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UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

ELOUISE PEPION COBELL, et   .
al.   .
                              .
        Plaintiffs,   .   Civil Action 96-1285
                              .
    v.   .
                              .   Washington, D.C.
DIRK KEMPTHORNE, Secretary   .   Tuesday, June 17, 2008
of the Interior, et al.   .   1:33 p.m.
                              .
        Defendants.   .

. . . .

        TRANSCRIPT OF TRIAL - AFTERNOON SESSION
         BEFORE THE HONORABLE JAMES ROBERTSON
            UNITED STATES DISTRICT JUDGE

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01:33:09PM   1   P R O C E E D I N G S

01:33:09PM   2   COURTROOM DEPUTY: Please come to order and remain

01:33:11PM   3   seated.

01:33:12PM   4   THE COURT: All right, Mr. Dorris.

01:33:13PM   5   MR. DORRIS: Thank you, your Honor.

01:33:14PM   6   FRITZ SCHEUREN, Ph.D., WITNESS FOR THE GOVERNMENT,

01:33:14PM   7   PREVIOUSLY SWORN

01:33:14PM   8   CROSS-EXAMINATION

01:33:14PM   9   BY MR. DORRIS (continuing):

01:33:15PM 10   Q.   Good afternoon, Dr. Scheuren.

01:33:16PM 11   A.   Good afternoon to you.

01:33:18PM 12   Q.   Let me move to a little different subject than where we

01:33:21PM 13   were before the lunch break. You testified some about changes

01:33:28PM 14   that were made in some of the information that was given to us

01:33:34PM 15   from -- some information that was provided on May 30th to us and

01:33:41PM 16   then information that was provided to us on June 4th. Do you

01:33:44PM 17   recall testifying about that during your direct?

01:33:46PM 18   A.   I do.

01:33:47PM 19   Q.   I'm going to ask that we bring up on the screen Plaintiffs'

01:33:50PM 20   Exhibit 117. Maybe I've got the wrong number.

01:34:05PM 21   Can I have just a minute, your Honor?

01:34:07PM 22   (Pause in the proceedings).

01:34:26PM 23   MR. DORRIS: I'm sorry, your Honor. I had written

01:34:29PM 24   down the wrong exhibit number. Oh, here it is. Do you show

01:34:32PM 25   what exhibit number that is? Okay.

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01:34:41PM   1   BY MR. DORRIS:

01:34:43PM   2   Q.   I believe it has been marked as 117. And in looking at

01:34:48PM   3   this I want you to look at the bottom two that are referenced at

01:34:54PM   4   AR-171R1, the May 30th, and then AR-171R2, which is the June 4.

01:35:05PM   5   Do you see those?

01:35:06PM   6   A.   Yes.

01:35:06PM   7   Q.   Okay. And if you look over, and this is just revenues,

01:35:11PM   8   okay, this doesn't address disbursements or other information.

01:35:16PM   9   Do you see that between the information we were provided on May

01:35:21PM 10   30th showed total revenues in the pre-1972 time frame of almost

01:35:30PM 11 $3.4 billion?

01:35:32PM 12   A.   I do.

01:35:33PM 13   Q.   And then in as of June 4, 2008, they'd fallen to about $2.8

01:35:43PM 14   billion. Do you see that?

01:35:44PM 15   A.   I do.

01:35:45PM 16   Q.   Okay. Now, I don't believe that there were any changes in

01:35:54PM 17   what we were provided between those two between 1972 and the end

01:36:02PM 18   of the chart, which I think is 2007. Do you know whether there

01:36:06PM 19   were any changes in that later time frame?

01:36:09PM 20   A.   To my knowledge, no.

01:36:10PM 21   Q.   Okay. So all of the changes that occurred between these

01:36:15PM 22   two runs or whatever occurred -- made changes in the pre-1972

01:36:22PM 23   time frame, fair?

01:36:23PM 24   A.   Yes.

01:36:24PM 25   Q.   Now, you testified, and I tried to follow but I couldn't

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01:36:32PM **1** exactly, why there were further changes made between May 30 and

01:36:39PM **2** June 4, 2008. Did I understand you to say that the process you

01:36:46PM **3** were going through simply wasn't complete on May 30, 2008?

01:36:53PM **4** **A.** That is correct.

01:36:57PM **5** **Q.** And did you get it completed by June 4th?

01:37:01PM **6** **A.** I believe it is.

01:37:01PM **7** **Q.** Now, what changes, if you know, were made between those two

01:37:08PM **8** analyses that would cause about $600,000,000 in revenues to go

01:37:20PM **9** down during that period, the pre-'72 period?

01:37:25PM **10** **A.** We did two things. I already said some of this to you. We

01:37:34PM **11** looked at the imputation model and we improved it. We were not

01:37:38PM **12** happy with the -- well, with how good it was working for us, and

01:37:43PM **13** we improved the model. And then we also looked at the reported

01:37:47PM **14** data, okay, which we had not factored into the uncertainty in

01:37:55PM **15** the unreported data at that point.

01:37:56PM **16** **Q.** Okay. So you looked at it, the model, because you weren't

01:37:59PM **17** happy with it, correct?

01:38:00PM **18** **A.** That's correct.

01:38:01PM **19** **Q.** Why weren't you happy with it?

01:38:03PM **20** **A.** The disbursement -- it was getting negative values for the

01:38:11PM **21** balances, and this is over the whole life of the trust, that

01:38:15PM **22** couldn't be right, so we tried to find out what it was, and I've

01:38:20PM **23** already mentioned to you that one of the -- it doesn't sound

01:38:23PM **24** like it's a big deal, but one of the things that hit us was we

01:38:27PM **25** had used the value in 1887 as if the trust started in 1887,

01:40:23PM **1** **A.** That needs to be footnoted, though.

01:40:26PM **2** **Q.** That needs to be footnoted?

01:40:29PM **3** **A.** Yes, because of the way we did this.

01:40:30PM **4** **Q.** Can I ask this, it's not footnoted on anywhere on what

01:40:34PM **5** you've done, is it?

01:40:35PM **6** **A.** No.

01:40:35PM **7** **Q.** Okay. You said it needed to be footnoted. Would you say

01:40:39PM **8** what you mean?

01:40:40PM **9** **A.** What I need to do is explain to you that we actually had to

01:40:44PM **10** make a starting value, okay, in this area, and grew out of the

01:40:50PM **11** model that we chose, which we had to go back seven years, as you

01:40:55PM **12** remember this from this morning, and were not showing all those

01:41:00PM **13** seven years. We're just showing first of the years, 1887, so

01:41:03PM **14** that number is coming from, you know, coming from a process you

01:41:08PM **15** haven't fully seen.

01:41:10PM **16** **Q.** Okay. Now, so there was some analysis, further analysis

01:41:15PM **17** between May 30 and June 4 for a time period between 1880 and

01:41:21PM **18** 1887, correct?

01:41:22PM **19** **A.** Yes.

01:41:23PM **20** **Q.** Where you were finding that or establishing in some fashion

01:41:30PM **21** that there was money coming into the government for individual

01:41:37PM **22** Indian allotted lands, correct?

01:41:39PM **23** **A.** I don't know how to answer that. We were not really doing

01:41:47PM **24** that. We were trying to fix this model so it worked for us. If

01:41:52PM **25** you look at these numbers here you will see that the collection

01:38:33PM **1** which in fact in some senses it didn't.

01:38:36PM **2** **Q.** Oh, okay. So that was one thing you did talk about, how?

01:38:40PM **3** **A.** This morning.

01:38:41PM **4** **Q.** And the model that was run that generated the May 30th

01:38:47PM **5** information we were given, are you saying that that was

01:38:50PM **6** presumably a zero balance as of 1887?

01:38:53PM **7** **A.** That is my recollection.

01:38:55PM **8** **Q.** Okay. You've never produced the analysis for May 30 to us,

01:39:03PM **9** have you?

01:39:04PM **10** **A.** No, I have not. I think I also said this morning that we

01:39:08PM **11** used only a small number of iterations, only a thousand, in the

01:39:15PM **12** May 30 data. Like ten thousand.

01:39:20PM **13** **Q.** So between May 30 and June 4 we've identified a couple

01:39:26PM **14** things, and keep me straight. We've identified that you've now

01:39:31PM **15** put a balance in for 1887 and you ran ten times the number of

01:39:41PM **16** imputations, correct?

01:39:42PM **17** **A.** I didn't put a balance in. I did -- I didn't force a

01:39:48PM **18** balance of zero, okay, in 1887, which we had done earlier.

01:39:51PM **19** **Q.** Okay. You didn't put a balance in, but you let this model

01:39:57PM **20** that you created generate a value for that missing information?

01:40:02PM **21** **A.** Correct.

01:40:03PM **22** **Q.** And it generated a value of $5.8 million balance in 1887,

01:40:12PM **23** correct?

01:40:12PM **24** **A.** Yes.

01:40:22PM **25** **Q.** Now --

01:41:56PM **1** numbers for 1887 were 2.2 million and disbursement 2.1 million

01:42:03PM **2** and that meant there was a balance increase for that year of 2.1

01:42:07PM **3** million, so where does the other money come from? It obviously

01:42:10PM **4** comes from the past, okay. It has to come from the past, and

01:42:13PM **5** this issue is one that we're -- we don't have -- we actually --

01:42:21PM **6** it comes out of the process that you haven't seen.

01:42:23PM **7** **Q.** Okay. And this process I haven't seen would indicate to me

01:42:27PM **8** that on average over a course of six or seven years there is

01:42:32PM **9** approximately $5.8 million balance that is generated through

01:42:37PM **10** that process, correct?

01:42:38PM **11** **A.** That is what is happening, yes.

01:42:42PM **12** **Q.** Okay. Am I correct when I look at the top line of

01:42:45PM **13** Defendants' Exhibit 462, that collections of 2.2 million less

01:42:53PM **14** disbursements of 2.1 million ends up with a balance at the end

01:42:57PM **15** of fiscal year 1887 of $5.8 million, am I reading the chart

01:43:03PM **16** correctly?

01:43:05PM **17** **A.** You are correct.

01:43:05PM **18** **Q.** So the beginning balance at the end of fiscal year 1886

01:43:11PM **19** under this would be 5.7 million, correct?

01:43:14PM **20** **A.** If it's footed, yes.

01:43:15PM **21** **Q.** Now, for those seven years then the average amount would be

01:43:21PM **22** approximately eight hundred to nine hundred thousand dollars in

01:43:27PM **23** a buildup of the balance, correct?

01:43:28PM **24** **A.** I think I need to give you more information than this, but,

01:43:33PM **25** yes, that is a logical conclusion, yes.

01:43:37PM	**1**	**Q.** And then after that there isn't another year where this
01:43:41PM	**2**	model that you have constructed would show that much build up in
01:43:46PM	**3**	the balance until which year?
01:43:48PM	**4**	**A.** Well, in looking at the data it looks like 1903.
01:43:56PM	**5**	Perhaps -- I'm not sure what you mean. 5.8 to 10, what is that?
01:44:00PM	**6**	**Q.** Well, it looks like to me there's a $400,000 difference
01:44:03PM	**7**	between collections and disbursements in 1903.
01:44:10PM	**8**	**A.** Yes, but you're not looking at the balances. The
01:44:12PM	**9**	difference between the two balances is $3 million.
01:44:15PM	**10**	**Q.** Oh, okay. So you're saying, well, look at the balances,
01:44:18PM	**11**	don't look at the collections and disbursements?
01:44:20PM	**12**	**A.** Well, I won't say don't. Don't just look at the
01:44:24PM	**13**	collections and disbursements. We do not -- this system does
01:44:27PM	**14**	not foot until 1996, and the balance information is in the
01:44:34PM	**15**	system but it's not -- is tied -- perhaps it's timing or
01:44:40PM	**16**	whatever it is, but it's not tied closely.
01:44:42PM	**17**	**Q.** You said it didn't foot until 1996?
01:44:46PM	**18**	**A.** That's correct.
01:44:46PM	**19**	**Q.** Did I understand you correctly?
01:44:48PM	**20**	**A.** That's what these data show.
01:44:50PM	**21**	**Q.** That's what this model shows, correct?
01:44:52PM	**22**	**A.** Well, there is two ways to answer that. One of them is in
01:44:59PM	**23**	those years we have data, collections, disbursements, and
01:45:03PM	**24**	balances. The only years which we have data in foots begin in
01:45:07PM	**25**	1996.

