,2, 3,16 195:17,19 200:15 228:6 236:14 250:14 truly 88:11 245:10 truncated 186:10 trust 259:15 truthful 11:19 13:7 try 13:12,13 56:7 138:5 151:16 166:20 177:14 178:3 209:4 220:11,18 trying 16:21 28:7,8 30:5,8 31:19,22 40:14 70:2 87:17 112:22 119:1 135:3, 6,14 136:2 183:23 220:25 232:11,25 turn 40:19 86:11 132:17 153:15 164:6 179:23 182:21 194:5 turned 36:20 152:12 183:7 turning 63:5 163:14	173:6 189:9 195:1 turns 233:21 Twain 140:17,22 141:3 two 16:19 19:21 20:6, 9 27:8 28:15 31:9 51:13 66:6,17 67:8 70:24,25 80:10 94:14 104:12 157:18 180:16 182:1 185:8 186:17 188:7 190:1 194:24 195:2 198:21 210:23 211:9,15 212:4 215:13 229:12 237:5 240:19 241:23,25 242:3 245:12 257:9,14 two- 208:25 209:4 type 67:13,21 68:25 81:9,22 82:8 89:25 129:8 170:13 171:5 typeface 209:14 215:8 types 83:10 127:18 171:16 176:17 261:10 typical 172:14 typically 52:8,13 75:6 98:11,21 99:7 122:24 129:5 typo 160:23 <hr/> U <hr/> ultimately 136:24 140:16 253:23 Un 68:2 unable 26:21 107:22 unclear 11:25 253:11
--	---	---	---

<p>underlies 182:19 226:2</p> <p>underlying 128:11 131:17 150:1 181:23</p> <p>underpaid 248:18</p> <p>understand 9:21 10:20 11:20,23 12:12,21 13:4 14:14 15:2 16:21 18:4 23:22 26:20 30:25 31:15 32:15 33:12, 18 36:21 42:5,9 55:18,20 56:11 58:3 59:24 65:14 68:17 69:2 70:2 75:2 85:8 87:17 92:1 102:5 107:1 108:14,17,18, 21 113:13 117:20 127:10 139:15 163:24 164:11 178:3 192:13,20 193:7,13, 14 200:4</p> <p>understanding 10:13 14:18,20,25 15:9 16:7 17:2 18:6 19:9 24:4 32:18 33:3 40:11 41:3 52:2,7,12 54:18,25 55:8 66:21 82:23 115:8 119:22 120:15 121:10 126:10 137:7 151:9 153:25 161:20 164:25 173:9 183:3 193:10 195:10,11 197:3 210:7 214:11 226:14 230:7 249:8 252:1 254:16</p> <p>understood 12:5,15 32:23 241:7 259:21, 22</p> <p>unexplained 66:12 225:10,15</p>	<p>Unfortunately 184:3</p> <p>unique 23:2 41:2 207:18,24</p> <p>uniquely 82:10 98:4</p> <p>units 127:16,21</p> <p>universities 249:20</p> <p>university 38:10 72:1 98:9 126:7 149:16 150:18,19 151:13,19 152:12,18 153:3</p> <p>unknown 165:12,13, 15,21 168:6,11,15, 22 169:9,12 170:9</p> <p>untimely 177:2</p> <p>unusable 92:22,23 98:1</p> <p>unusual 249:12,17</p> <p>upcoming 138:16</p> <p>update 142:3</p> <p>upheld 140:16</p> <p>upped 199:3</p> <p>upper 215:12</p> <p>urban 146:21 234:13</p> <p>use 9:25 10:1 47:13, 15 50:4,11,12,13,14 52:19 53:4 65:16 66:12,14 67:4 90:19 98:6 102:17 103:12, 13 111:17 119:10 125:25 130:19 144:12 213:4 218:14 219:13 251:18 254:23,25 258:10</p> <p>useful 173:4</p> <p>uses 77:4</p> <p>usual 94:12</p> <p>usually 223:4</p>	<hr/> <p>V</p> <hr/> <p>vacancy 88:12,24,25 89:15</p> <p>vague 15:19 16:12,16 19:13 20:19 24:13 25:3,11,18 27:14 28:5 31:2 35:1 36:23 39:17 41:1 42:24 43:8 48:2,16,22 50:8 51:16 52:10 53:7,23 54:9,16,22 55:11,22 56:10,19 57:12,21 58:24 59:6,16 60:11 62:2,16 64:1,8 66:3, 10 69:9,20 70:14 71:8,24 72:14,23 73:16,24 76:4 78:15 79:23 81:11,24 82:9 83:6,16 84:18 85:2, 21 87:21 88:17 89:20,21,23 90:16 91:8,21 92:4 93:21 95:7,14,20 96:3,23 97:9,24 98:17 99:21 101:20 102:14 103:8 105:11 109:12 110:6 112:12 113:6,17 114:9,16,20 115:11, 24 116:5 117:5,22 118:16 119:17 120:8 121:7 123:8,20 124:17 125:6,23 127:9 128:8 129:9 143:8 164:19 166:25 167:24 171:1 172:25 175:8 176:6 178:16 192:23 198:12 199:6,10 207:21 243:16 246:6 248:24 250:5 253:19</p> <p>valuable 79:4,19</p> <p>value 54:7 76:25</p>	<p>78:10 