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01:45:08PM	**1**	**Q.** Okay. Now, is that something that you set the model up to
01:45:19PM	**2**	do, to make sure it footed as of 1996?
01:45:23PM	**3**	**A.** No. It does. That's real data.
01:45:27PM	**4**	**Q.** Okay. Then let me ask this: The data for 1996 is real
01:45:33PM	**5**	data, is what you're saying?
01:45:34PM	**6**	**A.** Yes, sir.
01:45:34PM	**7**	**Q.** And is that different than the other data that you show
01:45:42PM	**8**	here as reported values? Are you treating that different in
01:45:47PM	**9**	some fashion?
01:45:49PM	**10**	**A.** You're right in that some of the data, the data that's in
01:45:56PM	**11**	the boxes, okay, was reported data, but has been model adjusted.
01:46:02PM	**12**	The data that was not in the -- does not have a box around it
01:46:06PM	**13**	and is not color-coded is reported data.
01:46:11PM	**14**	**Q.** Okay. So when I look under the columns Collections and
01:46:15PM	**15**	Disbursements on Defendants' Exhibit 462, everything that was a
01:46:21PM	**16**	reported value earlier now shows as being a model adjusted value
01:46:32PM	**17**	all the way up until 1996, correct?
01:46:38PM	**18**	**A.** When we're talking about collections and disbursements,
01:46:40PM	**19**	what you said is true. The balances were not model adjusted.
01:46:43PM	**20**	They were as we left them after imputation.
01:46:46PM	**21**	**Q.** You didn't try to adjust those in the same way that you
01:46:48PM	**22**	tried to adjust collections and disbursements, correct?
01:46:50PM	**23**	**A.** That's correct. They were there to help us model
01:46:56PM	**24**	disbursements and collections.
01:46:57PM	**25**	**Q.** You said something during your direct examination, and I'm

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01:47:01PM	**1**	talking from my notes, not from the transcript, but it was
01:47:05PM	**2**	something about that the model was so unstable that you treated
01:47:11PM	**3**	1996 and beyond as actual data, at least that's the gist of what
01:47:19PM	**4**	I heard you say.
01:47:20PM	**5**	**A.** That is not what I said.
01:47:21PM	**6**	**Q.** Okay. Is that true?
01:47:23PM	**7**	**A.** Let me separate the truths that you're saying into pieces
01:47:29PM	**8**	and then see what the causal links are, if there are causal
01:47:34PM	**9**	links. May I start?
01:47:35PM	**10**	**Q.** Please.
01:47:35PM	**11**	**A.** The first thing to remember is that the 1996 data, which
01:47:39PM	**12**	was very useful, has been audited it. All the data since 1996
01:47:44PM	**13**	has been audited and all of it is footed. It behaves in the
01:47:49PM	**14**	proper way, is an accounting system. The earlier data does not
01:47:53PM	**15**	behave in that way, which made us suspicious of it. We took the
01:48:01PM	**16**	1996 data as useful in understanding the earlier data, but we
01:48:06PM	**17**	didn't change it.
01:48:07PM	**18**	**Q.** Okay. Did you say, did you talk at all during your direct
01:48:14PM	**19**	examination about any instability in the model as it relates to
01:48:19PM	**20**	these years 1996 and beyond?
01:48:21PM	**21**	**A.** No, not about that year.
01:48:24PM	**22**	**Q.** Now, so you are taking from 1996 through 2007 because there
01:48:35PM	**23**	are audited financial statements, you're accepting those as
01:48:37PM	**24**	being correct?
01:48:38PM	**25**	**A.** I'm accepting those, yes. The word "correct" is your word.

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01:48:44PM	**1**	**Q.** Okay. When you say you're accepting them, is there still a
01:48:48PM	**2**	part of your analysis that assumes any uncertainty with respect
01:48:55PM	**3**	to the data from 1996 forward?
01:48:58PM	**4**	**A.** No.
01:48:59PM	**5**	**Q.** Okay. So you are not viewing that as being uncertain in
01:49:05PM	**6**	the least?
01:49:05PM	**7**	**A.** It is not part of the modeling process, correct.
01:49:11PM	**8**	**Q.** I did not understand what you said.
01:49:13PM	**9**	**A.** It is not -- our focus of the modeling.
01:49:18PM	**10**	**Q.** Can you just repeat your answer?
01:49:19PM	**11**	**A.** I can't do that exactly but I'll say it differently maybe
01:49:22PM	**12**	and that will help you.
01:49:23PM	**13**	**Q.** Okay.
01:49:24PM	**14**	**A.** And of course you'll have the transcript too to compare
01:49:28PM	**15**	what I said the first time to what I said now.
01:49:31PM	**16**	We know the data was audited in 1996. It foots, it
01:49:35PM	**17**	makes sense in terms of the earlier data, okay, for use earlier
01:49:39PM	**18**	and collections and disbursements. And we took -- we took that
01:49:43PM	**19**	data as a given and not a need of any further adjustment, either
01:49:50PM	**20**	an imputation adjustment, because there was nothing missing, or
01:49:55PM	**21**	model adjustment because of the possibility that there was some
01:49:58PM	**22**	errors still in that data. That is not to say that there
01:50:01PM	**23**	couldn't be errors in that data, we do not know that, but we
01:50:04PM	**24**	were so behaved so well that we did not do any modelling for
01:50:12PM	**25**	that.

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01:50:12PM **1** Q. Okay. I got off on this as I was trying to find out what

01:50:16PM **2** went on in these two different analyses for the pre-1972 period,

01:50:21PM **3** and let's go back to what I'm calling Plaintiffs' Exhibit 117.

01:50:28PM **4** Now, you told me that part of the reason these changed had to do

01:50:35PM **5** with the -- that you included 1980 through 1986 in your

01:50:42PM **6** analysis, correct, is one reason that the numbers changed? I

01:50:49PM **7** may have said 19. I should be saying 1880 to 1886.

01:50:53PM **8** A. That would help me, yes.

01:50:54PM **9** Q. I'm sorry I misspoke. Can you explain any of the other

01:50:59PM **10** reasons that the numbers changed between May 30 and June 4?

01:51:04PM **11** A. We of course are fitting a different model, okay, than we

01:51:09PM **12** were fitting earlier, all right. A model which we liked better

01:51:13PM **13** and we were comfortable with, and also I mentioned earlier that

01:51:16PM **14** we had -- we have, subsequent to the multiple imputation, we had

01:51:22PM **15** done the model adjustments for the reported values, and I'm

01:51:27PM **16** pretty sure that those were not done until after May 30th,

01:51:31PM **17** although we may have done them, but the version you got on May

01:51:35PM **18** 30th did not have them.

01:51:36PM **19** Q. Okay. And when you talk about the model-adjusted numbers,

01:51:40PM **20** those are the ones on DX 462 that show up in the black boxes?

01:51:45PM **21** A. That's correct.

01:51:45PM **22** Q. Okay. And certainly the addition and subtraction of those

01:51:52PM **23** don't come anywhere, the addition of all the additional revenue

01:51:56PM **24** reflected here, are you saying that that more is shown in those

01:52:03PM **25** boxes than that that explains a $600 million difference?

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01:52:09PM **1** A. Let me try to answer the question in a somewhat different

01:52:13PM **2** way. I am not claiming that the difference, numerical

01:52:18PM **3** difference between these numbers is due to A, B, C and D. What

01:52:22PM **4** I am telling you is what A, B, C and D, which is what we did,

01:52:28PM **5** occurred between these two numbers. We went away from this

01:52:30PM **6** model. We were in happy with it. And the fact that we're

01:52:35PM **7** continuing to talk about it is your prerogative, but I'm not

01:52:39PM **8** happy with this model.

01:52:40PM **9** Q. And can you list to me the primary reasons you were not

01:52:47PM **10** happy with the model of May -- that resulted in the May 30

01:52:53PM **11** numbers?

01:52:54PM **12** A. Well, I told you two of them and I'll mention them again.

01:52:56PM **13** And to order them in terms of a report I don't know if I can do

01:53:00PM **14** that right now. First thing is that we're getting some negative

01:53:04PM **15** values from the earlier value.

01:53:06PM **16** Q. Say it again.

01:53:07PM **17** A. Negative values. The balance over the whole life of the

01:53:10PM **18** trust was negative, and that didn't make sense. That did not

01:53:14PM **19** make sense. And the second reason was that we had in 1887

01:53:21PM **20** things, so as soon as we got rid of the 1887 problem that we

01:53:24PM **21** treated as a zero the model behaved in a way that made sense,

01:53:33PM **22** and then we went on to do the model-adjusted steps for the

01:53:38PM **23** reported values. I didn't realize that I was going to have to

01:53:46PM **24** be asked to talk about this. I'm happy to talk about it of

01:53:49PM **25** course and then maybe I can give you a better answer later, but

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01:53:52PM **1** this is the answer I have right now.

01:53:53PM **2** Q. Okay. Well, let's do move on. Have you ever applied this

01:54:12PM **3** multiple imputation model to a situation such as this one?

01:54:18PM **4** A. The degree to which the situations are similar is in the

01:54:25PM **5** eye of the be holder. I've applied multiple imputation in lots

01:54:29PM **6** of situations. Exactly like this, never.

01:54:32PM **7** Q. Okay. Now, as I have read your article that was produced

01:54:37PM **8** today and other articles on multiple imputation, it originally

01:54:43PM **9** grew out of trying to impute values for missing data in

01:54:49PM **10** extremely large surveys, correct?

01:54:51PM **11** A. Correct.

01:54:52PM **12** Q. And those values needed to be imputed in those surveys so

01:54:59PM **13** that then-existing techniques for studying a completed data set

01:55:09PM **14** could be run on those sets, correct?

01:55:11PM **15** A. That is correct. Those techniques of course are still

01:55:14PM **16** being used.

01:55:14PM **17** Q. And that's the reason why in those surveys that you want to

01:55:20PM **18** impute or put some value in for the missing data?

01:55:23PM **19** A. The value of the imputation, the multiple imputation --

01:55:29PM **20** important word -- was to get to uncertainty, but the analysis

01:55:34PM **21** had to be done, especially given this offer in those days, was

01:55:37PM **22** to make the data look like a complete data set because the

01:55:42PM **23** methodologies for those complete data sets already existed.

01:55:45PM **24** Q. Okay. You say that similarities or whatever are in the eye

01:55:49PM **25** of the beholder. Let me ask you, as the beholder, can you

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01:55:53PM **1** describe for us the closest situation to this that you have ever

01:55:59PM **2** used multiple imputation for?

01:56:02PM **3** A. I wish I had known you were going to ask that question. I

01:56:11PM **4** would you have thought about a better answer, but most of my

01:56:13PM **5** applications have been in administrative records when I was at

01:56:16PM **6** the IRS, and in surveys.

01:56:18PM **7** Q. Okay. Would it be fair to say that this is the first time

01:56:29PM **8** that you've used multiple imputation in trying to develop

01:56:34PM **9** missing values for a trust or banking situation?

01:56:41PM **10** A. That's a bit broad, but it's certainly true that I've not

01:56:46PM **11** done this kind of analysis before.

01:56:56PM **12** Q. Now, when you look at -- you used a phrase during your

01:57:00PM **13** direct, a word that I guess is one of those words that

01:57:04PM **14** statisticians come up with. You said the "missingness" of

01:57:09PM **15** certain data. Do you remember using that word?

01:57:11PM **16** A. Yes, I did. I do use it, yes.

01:57:13PM **17** Q. Now, if you would bring up Defendants' Exhibit 461. Can

01:57:21PM **18** you describe to me what you mean by the missingness of data?

01:57:24PM **19** A. Well, there are multiple measures of that that you can

01:57:27PM **20** have. One of them is simply to look at the number of missing

01:57:31PM **21** cells relative to the total number of cells. Another one is to

01:57:35PM **22** look at the dollars in the imputed data and in the reported

01:57:40PM **23** data, how many of the dollars have been imputed. That's another

01:57:44PM **24** kind of degree of missingness, okay.

01:57:47PM **25** Q. Okay. Let me ask before we go through, you don't know what

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01:57:52PM **1** the imputed information is when you've got Defendants' Exhibit

01:57:56PM **2** 461, correct?

01:57:57PM **3** **A.** That's correct.

01:57:58PM **4** **Q.** And when you make an assessment, for example, of the first

01:58:01PM **5** page of Defendants' 461, how would you characterize the

01:58:06PM **6** missingness of the data on that chart?

01:58:08PM **7** **A.** Considerable. It's considerable.

01:58:11PM **8** **Q.** Is there a point where you have so much missing data that

01:58:16PM **9** multiple imputation is not a good device to use?

01:58:21PM **10** **A.** I'm sure there is.

01:58:23PM **11** **Q.** And we're at that point if this was the only page that we

01:58:29PM **12** had in Defendants' Exhibit 461?

01:58:31PM **13** **A.** I admit we are, yeah.

01:58:33PM **14** **Q.** Look at the next page. If I told you on the next page, Dr.

01:58:43PM **15** Scheuren, to assume that all of the values that are stated for

01:58:47PM **16** collections between the years 1927 through 1949 are incorrect

01:58:54PM **17** and you should disregard them, in other words, if all of that

01:58:58PM **18** was yellow, would you agree with me then that there was too much

01:59:03PM **19** missingness on that page to use for a multiple imputation

01:59:09PM **20** process?

01:59:11PM **21** **A.** 1927 to 1949, is that what you said?

01:59:15PM **22** **Q.** Yes, for the collections column. You have reported values

01:59:18PM **23** there and I've asked you to assume those are all missing and are

01:59:21PM **24** yellow.

01:59:21PM **25** **A.** Let me make two comments. First is to compare the first

01:59:24PM **1** page to the second page if you would let me, and then second is

01:59:27PM **2** to answer your question directly.

01:59:29PM **3** **Q.** Yes. Would you show --

01:59:32PM **4** **A.** I don't need to see it again. There is considerably more

01:59:37PM **5** data here even if those, that second column, disbursement

01:59:41PM **6** column, were yellow, than there is on the first page. What is

01:59:46PM **7** weakened here greatly is the relationship between collections

01:59:49PM **8** and disbursements in that second -- well, it's the third column

01:59:52PM **9** on the page if the disbursement column were yellow, so my answer

01:59:57PM **10** here on this page was that it depends on what it is you are

02:00:01PM **11** trying to impute here. What's your final number? If you're

02:00:07PM **12** into, and we are, into a balance figure displacement,

02:00:12PM **13** collections minus disbursements, then I would be worried about

02:00:15PM **14** this probably if that were the case.

02:00:17PM **15** **Q.** Okay. To make clear, your answer when you referred to the

02:00:24PM **16** second column, you're referring to the column entitled

02:00:28PM **17** Collections, and when you refer to the third column you were

02:00:31PM **18** referring to the column entitled Disbursements, correct?

02:00:34PM **19** **A.** Yes. And your question was about the disbursement column,

02:00:38PM **20** I believe.

02:00:39PM **21** **Q.** No, it was about the collection column, that if you --

02:00:41PM **22** **A.** Oh, I'm sorry.

02:00:42PM **23** **Q.** That if you did not -- let's make sure it's clear because I

02:00:46PM **24** think your answer is the same. But if on the second page of

02:00:50PM **25** Defendants Exhibit 461 they reported values in column two that

02:00:56PM **1** is labeled Collections were all missing between 1927 and 1949,

02:01:02PM **2** that was the premise of my question. Did you understand that?

02:01:06PM **3** **A.** Now I do. I misunderstood. I thought it was disbursement,

02:01:09PM **4** but I'll say it a different way as I think as you've already

02:01:12PM **5** anticipated my answer here.

02:01:13PM **6** If one or the other of these columns were all missing,

02:01:17PM **7** then what I said would be correct.