80:17 165:15 168:7,11,16,22 210:24,25 221:8</p> <p>valued 75:13</p> <p>values 210:23 228:1</p> <p>variable 46:22 47:8,9, 10,12,23 48:12 81:2, 19 88:19 131:12,18 164:15 165:8,17,22 166:23 167:5,7,12, 19 169:17 170:19,20 173:17,21 174:2 175:6,20 177:8,10, 23 214:1,2,4,21 216:13,21,23 217:3 218:1,2,3,5 219:3 222:5 224:23 225:4 234:2</p> <p>variables 47:18 50:4, 11 103:15 131:6,8, 11,13,14,15,21,23 132:4,5,12 133:20, 21 164:11 174:5 210:3 214:20,22,25 216:7 217:8,13 219:14 220:2,19 221:1,21 222:7 223:21 224:20 232:20 236:24 237:6 245:7,8</p> <p>variance 224:14</p> <p>variation 221:18 222:5 224:19 225:3, 10,14 233:23</p> <p>variety 233:11</p> <p>various 147:10</p> <p>vary 222:18</p> <p>varying 223:3</p> <p>Vekker 163:11</p> <p>verbal 92:11</p>
---	---	---	---

verbatim 150:10	Waggoner 48:23 49:1 50:17 51:5 56:5 99:19 100:1 109:22	Washington 20:13	web 22:9
versus 57:23 109:9 171:25 176:23 179:6 202:9 231:3 233:8, 17	Waggoner's 53:20 99:17 118:4,14	wasn't 25:1 29:10 46:15 58:11 84:11 92:24 93:11 94:15 96:10 98:6 101:10 115:16 159:11 171:21 184:3 190:1 191:22 205:19 206:1 253:13	website 21:20 22:14, 24 111:21 138:23
victim 58:7,14,23 59:4 60:9 61:4,15,25	wait 13:14 180:23 205:1 249:1	way 11:25 47:24 76:2, 19 98:1,7 99:14 100:15 117:15 120:3 121:11 124:23 134:18 170:1,4,5 174:9,11 176:13 177:24 180:18 194:3 199:2 201:17 217:17 223:19 224:13 234:25 237:3 243:15,19 244:2 249:20	week 41:19 260:19 261:8,17
victims 63:18	waited 93:23	ways 30:20 124:14 195:9 198:21	weight 77:11 124:14
video 8:4 65:6,9 68:7, 10 76:12,15 103:24 104:2 138:14 139:8, 11 179:15,18 209:7, 10,12 212:12,15 257:11	waiting 74:18,24 75:20	we'll 68:4,17 243:5,6 251:21 259:25	weighted 80:23
VIDEOGRAPHER 8:2 65:5,8 68:6,9 76:8, 11,14 103:17,23 104:1 138:13 139:7, 10 179:14,17 209:6, 9 212:11,14 257:10, 13 261:22	waived 261:24	we're 9:17 26:12 32:3 34:17 63:1 65:6,9,14 66:16,17 68:7,10,12 76:15 79:13 103:24 104:2 134:21 138:18,22 139:2,8, 11 164:14 179:15 184:10 200:10 207:24 208:16 209:7,10 212:12,15 217:17 254:19,21 255:18 257:7 259:23,24 260:8,9, 10,20	weights 124:22 125:3
view 43:18 70:12 133:20 152:20 157:23 224:6 231:14 248:7	want 18:4 19:8 26:8 34:4 44:5 49:12 55:4 56:12 58:2 80:3 102:23 111:17 113:1 114:4 131:25 134:10 138:13,21 144:22 151:20 161:19 162:6 164:3 168:3 169:2 173:6 181:8 188:10, 11 190:14,18,21 192:7 193:13 195:5, 8 202:14,15 212:10 217:10 221:6 226:14,18 227:14 237:11,14 240:12 245:4 251:25 254:17 255:13 256:20,24 257:10 258:5	we've 13:19 50:6 109:13,23 117:10 118:20 192:9 212:5	Welcome 65:11 104:4
views 65:21	wanted 18:8 23:22 47:15,18 65:19 85:24,25 104:6,10 153:12 164:10 179:20 183:2 195:9 239:23 242:23 255:18 256:5 257:4		went 10:12 19:23 20:6,9 147:19 149:22 161:24
violation 63:25 258:8	wants 258:6		weren't 201:24 235:10
virtually 15:23 57:25 90:17 102:1 192:8 245:14	warning 220:14,17,25		whatsoever 67:21 68:24
vis-a-vis 226:15	warranted 230:20 231:2		Whispers 17:3
vision 240:6			white 126:4
voce 17:3			whites 14:22,23 57:23 62:10 91:13 122:18,21 171:13,14 180:11 201:14,19 243:18 251:13,14
volume 147:9 154:11, 17,22 155:4,16			Who 28:10 35:14
volumes 15:25			wider 147:3
<hr/> W <hr/>			widow 258:21 259:13,19
wage 231:11,15			willing 149:16 150:19
			window 258:21 259:13,19
			winging 259:18
			wins 248:21
			witness 8:14,16 14:15 24:11 25:14 28:3 29:3,13 30:11 71:21 86:19 139:24