02:01:18PM **8** **Q.** And what you said would be correct is that then there would

02:01:21PM **9** not be sufficient information to use a multiple imputation model

02:01:27PM **10** to try to project a missing data, correct?

02:01:29PM **11** **A.** If I might interject a word, the word "strong model." I

02:01:34PM **12** can still model it, but I don't have enough feedback in the data

02:01:38PM **13** to have me believe the model. The data is not telling me that

02:01:45PM **14** the model can be relied on. You can always make strong

02:01:48PM **15** assumptions if you want, but I wouldn't have used that, no.

02:01:50PM **16** **Q.** So that when what you're saying is you could still model it

02:01:54PM **17** but you wouldn't find that to be reliable?

02:01:57PM **18** **A.** If you make too many assumptions you have to worry.

02:02:01PM **19** **Q.** Okay. Now, you've been in court on and off since the trial

02:02:06PM **20** started, correct?

02:02:07PM **21** **A.** Yes, I have.

02:02:09PM **22** **Q.** And are you aware of there being any questions or concerns

02:02:14PM **23** about the collection information that has been used in the

02:02:19PM **24** period from roughly 1922 or 3 all the way through 1949?

02:02:26PM **25** **A.** I'm afraid you're going to have to refresh my memory here.

02:02:30PM **1** I'm not sure what I was hearing. Some of the time I wasn't

02:02:32PM **2** paying as much attention as at other times.

02:02:36PM **3** **Q.** Let's pull up Defendants' Exhibit 372, and look at page

02:03:00PM **4** eight.

02:03:07PM **5** I've called out the wrong page. Go back -- well, hold

02:03:11PM **6** on just a second. Go back to page four, please. And then

02:03:32PM **7** let's --

02:03:33PM **8** Your Honor, may I get my notebook? I'm sorry, I don't

02:03:38PM **9** have it at the podium.

02:03:39PM **10** THE COURT: Sure.

02:03:40PM **11** BY MR. DORRIS:

02:03:53PM **12** **Q.** Page ten, Defendants' Exhibit 372, page ten, and I'll tell

02:04:00PM **13** you what. If you blow up the top part so that Dr. Scheuren can

02:04:04PM **14** see that. And you see that this particular chart is referring

02:04:10PM **15** to the years 1934 through 1949. Are you with me?

02:04:16PM **16** **A.** Yes, I am.

02:04:16PM **17** **Q.** And then it gives a document reference to the far right

02:04:19PM **18** column, footnote two. Do you see that?

02:04:23PM **19** **A.** I do.

02:04:23PM **20** **Q.** Okay. And then if you would blow up footnote two.

02:04:33PM **21** Dr. Scheuren, we've read this many times. I would ask

02:04:35PM **22** you to read footnote two to yourself.

02:04:42PM **23** **A.** Yes, I've read it.

02:04:44PM **24** **Q.** Those indicate that the reports on which the collections

02:04:48PM **25** for those years are being based likely understate total

02:04:54PM	**1**	receipts. Do you see that?
02:04:55PM	**2**	**A.** I do, but I remind you that you're looking at tribal here,
02:04:59PM	**3**	not the total.
02:05:02PM	**4**	**Q.** Okay.
02:05:02PM	**5**	**A.** Pull back up to the top. You're looking at tribal.
02:05:05PM	**6**	**Q.** Okay. Let's go there. Go to 1934 and kind of blow up the
02:05:14PM	**7**	top year so we get it nice and large.
02:05:20PM	**8**	You say it's highlighted there. The receipts that are
02:05:23PM	**9**	being referred to there, sir, are receipts, those are receipts
02:05:28PM	**10**	that were used -- well, you tell me. What did you use in your
02:05:34PM	**11**	model on -- let's just look at this number. See the 10.6
02:05:39PM	**12**	million?
02:05:39PM	**13**	**A.** I see it.
02:05:40PM	**14**	**Q.** And that's for 1934. You're with me, the 10.6.
02:05:52PM	**15**	Let's pull up Defendants' Exhibit 461 and go to the
02:06:01PM	**16**	second page.
02:06:03PM	**17**	And do you see under 1934 you used as a starting, as a
02:06:10PM	**18**	reported value 10.6. Are you with me now?
02:06:15PM	**19**	**A.** I do see the coincidence, yes.
02:06:17PM	**20**	**Q.** That's not tribal, is it?
02:06:19PM	**21**	**A.** No, it's not.
02:06:20PM	**22**	**Q.** And do you see there where we saw a footnote there that
02:06:23PM	**23**	indicated that the information from which that was taken and
02:06:30PM	**24**	then a statement that Ms. Herman I believe testified that she
02:06:34PM	**25**	and Dr. Angel prepared together that says that all those revenue

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02:06:39PM	**1**	figures are likely understated, were you aware of that before
02:06:43PM	**2**	right now?
02:06:44PM	**3**	**A.** I heard this business about understatement, of course.
02:06:48PM	**4**	This connection that you've just made between these two exhibits
02:06:53PM	**5**	I am hearing and seeing for the first time.
02:06:54PM	**6**	**Q.** Go back to page -- on Defendants' Exhibit 372 to the
02:07:03PM	**7**	first -- to page four. And blow up kind of, I need to go to the
02:07:15PM	**8**	other -- over to the Other Receipts column, the first seven or
02:07:20PM	**9**	eight lines. Do you see over there under the Other Receipts
02:07:26PM	**10**	column here on this front page where it is showing that you look
02:07:31PM	**11**	at schedule A-1 page one in order to get the numbers that are
02:07:38PM	**12**	there?
02:07:40PM	**13**	**A.** Apparently there is come kind of a footnote here that I'm
02:07:43PM	**14**	not seeing.
02:07:43PM	**15**	**Q.** Okay. And then do you --
02:07:48PM	**16**	**A.** So my answer to your question is no, I do not see it.
02:07:51PM	**17**	**Q.** Would you point the arrow under Tribal IIM to the footnote
02:07:56PM	**18**	A-1-1? Do you see where the red arrow is pointing now?
02:08:01PM	**19**	**A.** I do.
02:08:02PM	**20**	**Q.** Do you see the footnote?
02:08:04PM	**21**	**A.** No, I haven't seen the footnote. Let me see the footnote.
02:08:07PM	**22**	**Q.** No, but you just see the reference to A-1 page one?
02:08:11PM	**23**	**A.** Yes, sir.
02:08:11PM	**24**	**Q.** And when we turned to A-1 page one in this exhibit, it is
02:08:19PM	**25**	page number eight. Are you with me?

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02:08:29PM	**1**	**A.** I'm getting there.
02:08:33PM	**2**	**Q.** And then do you see for Tribal IIM, if you'll point the
02:08:41PM	**3**	arrow at it, the footnote, you see Tribal IIM and then you see
02:08:47PM	**4**	the footnote next to it that you look at page A-1.1 page one?
02:08:52PM	**5**	**A.** Um-hmm.
02:08:53PM	**6**	**Q.** And then if you go to page ten, and that's the page we were
02:09:00PM	**7**	just looking at with the note on it, do you see that?
02:09:03PM	**8**	**A.** Yes.
02:09:03PM	**9**	**Q.** And that has to do with A-1.1. So do you see how this
02:09:12PM	**10**	document fits together?
02:09:13PM	**11**	**A.** Yes, but you're moving a little fast for me. Remember my
02:09:20PM	**12**	vision is a little slower than that, but, yes, I see this. I
02:09:25PM	**13**	commend you for putting this together. Thank you.
02:09:26PM	**14**	**Q.** Let me ask it to you in a question this way since you're
02:09:30PM	**15**	testifying as an expert statistician. If I ask you to assume
02:09:35PM	**16**	that all of the collection information shown on Defendants'
02:09:49PM	**17**	Exhibit 461 as reported values from 1923 through 1949 are likely
02:09:56PM	**18**	understated, what modifications or adjustments, if any, would
02:10:02PM	**19**	you make to what you have done?
02:10:04PM	**20**	**A.** If that's the case then I would have wanted to have
02:10:12PM	**21**	adjusted them up to account for that before I did the rest of
02:10:17PM	**22**	the analysis.
02:10:17PM	**23**	**Q.** And that was not done, was it?
02:10:20PM	**24**	**A.** It was not. We did take into account uncertainty in the
02:10:23PM	**25**	data, as you heard me tell you, but we did not expect to model

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02:10:30PM	**1**	any bias in the data.
02:10:31PM	**2**	**Q.** Okay. I don't understand the last phrase you did not
02:10:35PM	**3**	expect any modeling bias in the data. What does that mean?
02:10:39PM	**4**	**A.** I don't think I quite said that.
02:10:42PM	**5**	**Q.** Tell me what you said.
02:10:43PM	**6**	**A.** Suppose that every one of those values was off by $3
02:10:48PM	**7**	million, okay, every year.
02:10:49PM	**8**	**Q.** Off by what?
02:10:51PM	**9**	**A.** By $3 million, just hypothetically. You give me a
02:10:55PM	**10**	hypothetical I give you one back, okay? So off by $3 million
02:10:57PM	**11**	and I was able to learn that somehow. I mean, enormously expert
02:11:02PM	**12**	people in the room here at Angel and Michelle Herman, and if
02:11:05PM	**13**	they had come to me and said these data are off by $3 million I
02:11:08PM	**14**	would have adjusted them upwards by $3 million. I would have
02:11:12PM	**15**	told you that.
02:11:13PM	**16**	**Q.** And if they were not able to come up with a reasonable
02:11:16PM	**17**	estimate for you as to how understated those values were, what
02:11:21PM	**18**	would you do?
02:11:24PM	**19**	**A.** I would not have been able to have done any more than I
02:11:27PM	**20**	did.
02:11:27PM	**21**	**Q.** So you would have run them in the model just like you have,
02:11:31PM	**22**	even though they're --
02:11:33PM	**23**	**A.** If I knew they were consistently understated I would have
02:11:36PM	**24**	developed an adjustment process that was asymmetric. The
02:11:41PM	**25**	process we used assumed errors in reporting in both directions.

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02:11:46PM **1** I would have adjusted it only reporting errors in one direction.

02:11:50PM **2** I did not do that, though.

02:11:52PM **3** **Q.** All right. And those are adjustments that you would have

02:11:54PM **4** made before you ran the model, correct?

02:11:58PM **5** **A.** What we actually did, of course, is we took out the really

02:12:04PM **6** extreme outliers as we thought them outliers, and then knowing

02:12:08PM **7** they were reporting errors we went ahead and did the imputation

02:12:11PM **8** and then we went back in afterwards and adjusted the reporting

02:12:16PM **9** and imputed the data. And the reason we did that is because the

02:12:19PM **10** system is so sparse that we needed the imputed data to help us

02:12:26PM **11** to decide how to adjust the reported data and the imputed data

02:12:30PM **12** together.

02:12:30PM **13** **Q.** So that even with all of the reported values that you've

02:12:40PM **14** used such as they are, the data was so scarce that you actually

02:12:44PM **15** needed to run an imputation and impute values in order to then

02:12:52PM **16** make further changes to the model?

02:12:54PM **17** **A.** To the reported data, yes.

02:12:56PM **18** **Q.** To the reported data?

02:12:57PM **19** **A.** And the imputed data at the same time.

02:12:59PM **20** **Q.** Let's go back to Defendants' Exhibit 462. Do you see the

02:13:13PM **21** years 1909 through 1911 are now in black boxes as being model

02:13:20PM **22** adjusted values? Do you see that?

02:13:21PM **23** **A.** I of course do.

02:13:23PM **24** **Q.** That was some of the reported value you had before,

02:13:28PM **25** correct?

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02:13:28PM **1** **A.** Correct.

02:13:29PM **2** **Q.** And explain to us why the model adjusted the values for

02:13:38PM **3** these reported amounts.

02:13:43PM **4** **A.** What we had done is we had fit a time series model to the

02:13:48PM **5** whole data set after we had done the imputation and identified a

02:13:55PM **6** degree to which the model did not fit, and then we took the

02:13:58PM **7** residuals from the model and we treated those as a way of

02:14:03PM **8** thinking about the remaining uncertainty in the reported values,

02:14:08PM **9** and then we used those residuals to increase the amount of our

02:14:16PM **10** measure of uncertainty. Remember that our focus is not really

02:14:20PM **11** on the model values at this level. Our focus is on the overall

02:14:25PM **12** uncertainty at the balance level. That was our goal. If we had

02:14:31PM **13** a goal of producing a best estimate for 1918, okay, collection

02:14:36PM **14** and disbursement, we would have done additional work localized

02:14:44PM **15** to that year.

02:14:45PM **16** **Q.** So if you were trying to come up with the best estimate for

02:14:48PM **17** 19 -- let's just say 1912, what additional work would you have

02:14:54PM **18** done to try to come up with the best estimate for those years,

02:14:58PM **19** for collections and disbursements?

02:15:00PM **20** **A.** I don't know the answer to that right now. Do I have to

02:15:03PM **21** know the answer? I mean, you're asking hard questions. You

02:15:06PM **22** know, at least they have hard answers from my world.

02:15:08PM **23** **Q.** Well, an acceptable answer is to say "I don't know at this

02:15:11PM **24** time."

02:15:11PM **25** **A.** That's the answer. I don't know at this time.

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02:15:14PM **1** **Q.** Okay. Well, let me ask this. When I compare the reported

02:15:17PM **2** values on Defense Exhibit 461 to the model adjusted values on

02:15:23PM **3** Defendants' 462, I actually find that the model adjusted the

02:15:31PM **4** collections for those three years up by about $100,000 or

02:15:36PM **5** $200,000 and the disbursements down.

02:15:40PM **6** Can you put the other one next to it? Thank you. I

02:15:44PM **7** don't know if you can then blow up those particular areas.

02:15:46PM **8** It's not a lot of numbers, but it's odd to me. Can

02:15:55PM **9** you see the screen at all?

02:15:56PM **10** **A.** I can see. What I hear --

02:16:03PM **11** **Q.** It's coming. You see in 1909 --

02:16:08PM **12** THE COURT: The story of this trial, you know, is

02:16:10PM **13** going to be the dualing laptops. These guys are both good.

02:16:14PM **14** MR. DORRIS: They are, and it makes it much more

02:16:17PM **15** efficient.

02:16:18PM **16** BY MR. DORRIS:

02:16:19PM **17** **Q.** And now, Dr. Scheuren, do you see, for example, what I said

02:16:22PM **18** in looking at DX 461 for the years 1909, 1910, and 1911 and

02:16:29PM **19** comparing that to those same years for collections in Defense

02:16:34PM **20** Exhibit 462, how each of those numbers has been increased by one

02:16:39PM **21** hundred or $200,000?

02:16:40PM **22** **A.** I do see that, correct, yes.

02:16:41PM **23** **Q.** And do you see similarly with the disbursements for those

02:16:44PM **24** three years from Defendants' Exhibit 461 to 462, the

02:16:48PM **25** disbursements were all decreased?

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02:16:51PM **1** **A.** No.

02:16:51PM **2** **Q.** The disbursements were all increased by $100,000; is that

02:16:56PM **3** correct?

02:16:56PM **4** **A.** Thank you. Yes.

02:16:57PM **5** **Q.** All right. So why did the model make those kind of

02:17:01PM **6** adjustments, do you know?

02:17:03PM **7** **A.** Specifically why did it make those? No, I don't know that.

02:17:08PM **8** This is a model with lots and lots of issues in the underlying

02:17:13PM **9** data. I could do a diagnostic and pull up the ten thousand

02:17:18PM **10** observations under each of these and look at them and see what's

02:17:22PM **11** going on with them, but I haven't done that. You actually have

02:17:24PM **12** the data so you could do it.

02:17:26PM **13** **Q.** I can assure you I can't do it. But let me ask this: Was

02:17:31PM **14** that because of any uncertainty in the reported data?

02:17:34PM **15** **A.** The reason we did the change was because we wanted to model

02:17:41PM **16** the uncertainty in the reported data and our focus was not on

02:17:45PM **17** the point estimates, which is what you're looking at, but on how

02:17:48PM **18** much more uncertainty overall we had in the balances, and, you

02:17:53PM **19** know, I'm delighted that you're looking at it this way, but this

02:17:57PM **20** was not our goal.

02:17:58PM **21** **Q.** Okay. The long and short of it is, though, that the model

02:18:01PM **22** itself for reasons that you would have to run a diagnostic on

02:18:05PM **23** the computer to determine, changed the values of some of the

02:18:09PM **24** reported numbers, correct?

02:18:10PM **25** **A.** It did in all cases do that, yes.

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02:18:12PM	**1**	**Q.** Until we get the 1996?
02:18:14PM	**2**	**A.** That's correct.
02:18:15PM	**3**	**Q.** It didn't change those after that time, did it?
02:18:19PM	**4**	**A.** We did not do any imputations in 1996 and later.
02:18:23PM	**5**	**Q.** Now, in terms of these values, if we take away that
02:18:33PM	**6**	comparison but leave the two slides up, do you see down at the
02:18:39PM	**7**	bottom of the page -- I'm not going to ask you to read the
02:18:42PM	**8**	numbers -- but the concept, that similarly for the years
02:18:46PM	**9**	beginning in 1923 that the model adjusted the reported values in
02:18:52PM	**10**	disbursements and collections from 1923 through, and if we'll
02:18:58PM	**11**	look at the second page of 462, all the way through 1949 except
02:19:12PM	**12**	for the disbursements in 1945, correct?
02:19:25PM	**13**	**A.** I'm trying to understand the yellow in 1945.
02:19:33PM	**14**	**Q.** Well, it was saying that's imputed for missing data. In
02:19:38PM	**15**	other words, no reported value in the year. If you look over to
02:19:41PM	**16**	the left of the charts you'll see 1945 and the --
02:19:44PM	**17**	**A.** That's the answer, yes.
02:19:45PM	**18**	**Q.** Okay. And again you can't explain why the model changed
02:19:51PM	**19**	reported value in those years, can you?
02:19:52PM	**20**	**A.** I don't think that's what I said.
02:19:56PM	**21**	**Q.** Okay. Sitting here today without going and --
02:20:00PM	**22**	**A.** In terms of a specific number, I cannot. In terms of a
02:20:05PM	**23**	process, I have already described it in general, and if you
02:20:08PM	**24**	allow me to go in and look at the data, which you all have, we
02:20:14PM	**25**	can do more than that.

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02:20:14PM	**1**	**Q.** Let's look at Defendants' Exhibit 462, page three. Let's
02:20:22PM	**2**	blow that up where it sits by itself. There we go. Blow up
02:20:36PM	**3**	right at the top 1968.
02:20:41PM	**4**	Do you see where in 1968 now it is showing that this
02:20:47PM	**5**	model imputed a missing value for that year in collections of a
02:20:52PM	**6**	hundred million dollars?
02:20:53PM	**7**	**A.** I do, I do.
02:20:56PM	**8**	**Q.** And let's look at the prior page of this Defendants'
02:20:59PM	**9**	Exhibit 462, which would be page two?
02:21:02PM	**10**	Down at the bottom let's look at 1965 through 1967.
02:21:11PM	**11**	And do you see where in 19 -- well, you see 1964 it's $100.2
02:21:18PM	**12**	million. In '65 it's $93.4 million. In '66 it's $95.4, and in
02:21:25PM	**13**	1967 it's a hundred million. Do you see that?
02:21:27PM	**14**	**A.** I do.
02:21:27PM	**15**	**Q.** And if I told you that there was an audit report that
02:21:32PM	**16**	states in -- that for 196 -- as of 1968 that collections in the
02:21:41PM	**17**	IIM system were averaging $121 million, what adjustments, if
02:21:47PM	**18**	any, would you make?
02:21:47PM	**19**	**A.** Well, if I had the report I would of course have used it.
02:21:53PM	**20**	And we would have adjusted this data to conform with that if we
02:21:58PM	**21**	found it reliable.
02:22:03PM	**22**	**Q.** Okay. And if Dr. Angel considered it to be a reliable
02:22:10PM	**23**	statement of the average collections up to the 1968, for some
02:22:15PM	**24**	period you would accept that, correct?
02:22:18PM	**25**	**A.** Oh, I would have accepted that, yes. I would have checked

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02:22:21PM	**1**	it, but I would have accepted it.
02:22:22PM	**2**	**Q.** And you would have checked it by doing what, sir?
02:22:24PM	**3**	**A.** Get into the actual report itself and understand it,
02:22:28PM	**4**	because often times are these subtle definitional issues, and
02:22:33PM	**5**	remember we're different, we think differently here, and there
02:22:35PM	**6**	are many different disciplines in this room right now, and I
02:22:39PM	**7**	apologize to all those who don't think the way I do, but I'm
02:22:44PM	**8**	glad that you're helping me explain myself better, but we're
02:22:48PM	**9**	thinking differently, even Dr. Angel and I, who have worked
02:22:51PM	**10**	together for a long time.
02:22:52PM	**11**	**Q.** With the information that Dr. Angel provided to you did you
02:22:57PM	**12**	ask him to provide you with the backup documentation for that
02:23:01PM	**13**	information?
02:23:01PM	**14**	**A.** For this particular year you're talking about, no, we did
02:23:06PM	**15**	not.
02:23:06PM	**16**	**Q.** Oh. I'm not saying he provided you any information about
02:23:10PM	**17**	this year, but for the information that he did provide to you,
02:23:12PM	**18**	did you ask him for documentary support for each of those
02:23:18PM	**19**	figures he provided to you?
02:23:19PM	**20**	**A.** Let me go back and raise another question. The answer to
02:23:25PM	**21**	your questions is yes, we did every year that Dr. Angel provided
02:23:29PM	**22**	me before 1972 we had full documentation for and confirmed.
02:23:34PM	**23**	This I think is a -- this is a -- what is it, 1960? What is the
02:23:40PM	**24**	year we're looking at here? What is the year we're looking at
02:23:43PM	**25**	here, '68?

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02:23:45PM	**1**	**Q.** 1968 was the year. I started asking you questions about
02:23:49PM	**2**	it. Did you personally look at any of that documentation or did
02:23:52PM	**3**	you have your staff do it?
02:23:53PM	**4**	**A.** I looked at some of it, but no, I didn't do all of it at
02:23:57PM	**5**	all.
02:23:57PM	**6**	**Q.** How much of it did you look at?
02:23:59PM	**7**	**A.** Fifteen percent, twenty percent; something like that.
02:24:02PM	**8**	**Q.** If you pull up Defendants' Exhibit 72 and go to page four.
02:24:11PM	**9**	Your Honor, I know you've seen this many times, but in
02:24:17PM	**10**	light of the witness' testimony I'd like to show it to him.
02:24:20PM	**11**	I'm sorry. Let's go back to page one so we can
02:24:23PM	**12**	orient, Dr. Scheuren. This is an audit report from you see
02:24:30PM	**13**	March 1969 on it?
02:24:32PM	**14**	**A.** Not yet. You have to bring it up for me if you want me to
02:24:36PM	**15**	see it here. I do see March 1969. Thank you.
02:24:43PM	**16**	**Q.** Can you see March 1969 now?
02:24:44PM	**17**	**A.** Yes, sir.
02:24:45PM	**18**	**Q.** Let's go to page four, and if you'll bring up the
02:24:48PM	**19**	highlighted information there. All right. Let me let you look
02:24:54PM	**20**	at that.
02:24:57PM	**21**	**A.** I see that.
02:24:58PM	**22**	**Q.** And it says, Cash receipts are running at the rate of 121
02:25:02PM	**23**	million per year. Do you see that?
02:25:04PM	**24**	**A.** I do.
02:25:06PM	**25**	**Q.** Tell me how you would factor that into your analysis.

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02:25:09PM 1   **A.**   Well, I'd like to get behind that number because in many of

02:25:14PM 2 these reports there are statements that are not net necessarily

02:25:16PM 3 made by people close to the system. They're using overall

02:25:20PM 4 averages or impressions. But if it was a real number, after I

02:25:24PM 5 had done that review then I would have wanted to have that

02:25:28PM 6 average be met in the data.

02:25:30PM 7   **Q.**   Okay. And the average that we've seen in the data for the

02:25:35PM 8 period coming up, that would be something between, say, probably

02:25:40PM 9 about ninety and a hundred million dollars, correct?

02:25:43PM 10   **A.**   It's a little over a hundred in a couple years, but yes,

02:25:47PM 11 it's under this number considerably.

02:25:49PM 12   **Q.**   And so that you would want to go then go in and put as a

02:25:54PM 13 reported value $121 million for a certain number of years

02:25:58PM 14 leading up to 1968?

02:26:00PM 15   **A.**   I would have tried to find out what period this was in

02:26:02PM 16 reference to, but remember I have to change the disbursements

02:26:07PM 17 too. I can't just change the collections because if this number

02:26:11PM 18 is -- if the numbers I have about collections are too low and

02:26:19PM 19 they get raised, then I have to raise the disbursements too or I

02:26:23PM 20 have to have an explanation for why I can't raise the

02:26:27PM 21 disbursements.

02:26:28PM 22   **Q.**   Do you remember that we saw the year 1945 where you had a

02:26:32PM 23 reported value of collections and no report on disbursements?

02:26:37PM 24   **A.**   I do.

02:26:37PM 25   **Q.**   We just looked at that.

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02:26:38PM 1   **A.**   I do.

02:26:41PM 2   **Q.**   So for 1968 and the prior years, you could enter a value

02:26:45PM 3 for collections without putting a value in for disbursements,

02:26:49PM 4 correct?

02:26:49PM 5   **A.**   I could have imputed it, yes.

02:26:53PM 6   **Q.**   You could have?

02:26:57PM 7   **A.**   I could have left it blank, but if I had the numbers, if I

02:26:57PM 8 had both numbers, disbursements and collections, I would have

02:27:01PM 9 gone to Ed and asked him for his advice about what to do.

02:27:05PM 10   **Q.**   And go back to the first page of this exhibit and blow up

02:27:09PM 11 the title at the top.

02:27:13PM 12   And do you see that this was done by the Office of

02:27:15PM 13 Survey and Review for the Department of Interior?

02:27:18PM 14   **A.**   Yes.

02:27:19PM 15   **Q.**   And you would expect them to be knowledgeable of the IIM

02:27:22PM 16 system?

02:27:23PM 17   **A.**   I would.

02:27:23PM 18   **Q.**   And this is a change that we look at here today that you

02:27:34PM 19 could make to your system still, couldn't you? You could go run

02:27:38PM 20 it, go back to the office and run that this evening, right?

02:27:42PM 21   **A.**   This evening maybe. Certainly we could run it quickly

02:27:47PM 22 after we had confirmed it with discussions.

02:27:49PM 23   **Q.**   Another area where there was some examination about the

02:28:03PM 24 accuracy of the information that was used by Ms. Herman was in a

02:28:08PM 25 period that you talked about, and I think you've talked about it

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02:28:11PM 1 as the CD&L information that was a period between 1972 and 1985,

02:28:18PM 2 correct?

02:28:18PM 3   **A.**   Correct.

02:28:20PM 4   **Q.**   And what I understood you to say is that as a result of

02:28:24PM 5 hearing that testimony you did some further analysis about the

02:28:29PM 6 missing information on the spreadsheets that were used to

02:28:33PM 7 support her numbers and therefore you prepared a new histogram

02:28:39PM 8 the day that we looked it; is that correct?

02:28:41PM 9   **A.**   Let's me say it a little bit differently. I already

02:28:48PM 10 commended you and thanked you for pointing those out, and when

02:28:51PM 11 we went back in and looked at that as you pointed it out to us

02:28:58PM 12 we did not change the histogram itself. I used the histogram to

02:29:01PM 13 make an assessment. This is obviously somewhat perhaps

02:29:07PM 14 incomplete to move the upper bound, the 95 percent upper bound,

02:29:11PM 15 to a higher value in order to deal with the fact that there was

02:29:16PM 16 more uncertainty in the system than I had expected.

02:29:21PM 17   **Q.**   And when you're talking about more uncertainty in the

02:29:24PM 18 system that you expected, you were talking specifically about

02:29:28PM 19 that 13- or 14-year period, correct?

02:29:31PM 20   **A.**   That's correct.

02:29:31PM 21   **Q.**   You said that you got Dr. Angel to provide you with backup

02:29:35PM 22 documentation for all the information he gave to NORC. Did you

02:29:39PM 23 have Ms. Herman likewise provide the supporting information for

02:29:44PM 24 all the data and the reported value she gave to you?

02:29:47PM 25   **A.**   Generally, no.

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02:29:49PM 1   **Q.**   Why the difference, sir?

02:29:51PM 2   **A.**   We had been looking at the '72 forward data for a long

02:30:01PM 3 time. It appears in one of the earlier reports. We thought we

02:30:09PM 4 knew what we were looking at, and we've been following the

02:30:13PM 5 changes in the micro data that Ms. Herman and her team has been

02:30:20PM 6 introducing over the years in the ways that she has described

02:30:22PM 7 here, so we thought we knew who we were getting.

02:30:26PM 8   **Q.**   In light of the uncertainty in the system I think as you've

02:30:33PM 9 referred to it, that you heard regarding the CD&L period, you

02:30:38PM 10 think that the upper bounds of the competencies at this level

02:30:43PM 11 that should be used is 97.5 percent?

02:30:48PM 12   **A.**   That is correct.

02:30:48PM 13   **Q.**   Why wouldn't it be 99 percent, sir?

02:30:51PM 14   **A.**   It could be 99 percent. I indicated in a conversation that

02:30:56PM 15 you heard, bringing the judge into this, that is a decision that

02:30:59PM 16 the decision-maker makes as to what that upper bound should be.

02:31:03PM 17   **Q.**   Okay. To help in that decision, can you explain you would

02:31:08PM 18 say 97-and-a-half percent rather than 99 percent?

02:31:12PM 19   **A.**   Well, I had looked at the data, and the amount of

02:31:20PM 20 uncertainty added to it did not seem to be very large. I have

02:31:25PM 21 not had a chance to rerun everything, so I'm basing this on just

02:31:30PM 22 simply my judgment here, and 97 percent of them had seemed to be

02:31:39PM 23 a good compromise between '95 and '99.

02:31:43PM 24   **Q.**   Do you recall in your direct testimony saying words to the

02:31:47PM 25 effect that uncertainty has to be scored in the plaintiffs'

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02:31:50PM 1 favor?

02:31:50PM 2 A. I do remember saying that, yes.

02:31:52PM 3 Q. If I ask you to apply that same principal, would that point

02:31:55PM 4 toward using a 99 percent confidence level rather than a

02:32:00PM 5 97-and-a-half percent?

02:32:02PM 6 A. I've already told you that I moved from 95 to 97-and-a-half

02:32:09PM 7 because I felt that it was appropriate in the context of what I

02:32:13PM 8 said about scoring things. I don't think it goes to 99, but

02:32:16PM 9 it's not my decision. It's the judge's decision.

02:32:20PM 10 Q. Now, let me ask this: If in fact some of the information

02:32:25PM 11 that has been used in your system reported value as deemed to be

02:32:31PM 12 so uncertain that it should not be used as a reported value,

02:32:38PM 13 what effect, if any, does that have on the upper bounds of the

02:32:44PM 14 confidence factors?

02:32:45PM 15 A. That is a question I can't answer without doing it both

02:32:51PM 16 ways, and if I do it both ways I would expect -- and this is I

02:32:56PM 17 think where you're going with this -- I would expect that

02:32:59PM 18 treating it as missing incompletely would increase the

02:33:04PM 19 uncertainty level to treating it as partially reported, which is

02:33:10PM 20 the way we're doing it with most of the data here that is

02:33:13PM 21 reported.

02:33:13PM 22 Q. And that would cause the upper bound to be a higher total

02:33:20PM 23 amount, correct?

02:33:20PM 24 A. That's correct. And we had various looks at what if we

02:33:25PM 25 were to impute all the data in the data process going from where

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02:33:31PM 1 we are now into the future. There's a way to do that. We

02:33:37PM 2 haven't done that. One of the things that repeatedly you've

02:33:41PM 3 heard with other witnesses is that with me more could be done,

02:33:46PM 4 and we are happy with this analysis given the time that we were

02:33:49PM 5 allowed to look at it and do it, but with more time we would do

02:33:53PM 6 more.

02:33:53PM 7 Q. Certainly you're not happy with this analysis in light of

02:33:57PM 8 some of the things that you've seen today with understatement of

02:34:02PM 9 revenues in between the 1930s and '40s and the 21 million

02:34:12PM 10 average leading up to 1968, are you?

02:34:14PM 11 A. I am not happy with the fact that we didn't incorporate

02:34:18PM 12 some of what you've told me today into this.

02:34:25PM 13 Q. Okay. Let's pull up Plaintiffs' Exhibit 137.

02:34:29PM 14 A. Other should I say we'd have to do.

02:34:31PM 15 Q. Put it at the top so we can see the title.

02:34:39PM 16 Do you see that this is a page that appeared in

02:34:42PM 17 Statistical Methods and Medical Research in 1999 by professor of

02:34:50PM 18 statistics at Penn State by the name of Joseph Schaeffer, do you

02:34:55PM 19 see that?

02:34:56PM 20 A. Yes.

02:35:01PM 21 MR. WARSHAWSKY: Do you have a copy of it?

02:35:03PM 22 THE COURT: You're looking at it on the screen.

02:35:05PM 23 MR. WARSHAWSKY: Normally they've been providing

02:35:05PM 24 copies.

02:35:09PM 25 MR. DORRIS: I don't, but why don't you take mine?

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02:35:11PM 1 MR. WARSHAWSKY: I don't want to take your marked-up

02:35:13PM 2 copy.

02:35:14PM 3 MR. DORRIS: It will be helpful to ask you to follow

02:35:17PM 4 along.

02:35:19PM 5 MR. WARSHAWSKY: Maybe.

02:35:19PM 6 MR. DORRIS: I know what I want to ask about this one.

02:35:22PM 7 BY MR. DORRIS:

02:35:22PM 8 Q. Professor Schaefer is someone that you know and works in

02:35:25PM 9 and is knowledgeable in the field of imputation, correct?

02:35:28PM 10 A. Yes. I know him quite well. I'm mentioned in his book.

02:35:32PM 11 I'm mentioned in a lot of books.

02:35:36PM 12 Q. I made it through the first two pages of this article

02:35:43PM 13 before I couldn't follow it anymore. He's written here you say

02:35:48PM 14 a primer for people on multiple imputation. Do you see that?

02:35:52PM 15 A. His model is what we're using for MPI analysis.

02:35:59PM 16 Q. I want to concentrate on this paragraph that runs over to

02:36:02PM 17 the next page.

02:36:03PM 18 If you will blow this up.

02:36:04PM 19 And he refers to multiple imputations, MI. Do you see

02:36:10PM 20 that?

02:36:11PM 21 A. MI is not the only principal method for handling missing

02:36:17PM 22 values, nor is it necessarily the best for any given problem.

02:36:20PM 23 Q. That's entirely consistent with what you've testified to?

02:36:23PM 24 A. Yes, I agree with that. The word "principal" means that

02:36:26PM 25 you know statistically the principal.

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02:36:29PM 1 Q. If you want to read the in between be my guest, but I want

02:36:35PM 2 you to go to the highlighted part that begins down at the bottom

02:36:40PM 3 of the page. It says, Given sufficient time and resources one

02:36:43PM 4 could perhaps derive a better statistical procedure than MI for

02:36:50PM 5 any particular problem. In real life applications, however,

02:36:56PM 6 we're missing data are a nuisance rather than a major focus of

02:37:03PM 7 scientific inquiry. A readily available approximate solution

02:37:10PM 8 with good properties can be preferable to one that is more

02:37:13PM 9 efficient but problem-specific and complicated to implement. Do

02:37:19PM 10 you see that?

02:37:19PM 11 A. Yes, I do.

02:37:20PM 12 Q. Is multiple imputation, should it be used to impute values

02:37:32PM 13 for the missing data where they are a nuisance other than a

02:37:38PM 14 major focus of the inquiry?

02:37:41PM 15 A. Can I answer that question by interjecting something first

02:37:50PM 16 before I answer it?

02:37:51PM 17 Q. Well, if you can answer it yes or no and then explain your

02:37:55PM 18 answer would be the preferable approach.

02:37:58PM 19 A. That's fine. I don't think that using multiple imputation

02:38:07PM 20 only when you're going to get rid of nuisance problems as needed

02:38:12PM 21 is appropriate. You can use it for other methods too, but there

02:38:16PM 22 are other specialized methods that could be used. I think it

02:38:22PM 23 could in the mathematical sense dominate. They could be better

02:38:27PM 24 if you had enough time and money.

02:38:28PM 25 Q. So you would not agree to the extent that Professor

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02:38:37PM **1** Schaeffer is implying that it should be used where missing data

02:38:40PM **2** is a nuisance rather than the major focus of scientific inquiry,

02:38:44PM **3** you wouldn't agree with that?

02:38:47PM **4** A. I couldn't agree with it, no.

02:38:48PM **5** Q. Now, let me ask you to look at your article. Do you have

02:38:52PM **6** that? It was passed out today. It's Defendants' Exhibit 507.

02:38:59PM **7** I suspect you have a copy with you, Dr. Scheuren.

02:39:04PM **8** A. Am I allowed to elaborate on what you just said?

02:39:07PM **9** Q. You can answer any questions that the government asks you.

02:39:11PM **10** A. Go ahead then.

02:39:19PM **11** Q. Looking at your article -- I'm going to pause just for a

02:39:22PM **12** moment till it's brought -- you need to switch over, I think.

02:39:27PM **13** Sorry to do that to you.

02:39:45PM **14** I'll tell you what I am working with now.

02:39:47PM **15** Go to the third page of this exhibit, please, and go

02:39:50PM **16** under 4.2, the second paragraph, and blow that up for me.

02:39:59PM **17** The part I'd like you to look at and I'd ask to

02:40:03PM **18** highlight is a sentence that begins about halfway down there and

02:40:06PM **19** says "I still remain skeptical of models, however, and worry

02:40:10PM **20** about people complaints believing them too much."

02:40:14PM **21** Can you highlight that statement for me, please, sir?

02:40:18PM **22** Exactly.

02:40:19PM **23** Do you see that?

02:40:20PM **24** A. I do.

02:40:20PM **25** Q. What were you saying about that?

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02:40:25PM **1** A. Let me give you some background, if I might. In the world

02:40:31PM **2** of sampling that I'm in, one of the greatest statisticians, who

02:40:36PM **3** recently died, W. Edwards Demming, did not believe in models.

02:40:42PM **4** He thought that we should base our inferences on what are called

02:40:48PM **5** frequentious-based as the same from Bayesian methods. And

02:40:54PM **6** frequentious-based methods are what we usually do when we're in

02:40:57PM **7** the world I live in, in the sampling world, because of Demming,

02:41:03PM **8** and we, because of Demming, did not adequately pay attention to

02:41:07PM **9** the fact that we really needed to use models for a whole lot of

02:41:11PM **10** settings that we weren't using them for, and where it's

02:41:13PM **11** particular when there are missing and misreported observations.

02:41:18PM **12** Even Demming would have agreed that we need missing data models

02:41:22PM **13** for missingness, but to the extent to which you have only one

02:41:27PM **14** model is a problem, because you really need to look at multiple

02:41:35PM **15** models because you need to look at the fact that the models

02:41:36PM **16** themselves have concerns with them, and we've been doing that

02:41:40PM **17** here, and because of the way this is being done, we're

02:41:43PM **18** presenting a model without all the models.

02:41:48PM **19** Q. And you really have looked at one model; is that correct?

02:41:54PM **20** A. No. You've actually called my attention to something we

02:41:56PM **21** gave you earlier, which is we've looked at at least two models,

02:41:58PM **22** and you asked me about the difference between those two models.

02:42:02PM **23** We spent quite a bit of time on that. There were other models

02:42:05PM **24** we looked at too.

02:42:06PM **25** Q. Two models constructed or run in the same analytical

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02:42:10PM **1** framework, correct?

02:42:11PM **2** A. The word "model" and the word "analytical framework" phrase

02:42:18PM **3** are not equivalent.

02:42:24PM **4** Q. Let me ask you to step back, and there's a paragraph on the

02:42:27PM **5** other column just above where you've highlight there that begins

02:42:31PM **6** the non-ignorable case. Do you see that sentence that begins,

02:42:37PM **7** The non-ignorable case NMAR which adds variance with intractable

02:42:48PM **8** bias is a generally have-to-live-with form of missingness?

02:42:49PM **9** A. That's correct.

02:42:49PM **10** Q. Can you state that in more layman's language?

02:42:55PM **11** A. There are three types of missingness that are described in

02:43:02PM **12** here by the people at Don Rubin in 1976. One kind is just have

02:43:08PM **13** data that is not there. There's nothing particularly bad about

02:43:13PM **14** it except that your sample is too small and you don't have as

02:43:19PM **15** much data as you thought. There's nothing you need to do about

02:43:22PM **16** it except not over-react to it. The second phase which is

02:43:27PM **17** missing at random is a case where if you know what's missing and

02:43:32PM **18** how to fix it then you can adjust the data so that it gives you

02:43:38PM **19** answers that are not biased, but if you don't have enough

02:43:42PM **20** information from the data set to deal with certain things, then

02:43:49PM **21** you cannot adjust for the missing -- the non-ignorable portion.

02:43:54PM **22** Because the non-ignorable portion is usually something that you

02:43:57PM **23** don't know, not in the data set, somewhere else, and maybe not

02:44:01PM **24** on anyone's radar screen, and that is affecting the results.

02:44:08PM **25** Sometimes you can't even tell that it's there, and in this sort

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02:44:11PM **1** of philosophical discussion, which is what this is, and

02:44:17PM **2** recollection, you need to be cognizant of that.

02:44:20PM **3** Q. And the missing data that we're confronted with in this

02:44:25PM **4** matter is which of the three types?

02:44:25PM **5** A. It's all three.

02:44:25PM **6** Q. Okay.

02:44:25PM **7** A. I've been talking about the all three part for quite a

02:44:25PM **8** while.

02:44:33PM **9** Q. Let's look at the next page. There is one last quote I

02:44:36PM **10** want to ask you about in this article. Under 6.1, if you would

02:44:46PM **11** pull that up and highlight that in the first sentence, it's kind

02:44:49PM **12** of a long sentence, you see there you wrote, Typically in my

02:44:54PM **13** practice subject matter experts believe in their imputation

02:44:56PM **14** models more than is warranted, possibly in part to the chronic

02:44:56PM **15** problem we have had in many surveys of underestimating

02:44:56PM **16** imputation variance and expense taken in time and money in

02:45:12PM **17** adjusting for missingness. Do you see that?

02:45:16PM **18** A. Yes, I do. I think it applies in this case.

02:45:17PM **19** Q. How does it apply in this case?

02:45:19PM **20** A. I think Professor Cornell believes that about his model.

02:45:19PM **21** Q. Okay.

02:45:23PM **22** A. It doesn't have any measure of uncertainty.

02:45:23PM **23** Q. So what I hear you saying, because you recognize that there

02:45:27PM **24** is tremendous uncertainty here -- well, you may not like that

02:45:32PM **25** word, tremendous. Would you agree there is tremendous

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02:45:40PM **1** uncertainty in the data here?

02:45:40PM **2** A. A little more quantative and less qualitative, but yes,

02:45:43PM **3** I'll let you get away with that. You're doing a good job, by

02:45:47PM **4** the way. Thank you.

02:45:48PM **5** MR. DORRIS: There's one thing we can agree on, your

02:45:51PM **6** Honor. Civility here. The questioner and the witness can

02:45:53PM **7** stipulate to one thing. I'm sorry for the interruption there.

02:45:59PM **8** BY MR. DORRIS:

02:46:00PM **9** Q. Okay. Dr. Scheuren, you used a phrase in your direct

02:46:09PM **10** examination that I didn't understand. You said that the

02:46:14PM **11** statistician need to let the data speak to them.

02:46:17PM **12** A. That's correct.

02:46:17PM **13** Q. What do you mean?

02:46:22PM **14** A. Well, it means a simple as -- you used this illustration

02:46:31PM **15** earlier as doing chatter blots with the data as relating the

02:46:34PM **16** data you have with other things you think are true, okay, or

02:46:39PM **17** with experts who may have created the data or who have knowledge

02:46:45PM **18** of what it means and all of that you factor into your

02:46:49PM **19** understanding of what the data is and allowing it to speak.

02:46:54PM **20** Q. For example, of what we went through before lunch when I

02:46:56PM **21** showed you the collection and disbursement data from 1909 to

02:47:01PM **22** 1911 and we looked at what the rate was there and then looked at

02:47:04PM **23** how the rates before and after were different than that, do you

02:47:08PM **24** remember us going through that?

02:47:08PM **25** A. Oh, I certainly do. It was very well done.

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02:47:11PM **1** Q. And that would be something that a statistician would let

02:47:15PM **2** that kind of data speak to him, correct?

02:47:17PM **3** A. Correct. If my objective had been to focus on approving

02:47:21PM **4** the point estimates, then I would have done a lot more work with

02:47:24PM **5** that.

02:47:24PM **6** Q. Okay. Now, let's go to Defense Exhibit 460. It will help

02:47:49PM **7** make the question clearer. Okay. This is kind of a -- by the

02:48:02PM **8** way, did you put this Power Point slide together?

02:48:04PM **9** A. I wrote these words. I wrote these words, yeah. I may

02:48:09PM **10** have given it to them as a Power Point. I can't remember.

02:48:13PM **11** Q. You say, After examining the existing data and then using

02:48:18PM **12** multiple imputation to generate estimates of missing data and to

02:48:22PM **13** assess missing data uncertainties. Do you see the second bullet

02:48:26PM **14** there that I was just reading?

02:48:29PM **15** A. Yes, yes.

02:48:30PM **16** Q. You testified during your direct examination about

02:48:32PM **17** something and I didn't follow it, but you did say you did

02:48:36PM **18** describe the process as how you go about beginning to impute the

02:48:42PM **19** data in that process and you said something to the extent that

02:48:47PM **20** you would essentially make a first guess at that and then move

02:48:53PM **21** on. Can you explain to me what you mean by making a guess at

02:48:59PM **22** those values?

02:49:00PM **23** A. Well, you have some kind of set of prior beliefs which

02:49:05PM **24** you've incorporated and you have this notion we're going to use

02:49:08PM **25** a multi vari normal distribution in background and then we're

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02:49:12PM **1** going to do our best to make an estimate from the available data

02:49:18PM **2** of what the mean and the variance of this data set are. A

02:49:23PM **3** vector mean and a coprehence (ph) matrix, and we do that, and

02:49:29PM **4** then we use the results, okay, the distribution we've created,

02:49:34PM **5** to draw an observation from random numbers, using random numbers

02:49:39PM **6** from that distribution.

02:49:40PM **7** Q. Okay. So that there is work done based on certain beliefs

02:49:45PM **8** that you have that then lead to the selection of the random data

02:49:52PM **9** to put in for the imputed data, correct?

02:49:56PM **10** A. I have prior beliefs and I have the data itself, the

02:50:02PM **11** reported data, and I use those to produce an initial starting

02:50:06PM **12** point for the multiple imputation, and then I repeat that

02:50:10PM **13** process over and over again and going back and forth until the

02:50:14PM **14** process converges, and then I stop and then I do another one and

02:50:19PM **15** so forth.

02:50:20PM **16** Q. Is there any way, looking at the information that you

02:50:23PM **17** provided to us electronically, for us to see these prior beliefs

02:50:29PM **18** that you have that lead to this first step or this really second

02:50:34PM **19** step that you're talking about here?

02:50:36PM **20** A. I think it's embedded in the software that we gave you

02:50:40PM **21** access to. Seeing the way you've conceptualized it I think we

02:50:47PM **22** probably would have to do a little more to make it visible for

02:50:50PM **23** you.

02:50:50PM **24** Q. And it's not visible?

02:50:52PM **25** A. It's in the software. It's in the proc MI, the multiple

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02:50:59PM **1** imputation procedure from SAS has this information in it. We're

02:51:12PM **2** calling commands from that proc, and I've already mentioned to

02:51:12PM **3** you that related to what Joe Schaeffer has done.

02:51:12PM **4** Q. Well, let me ask it to you this way: With what we've been

02:51:17PM **5** provided so far it's a little bit like you've told us

02:51:21PM **6** information that you've gone and put into a black box and now we

02:51:27PM **7** look at what the results are, correct?

02:51:30PM **8** A. Well, how about opaque? Can you say they're opaque?

02:51:37PM **9** Q. I'll settle for opaque. Okay.

02:51:41PM **10** A. That's fair, that's why I have to look at the data, and

02:51:44PM **11** look at the software in detail.

02:51:47PM **12** Q. What do you mean by "opaque"?

02:51:48PM **13** A. We didn't walk you through the process from front to back,

02:51:54PM **14** you know, connecting the words that you heard me say with the

02:51:58PM **15** software that you got Friday, and we perhaps should do that.

02:52:02PM **16** Q. And you've not brought anything into court today that would

02:52:08PM **17** permit you to do that for us, have you?

02:52:10PM **18** A. No. As a result of your question about Professor Cornell's

02:52:18PM **19** data we spent the lunch hour providing that data to you.

02:52:21PM **20** Q. Well, I've had some interesting lunches during this trial

02:52:24PM **21** too, so I apologize for taking up your lunch hour, but I do

02:52:30PM **22** understand from government counsel that that data about his

02:52:35PM **23** analysis of Dr. Cornell's information can be provided to us, and

02:52:39PM **24** what I'm going to ask your Honor is that I go as far as I can

02:52:45PM **25** go, cover everything except that, any questions that may come

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02:52:48PM 1 from that, that once that's provided we could then ask any

02:52:54PM 2 follow-up questions, if any, that we have of Dr. Scheuren on

02:52:58PM 3 that.

02:52:58PM 4   THE COURT: We'll talk more about that. Go as far as

02:53:05PM 5 you can and then we'll talk about it.

02:53:07PM 6   MR. DORRIS: Okay.

02:53:08PM 7 BY MR. DORRIS:

02:53:12PM 8 **Q.** Now, let me ask you this question about the relationship

02:53:15PM 9 between revenues and disbursements. You explained to me I think

02:53:20PM 10 before lunch that you would look at that and there would be some

02:53:25PM 11 type of coefficient or colinear relationship between those two,

02:53:30PM 12 correct?

02:53:30PM 13 **A.** We would look for that, and in fact we found it, yes.

02:53:33PM 14 **Q.** And let me ask it to you this way: The revenues are to a

02:53:40PM 15 large extent driven by market forces, correct?

02:53:44PM 16 **A.** Can we use "collection" instead of "revenue"? Whatever you

02:53:52PM 17 want to do.

02:53:52PM 18 **Q.** I'll be glad to use collection.

02:53:55PM 19 **A.** Okay.

02:53:55PM 20 **Q.** What do you mean by "collection"?

02:53:57PM 21 **A.** Well, because there's a lot of things in the IIM system

02:54:01PM 22 that aren't really revenues, okay? For example, bid deposits,

02:54:05PM 23 okay, it's not revenue. It's just a deposit.

02:54:07PM 24 **Q.** So where you've put "collections" on your chart you've just

02:54:11PM 25 tried to have those include things that are not the total

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02:54:18PM 1 revenue but only collections; is that right?

02:54:21PM 2 **A.** Collection is the total -- is the thing we're looking at

02:54:26PM 3 here. What's coming into the system is what we're calling a

02:54:31PM 4 collection.

02:54:31PM 5 **Q.** For example, you gave bid deposits. Are those in your

02:54:36PM 6 collection number or not?

02:54:36PM 7 **A.** They're in the collection number.

02:54:37PM 8 **Q.** I'll use collections with you. Now, collections are driven

02:54:41PM 9 to some extent by market forces, correct?

02:54:44PM 10 **A.** Of course.

02:54:44PM 11 **Q.** The price of all -- the price of a quart of timber, grazing

02:54:50PM 12 rights and the like?

02:54:51PM 13 **A.** All of that's true.

02:54:52PM 14 **Q.** Disbursements are not driven as much by market forces, are

02:54:57PM 15 they?

02:54:57PM 16 **A.** There are different periods in this time period. You know,

02:55:04PM 17 once -- you know, at some point until you remember what year it

02:55:09PM 18 is, if you have more than $5.00 in oil receipts you got a $5.00-

02:55:13PM 19 check and disbursements of, you know, disbursements of other

02:55:19PM 20 kinds of revenue as well, so once you receive a certain

02:55:23PM 21 threshold you got the money. In the old times that wasn't

02:55:27PM 22 always done.

02:55:27PM 23 **Q.** Well, let me ask you if this.

02:55:30PM 24 **A.** So they're linked, by the way, in modern times because of

02:55:35PM 25 this rule.

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02:55:36PM 1 **Q.** When you say "modern times," what time period begins

02:55:41PM 2 "modern times" for that answer?

02:55:43PM 3 **A.** I know the answer to that but I can't give it to you right

02:55:46PM 4 now. Sorry. I just don't know. It's been a long time since

02:55:49PM 5 this change has occurred.

02:55:50PM 6 **Q.** Okay. But before that period of time they are not linked

02:55:58PM 7 as a result of that policy; is that correct?

02:55:59PM 8 **A.** That's correct.

02:55:59PM 9 **Q.** And so while your data established a colinear

02:56:05PM 10 relationship between collections and disbursements, actually

02:56:08PM 11 market forces affect those two numbers in very different

02:56:13PM 12 fashions, don't they?

02:56:15PM 13 **A.** You just ignored what I said, didn't you?

02:56:18PM 14 **Q.** I may not have understood what you told me.

02:56:21PM 15 **A.** Part of this time, part of this historical period, that is

02:56:24PM 16 correct, but although you don't establish that the effect of

02:56:29PM 17 disbursements, you just said something about revenue. Revenue

02:56:33PM 18 and disbursements are linked in modern times. In earlier

02:56:39PM 19 periods they were not necessarily linked. But if you look at

02:56:44PM 20 the data during the Great Depression in our data set you will

02:56:47PM 21 see that disbursements exceed collections year after year, and

02:56:50PM 22 that's perfectly understandable. The money was coming out of

02:56:53PM 23 the trust in order to feed people.

02:56:55PM 24 **Q.** And that's that same period where we've seen even what Dr.

02:57:02PM 25 Angel and Ms. Herman note, that the revenues, their word was

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02:57:06PM 1 "revenues," were understated during that same period, correct?

02:57:09PM 2 **A.** I'm not sure when the beginning. I remember the 1949 end

02:57:16PM 3 point, but I don't remember what the early point is.

02:57:18PM 4 **Q.** How can there be a colinear relationship between balance

02:57:48PM 5 information and collections and disbursements when even

02:57:50PM 6 according to you the balances do not foot with the collection

02:57:55PM 7 and disbursement amounts?

02:57:57PM 8 **A.** Well, there are two things going on in which you've said.

02:58:04PM 9 First of all, a correlation can exist even though there is not a

02:58:10PM 10 direct functional relationship between something because there's

02:58:16PM 11 uncertainty. The extent of the correlation is a measure of

02:58:19PM 12 that, so of course there can be a correlation between these

02:58:24PM 13 values, even if they don't foot.

02:58:27PM 14 **Q.** Now, there are times in your numbers, for example, where

02:58:35PM 15 there are known information.

02:58:37PM 16   Let's pull up Defendants' Exhibit 462 to 19, the

02:58:47PM 17 second page, and blow up the first four lines or so.

02:58:56PM 18   Let me just ask you this: You see we're going along

02:58:59PM 19 and there is a missing value for the balance in 1929. Do you

02:59:05PM 20 see that?

02:59:06PM 21 **A.** Yes, I do.

02:59:07PM 22 **Q.** And so you're working with reported values for collections

02:59:11PM 23 and disbursements in the years before and after where that

02:59:15PM 24 missing data is. Do you see that?

02:59:17PM 25 **A.** Um-hmm. I've analyzed this data.

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02:59:20PM **1** **Q.** And you see that it says the balance as of the end of the

02:59:24PM **2** year, fiscal year 1928, is $74.7 million, correct?

02:59:29PM **3** **A.** I do.

02:59:31PM **4** **Q.** And then the next year there is about $9.5 million more

02:59:40PM **5** collected than disbursed, correct?

02:59:41PM **6** **A.** Correct.

02:59:42PM **7** **Q.** And then your imputation model has put in a balance that,

02:59:47PM **8** if I did the math right, would be at about $85 million, it puts

02:59:54PM **9** in a value of $33.3 million there, correct?

02:59:58PM **10** **A.** Yes, I know that. I've analyzed this data, as I already

03:00:01PM **11** told you. I noticed this when I saw it.

03:00:04PM **12** **Q.** Okay. So even when the model then comes and imputes

03:00:09PM **13** balances, it imputes balances that don't foot, correct?

03:00:14PM **14** **A.** That's correct.

03:00:15PM **15** **Q.** Is that because of the tremendous uncertainty in the data?

03:00:22PM **16** **A.** We looked at this data and we actually we had this

03:00:26PM **17** procedure of looking for outlies, and one of the things that we

03:00:29PM **18** did with the data that you have here is that we looked at the

03:00:33PM **19** outlies here too, and this is the worst. There are other out-

03:00:38PM **20** lies but they're mostly small. This is a spectacularly bad

03:00:43PM **21** outlier.

03:00:43PM **22** **Q.** The one that I just give you?

03:00:45PM **23** **A.** That's correct. I'm not surprised given who you are that

03:00:48PM **24** you would have noticed it, and we noticed it too and we went

03:00:52PM **25** back and looked at that. Our focus here is not on the balance.

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03:00:58PM **1** Our focus is here on the collections and disbursements, okay,

03:01:03PM **2** and so we didn't like it but we left it.

03:01:07PM **3** **Q.** You didn't like it but you didn't do anything about it,

03:01:11PM **4** correct?

03:01:11PM **5** **A.** Correct.

03:01:12PM **6** MR. DORRIS: Your Honor, I don't have any further

03:01:14PM **7** questions subject to the one note I mentioned about the analysis

03:01:19PM **8** that the government has agreed to provide -- or the data they've

03:01:25PM **9** agreed to provide to us.

03:01:26PM **10** THE COURT: Let's talk for a minute about that. Mr.

03:01:29PM **11** Warshawsky, do you have something to say about it?

03:01:32PM **12** MR. WARSHAWSKY: Yes, your Honor.

03:01:33PM **13** THE WITNESS: Can I say thank you?

03:01:35PM **14** MR. DORRIS: Sure.

03:01:36PM **15** THE COURT: And you may also step down. Thank you,

03:01:38PM **16** sir.

03:01:40PM **17** MR. WARSHAWSKY: Your Honor, we have what the

03:01:43PM **18** plaintiffs have asked for, and it's provided to them. It

03:01:45PM **19** consists of two files. One is actually the SAS application I

03:01:50PM **20** believe that they already had. The other is an Excel file.

03:01:54PM **21** This was an attempt to reconstruct --

03:01:59PM **22** THE COURT: Dr. Scheuren, actually, would you come

03:02:01PM **23** back up? I have a couple of questions I'd like to ask you.

03:02:05PM **24** THE WITNESS: Oh, certainly sir.

03:02:07PM **25** THE COURT: Go ahead.

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03:02:08PM **1** MR. WARSHAWSKY: It's an attempt to reconstruct Dr.

03:02:11PM **2** Cornell's model. We've never been provided any of the data or

03:02:15PM **3** information regarding Dr. Cornell's model. We first learned of

03:02:18PM **4** it, it was actually Wednesday, last Wednesday when he testified.

03:02:21PM **5** We had the good fortune that I would say that his model

03:02:25PM **6** apparently didn't change since the March 2008 brief that

03:02:29PM **7** plaintiffs filed. He made no adjustments even though we had

03:02:33PM **8** provided information in our brief, but although Thursday we

03:02:37PM **9** were, told both sides had been told to provide this information,

03:02:40PM **10** we still haven't received anything about Dr. Cornell's model, so

03:02:46PM **11** that's what we've got, is an attempt to reconstruction Dr.

03:02:53PM **12** Cornell's efforts and NORC's conclusions and now plaintiffs have

03:02:55PM **13** it. I'm certainly prepared to do the redirect on everything but

03:02:57PM **14** this and we can have Dr. Scheuren come back tomorrow if that's

03:03:01PM **15** the Court's wishes.

03:03:02PM **16** THE COURT: You're turning over the SAS application

03:03:05PM **17** and the spreadsheet?

03:03:07PM **18** MR. WARSHAWSKY: It's an Excel document, and Dr.

03:03:11PM **19** Scheuren could probably tell you about it, but basically my

03:03:15PM **20** understanding is it's the inputs that go into the application.

03:03:19PM **21** THE COURT: I thought I heard Mr. Dorris asking more

03:03:21PM **22** than that. I think he wants to look inside the opaque box.

03:03:21PM **23** MR. WARSHAWSKY: Well, your Honor, I'm glad you asked

03:03:29PM **24** about the opaque box. The opaque box is a reference to the SAS

03:03:31PM **25** application. I advised Mr. Smith before we had any discussion

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03:03:35PM **1** with the Court, I should say before we had the change, I advised

03:03:39PM **2** him Thursday that the application was a multiple imputation

03:03:43PM **3** application, and in fact when we delivered it on Friday I told

03:03:47PM **4** him that we had somebody from NORC waiting by if they needed any

03:03:51PM **5** assistance walking through it. That was in the afternoon. I

03:03:57PM **6** heard nothing as of 9:45 that evening. Nothing. Saturday I

03:04:00PM **7** spoke with Mr. Smith. He called simply to inquire about Dr.

03:04:05PM **8** Angel's information, so they've never asked us for the

03:04:08PM **9** assistance that we offered, and it's frankly a little odd at

03:04:14PM **10** this point to hear plaintiffs complaining that they haven't been

03:04:17PM **11** walked through the SAS application because the offer was there

03:04:20PM **12** as early as Friday afternoon.

03:04:22PM **13** THE COURT: All right. Do you want to do some

03:04:24PM **14** redirect now?

03:04:25PM **15** MR. WARSHAWSKY: I can do the redirect, your Honor, on

03:04:27PM **16** everything, obviously reserving --

03:04:29PM **17** THE COURT: Actually I want to ask two or three

03:04:32PM **18** questions and then you can do your redirect, so I released you

03:04:35PM **19** prematurely, Doctor.

03:04:37PM **20** I need to understand better than I do what this ten

03:04:45PM **21** thousand iterations business is all about. I don't quite

03:04:49PM **22** understand what you mean by that. Do you mean ten thousand

03:04:51PM **23** pieces of data, do you mean you run the model ten thousand

03:04:55PM **24** times, and if you run it ten thousand times how does the 999

03:05:00PM **25** differ from the thousand and so forth?

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1 THE WITNESS: We have a knowledge that we have from

2 the data to begin with and we use that to start the modeling

3 process. We bring it in. We then use random numbers to

4 actually do the simulations so each simulation is different

5 because of the randomness that we're adding, but they're

6 constrained by what we know about the model, so after we do the

7 first iteration we construct the posterior from the data. And

8 we compare the results, the parameters that we're interested in,

9 which was usually the means and variance, covariances in this

10 world, we compare them to what or what our starting values were,

11 and if they're not close, and close is really quite close, if

12 they're not close we average the first iteration with our

13 estimate, our starting value, and then we do it again and we

14 keep doing that until the numbers converge, so we get estimates

15 of the means and totals, means variances that are the same from

16 one iteration to the next, and this goes on a long time. Of

17 course it's microseconds because it's in the computer, and that

18 is the first iteration, that is the first imputation that we do,

19 and then we start begin, okay, a new starting point and do the

20 process over and over again until we've done ten thousand of

21 those. That's how we did it.

22 THE COURT: If I were to sit down at a keyboard with

23 that software would it show me what you mean?

24 THE WITNESS: Yes, yes. You have to have SAS on your

25 computer and things like that, but yes.

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1 THE COURT: The other thing I want to talk about is

2 the use of the Osage average share as one of the five variables

3 because you've got nothing about a year and an Osage variable.

4 Now, is that variable useful because of the quantity of it, or

5 is it useful because of the comparative size to this year's to

6 next year's to the year after that, or does it have anything to

7 do with oil price versus timer price?

8 THE WITNESS: I can't speak to oil price versus timber

9 price. It does give us some information about what's going on

10 with the economy generally, and of course it says specifically

11 regarding oil, and it goes all the way back into this period,

12 and it is directly relevant to the Indian trust system. We

13 could have added other variables.

14 THE COURT: Like what?

15 THE WITNESS: Price indices, GDP, you know, general

16 economic variables, but again we're talking about very rural and

17 regional areas where these general kinds of variables might not

18 get us down from enough or have any more predictive value than

19 the Osage did.

20 THE COURT: You said at one point, I think, you could

21 have run this without the Osage numbers.

22 THE WITNESS: We have done that, yes.

23 THE COURT: What's the result? How sensitive is this

24 model to using the Osage?

25 THE WITNESS: I can't give you the answer to that

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1 right now, but it is sensitive in the early period, before 1909.

2 It is sensitive. It's not going to make much difference.

3 THE COURT: If you ran it with the Osage numbers you'd

4 get what, higher balances or lower calculated balances?

5 THE WITNESS: I'm not sure what I would do if I

6 were -- I don't know the answer to that question, your Honor.

7 If I were really pressed and said you can't use Osage because

8 it's this, that or the other thing, then I would probably go

9 look for some other variables which I didn't think was

10 particular relevant, but I would check and maybe find them to be

11 relevant.

12 One thing that's been said a lot is we're operating

13 quickly here. If we had more time, you heard me make a comment

14 just a little while ago about an outlier that was identified by

15 plaintiff, the Plaintiffs' lawyers, which we identified

16 ourselves but after we delivered this. And of course I would

17 have fixed that, okay, but I don't think it would make much

18 difference so I didn't bring it up, but we've looked at all the

19 outliers. If we had more time we'd do better, but I think the

20 basic results that we have --

21 THE COURT: You're comfortable with them?

22 THE WITNESS: With the terms of the overall

23 uncertainty. I mean, we're looking at something -- there's a

24 lot of uncertainty here and the uncertainty cuts against the

25 government, but the kind of uncertainty that is on the table

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1 here is rather different in size than the numbers that you've

2 seen from the plaintiffs by a factor of ten.

3 THE COURT: Yes. Okay. Thank you.

4 Do you want to do some redirect, Mr. Warshawsky?

5 THE WITNESS: Thank you, your Honor.

6 MR. WARSHAWSKY: Thank you, your Honor. I just have a

7 couple of redirect.

8 REDIRECT EXAMINATION

9 BY MR. WARSHAWSKY:

10 Q. Dr. Scheuren, I'd like to ask you about a couple of things

11 that Mr. Dorris inquired about with respect to information you

12 received from Morgan Angel.

13 A. Yes.

14 Q. Now, you may recall on cross you were being asked about

15 some of the collection figures from 1922 to 1949.

16 A. Yes.

17 Q. Do you remember having any conversations with anybody from

18 Morgan Angel about disbursements during those periods?

19 A. No.

20 Q. If the disbursements -- let me ask it this way. If the

21 disbursements were similarly understated, there is a discussion

22 about collections being understated, how would that impact your

23 calculated balance estimates?

24 A. It wouldn't have changed the balances potentially at all.

25 The things we saw going forward, especially in the period

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1 before, the early period, is that even though it doesn't have to

2 move together, as I've stipulated, it tended to move together

3 up or down, except during the great economic stress during the

4 Depression.

5 Q. And just to be clear, when you're talking about things

6 moving together, you're talking about the collections and

7 disbursement?

8 A. Yes. If collection was up disbursement would also go up

9 and vice versa.

10 Q. And your focus is the calculated balances?

11 A. That's what we're after, yes. We're not trying to make

12 best estimates for each of these cells.

13 Q. Now, if you could pull up Defendants' Exhibit 72, please,

14 page four. Okay. And if you could highlight the section that

15 Mr. Dorris asked about here.

16 Do you remember the discussion about cash receipts are

17 running at a rate of $121 million per year?

18 A. Yes, I do.

19 Q. Do you know if Dr. Angel actually used that figure in his

20 analysis?

21 A. I don't know. I don't think he did, but I don't know.

22 Q. You weren't present this morning when Dr. Angel explained

23 on his redirect why he didn't use that, were you?

24 A. No, I was not.

25 Q. So you don't know the reasons that he rejected that figure?

1 A. No, I don't.

2 I want to make this point. I asked for data from Dr.

3 Angel that was connected directly to a historical, you know,

4 historical document, okay. And that's what we got and his

5 judgment is what I relied on.

6 Q. Let's pull up Plaintiffs' Exhibit 137. I'm not sure, do we

7 need to get that from you? Yes.

8 Dr. Scheuren, Mr. Dorris asked you about a paragraph

9 that continued from page one to page two. If it assists you I

10 can provide you with Mr. Dorris' copy.

11 A. Let me have the copy. Just looking through the lines it's

12 a little strange. It's a missing data problem.

13 Q. Okay. All right. And on the screen we do have those first

14 two pages up. Now, do you remember your testimony about that

15 paragraph?

16 A. Yes, I do. I wanted to elaborate and I didn't get to do

17 that, but maybe I can do it now. Maybe you'll ask me a question

18 and I can do it.

19 Q. Here's your chance. Why don't you agree with that

20 statement, Dr. Scheuren?

21 A. Well, I think we're having a situation where there is a lot

22 of different approaches to missing data. And Joe is trying to

23 convince people that at least in some cases multiple imputation

24 is the method of choice but he doesn't want to be absolute about

25 it and say it's always the method of choice. That doesn't make

1 friends and influence people so he's careful and he's modest in

2 his statement. I actually believe that is much more of an

3 advocate for multiple imputation than that, but he's trying to

4 deal with people who -- and there's some controversy among

5 multiple imputation. If you looked a little bit at the material

6 that I had in the paper that we looked at this morning, all you

7 Google when you Google -- I'm very sorry, Jackie -- you Google

8 this issue, the first thing that comes up is a paper by a good

9 friend of mine, Bob Fay, that has some problems with multiple

10 imputation, so there's some underbrush here. However, that kind

11 of underbrush actually leads to a particular kind of problem

12 which is the opposite of the problem here. If there is a

13 problem with the multiple imputation in this particular setting,

14 it doesn't affect our result except that we may have slightly

15 overstated the uncertainty as a result of it. Slightly

16 overstated.

17 Q. And what is the significance if you overstate the

18 uncertainty in this case?

19 A. That the amount of money that is at issue here is larger,

20 but we've already done that and I think I'm weighing all these

21 things, and what I heard the other day from Michelle Herman and

22 her response from the Plaintiffs' lawyers, I weigh that in with

23 the fact that we may slightly have overstated, but I don't think

24 that's very important in this case and I think that a modest

25 adjustment to a 97.5 upward bound is the right answer here in

1 rough justice.

2 Q. And to the extent you overstated, does that inure to the

3 benefit of the plaintiff or the defendant?

4 A. It benefits the plaintiffs. It benefits the plaintiffs.

5 MR. WARSHAWSKY: Your Honor, I have no more redirect

6 subject to whatever is covered.

7 THE COURT: Doctor, I think we're going to release you

8 today. I think we're going to have to say that you're subject

9 to recall, but when and under what circumstances remain to be

10 seen.

11 And we're going to take a ten-minute break.

12 MR. WARSHAWSKY: One request, your Honor. I know Mr.

13 Scheuren is going out the country I think next week.

14 THE WITNESS: Yes.

15 MR. WARSHAWSKY: So we request that he be called this

16 week.

17 THE WITNESS: Thank you, Judge.

18 COURTROOM DEPUTY: Court stands in recess.

19 (Recess taken at about 3:17 p.m.)

20 COURTROOM DEPUTY: Please come to order and be seated.

21 THE COURT: Okay. What's next?

22 MR. WARSHAWSKY: Your Honor, just to clarify, as I

23 indicated, we would like to get Dr. Cornell's backup data as

24 well and his analysis, and hopefully that's coming soon. I

25 haven't heard plaintiffs clarify that one.

03:27:43PM 1   Also, if we could get an indication as to when Dr.

03:27:47PM 2 Scheuren is to be recalled so we can make sure he's here.

03:27:53PM 3   THE COURT: Does anybody want to respond to any of

03:27:55PM 4 that? Mr. Dorris?

03:27:57PM 5   MR. DORRIS: If Mr. Warshawsky had asked me about it

03:28:01PM 6 at the break I would have been glad to address that with him. I

03:28:05PM 7 don't know what backup from Dr. Cornell he wants. We gave him

03:28:09PM 8 all of the information with the documents supporting it on March

03:28:13PM 9 19 and there hasn't been further analysis. Will there be?

03:28:19PM 10 We've indicated to Mr. Warshawsky we think there will be and

03:28:23PM 11 that we'll provide that to him as soon as it's done and that's

03:28:28PM 12 what we're committed to doing, but that has not -- that process

03:28:33PM 13 is not done and we don't have anything further to provide to him

03:28:37PM 14 at this point.

03:28:38PM 15   THE COURT: Okay. What about Scheuren, when do you

03:28:41PM 16 want to bring Scheuren back?

03:28:43PM 17   MR. DORRIS: Your Honor, they provided information,

03:28:45PM 18 and I would think given the witnesses I'm responsible for

03:28:49PM 19 tomorrow that Thursday would probably be better. Today is

03:28:52PM 20 Tuesday. Thursday would probably be best for Dr. Scheuren.

03:28:56PM 21 That gives me tomorrow to look at it.

03:28:59PM 22   THE COURT: Let's ask Dr. Scheuren to be available on

03:29:02PM 23 Thursday.

03:29:02PM 24   MR. WARSHAWSKY: Very good, your Honor.

03:29:04PM 25   THE COURT: Mr. Siemietkowski?

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03:29:06PM 1   MR. SIEMIETKOWSKI: Your Honor, the defense calls

03:29:10PM 2 Terence Kehoe.

03:29:10PM 3   THE COURT: All right.

03:29:19PM 4   COURTROOM DEPUTY: Please raise your right hand. Do

03:29:20PM 5 you solemnly swear that the testimony you give to the Court in

03:29:22PM 6 the case now on trial will be the truth, the whole truth and

03:29:25PM 7 nothing but the truth so help you God?

03:29:28PM 8   DR. KEHOE: I do.

03:29:28PM 9   COURTROOM DEPUTY: Thank you. Please be seated.

03:29:31PM 10   MR. SIEMIETKOWSKI: Your Honor, we intend to have Dr.

03:29:34PM 11 Kehoe testify regarding two areas. Primarily Dr. Kehoe will

03:29:40PM 12 testify regarding IIM banking policy, specifically where he has

03:29:44PM 13 been throughout the history of the IIM system. Secondarily and

03:29:49PM 14 more briefly, we expect Dr. Kehoe to testify in terms of the

03:29:53PM 15 Plaintiffs' calculation of alleged benefit to the government.

03:29:56PM 16   Now, your Honor, Dr. Kehoe has never testified as an

03:29:59PM 17 expert witness before. In fact, he has never testified at all.

03:30:04PM 18 We would like to qualify him as an expert like Dr. Angel in the

03:30:11PM 19 history of federal Indian relations and in the federal Indian

03:30:14PM 20 records. To do that, however, rather than simply show the Court

03:30:19PM 21 a C.V., we'd like to do that, but also lay the foundation with

03:30:22PM 22 Dr. Kehoe.

03:30:23PM 23   THE COURT: Fine. Go ahead.

03:30:26PM 24   MR. SIEMIETKOWSKI: And I ask that DX 498 be put on

03:30:30PM 25 the screen, please.

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03:30:30PM 1 TERENCE KEHOE, Ph.D, WITNESS FOR THE GOVERNMENT, SWORN

03:30:30PM 2   DIRECT EXAMINATION

03:30:32PM 3 BY MR. SIEMIETKOWSKI:

03:30:32PM 4 Q. Dr. Kehoe, would you please state your full name?

03:30:35PM 5 A. Terrence Patrick Kehoe.

03:30:38PM 6 Q. Where do you work?

03:30:39PM 7 A. I work at Morgan Angel & Associates in Washington, D.C.

03:30:43PM 8 Q. What's your profession?

03:30:44PM 9 A. I'm a historian.

03:30:45PM 10 Q. Dr. Kehoe, would you please explain your educational

03:30:48PM 11 background?

03:30:48PM 12 A. I have a bachelor of science degree in business

03:30:51PM 13 administration from Bowling Green State University and a

03:30:54PM 14 master's and a Ph.D in American history from Ohio State

03:30:59PM 15 University.

03:31:00PM 16 Q. In the course of your formal studies have you had a chance

03:31:05PM 17 to learn the conduct of historical records research?

03:31:10PM 18 A. Yes. In graduate school I had extensive experience

03:31:16PM 19 researching public policy and how it changed over time working

03:31:19PM 20 in various state and federal archives primarily in government

03:31:23PM 21 records of various kinds.

03:31:25PM 22 Q. What about your employment, Dr. Kehoe, have you ever taught

03:31:29PM 23 at all at the university level?

03:31:31PM 24 A. Yes. I was a visiting professor at Wake Forest University

03:31:37PM 25 for like two years, and among the courses that I taught there

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03:31:40PM 1 was American environmental history, history of the American

03:31:44PM 2 West, the United States since 1945.

03:31:49PM 3 Q. Did any of those courses taught at Lake Forest University

03:31:53PM 4 touch about Indian matters?

03:31:54PM 5 A. Certainly the course on environmental history did, and most

03:32:01PM 6 extensively the course on the American West. That was a big

03:32:03PM 7 component in that course.

03:32:04PM 8 Q. Dr. Kehoe, how long have you worked at Morgan Angel?

03:32:07PM 9 A. I joined the firm in December of 1999.

03:32:10PM 10 Q. Who has been your supervisor there since December of 1999?

03:32:15PM 11 A. Dr. Edward Angel.

03:32:17PM 12 Q. Could you provide the Court an estimate, please, of what

03:32:20PM 13 percentage of your work at Morgan Angel has been focused on

03:32:24PM 14 Indian matters?

03:32:25PM 15 A. About 75 percent.

03:32:26PM 16 Q. And what about the other 25 percent?

03:32:29PM 17 A. Primarily devoted to research and writing as it relates to

03:32:34PM 18 environmental litigation.

03:32:35PM 19 Q. Within Indian matters, what types of issues have you

03:32:38PM 20 focused on?

03:32:39PM 21 A. Well, I've done some research and writing concerning

03:32:45PM 22 natural resources management on reservations. I would say that

03:32:49PM 23 the bulk of my work has concerned the management of both tribal

03:32:54PM 24 trust funds and individual Indian monies.

03:32:57PM 25 Q. While employed at Morgan Angel who have your clients been?

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03:33:02PM **1** A. The work that I have done involving American Indian policy

03:33:06PM **2** has been for the Office of Historical Trust Accounting and the

03:33:10PM **3** Department of the Interior, the Department of Justice, and the

03:33:13PM **4** Department of the Treasury.

03:33:15PM **5** Q. Have you written my papers for these clients?

03:33:20PM **6** A. Yes, I have. I've written a number of major papers,

03:33:24PM **7** research papers, that have run between about 20 and 75 typed

03:33:30PM **8** pages.

03:33:30PM **9** Q. Are some of those papers reflected on the screen that's

03:33:33PM **10** shown now?

03:33:34PM **11** A. Yes, they are. And as you can see, I've written somewhat

03:33:41PM **12** about natural resource issues, but again, the primary focus has

03:33:44PM **13** been on the government's administration of Indian trust funds.

03:33:47PM **14** As you can see here, the Treasury as well in the administration

03:33:50PM **15** of travel trust funds, investment of travel trust funds. I've

03:33:53PM **16** written on IIM banking policy. And if you can scroll to the

03:33:57PM **17** next page on my resume.

03:33:59PM **18** MR. SIEMIETKOWSKI: Technical difficulties. They're

03:34:03PM **19** not getting in. Let's hold up a second, Dr. Kehoe, until we get

03:34:15PM **20** the screen working on both sides.

03:34:17PM **21** BY MR. SIEMIETKOWSKI:

03:34:18PM **22** Q. You wanted to refer to the papers that you've written?

03:34:20PM **23** A. As noted here, in addition to those research papers I've

03:34:23PM **24** also submitted 29 reservation histories to the Office of

03:34:25PM **25** Historical Trust Accounting. These are brief studies about 15

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03:34:32PM **1** to 20 pages, primarily narrative, but with some historic data

03:34:37PM **2** focused primarily on the history of land tenure on that

03:34:40PM **3** reservation, focusing on allotment, changes in land tenure over

03:34:47PM **4** time, and also the history of natural resource development on

03:34:50PM **5** those particular reservations. Of course, every reservation has

03:34:53PM **6** its own unique history.

03:34:55PM **7** Q. Have you performed any Indian research at the National

03:34:57PM **8** Archives and its facilities?

03:34:58PM **9** A. Yes. That's one of the primary places where we conduct

03:35:02PM **10** research here at the main building in Washington, D.C. and also

03:35:06PM **11** at College Park and also at some of the regional archives

03:35:09PM **12** scattered across the country.

03:35:11PM **13** Q. Have you conducted any Indian records research at the

03:35:14PM **14** American Indians Record Repository?

03:35:16PM **15** A. Yes. I've made a number of trips to Lenexa to conduct

03:35:21PM **16** research.

03:35:21PM **17** Q. What about federal records center?

03:35:40PM **18** A. I've also conduced work there as well.

03:35:40PM **19** Q. You mentioned that Interior is one of your clients. Have

03:35:43PM **20** you conducted any Indian research at Interior?

03:35:47PM **21** A. Well, I've made extensive use of the Department of Interior

03:35:52PM **22** library in their main building, and I also made several research

03:35:57PM **23** trips to what was called the Office of Trust Records in

03:36:03PM **24** Albuquerque, New Mexico, working in more recent Indian records,

03:36:06PM **25** and again I believe most of those records have been moved to the

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03:36:09PM **1** facility in Lenexa.

03:36:11PM **2** Q. Dr. Kehoe, do belong to any professional organizations?

03:36:15PM **3** A. I belong to several. American Society For Environmental

03:36:18PM **4** History, the Business History Conference, and the Organization

03:36:21PM **5** for American Historians.

03:36:22PM **6** Q. Earlier, Dr. Kehoe, you mentioned teaching at Wake Forest

03:36:27PM **7** University. Have you taught any Indian courses here in

03:36:30PM **8** Washington, D.C.?

03:36:31PM **9** A. I team-taught a course with other staff members at Morgan

03:36:36PM **10** Angel in 2000 at George Washington University.

03:36:40PM **11** Q. Did that course involve Indian matters?

03:36:43PM **12** A. The primary focus was the history of federal policy towards

03:36:49PM **13** Native Americans.

03:36:50PM **14** Q. How does the Indian research you've done for Morgan Angel

03:36:55PM **15** compare with the research you did to earn your Ph.D?

03:36:59PM **16** A. Although the topics are very different, they're both

03:37:02PM **17** examples I think of public policy research that is doing

03:37:04PM **18** extensive research at the archival level and government records

03:37:09PM **19** trying to trace changes in policy over time. I would say it's

03:37:15PM **20** fair to say I've done far more research and writing for Morgan

03:37:20PM **21** Angel than I did during my Ph.D at Ohio State.

03:37:23PM **22** Q. Thank you, Dr. Kehoe.

03:37:25PM **23** At this time, your Honor, we offer Dr. Kehoe as an

03:37:27PM **24** expert in the history of federal Indian relations and in federal

03:37:31PM **25** Indian records.

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03:37:32PM **1** THE COURT: Any objection or voir dire?

03:37:35PM **2** MR. HARPER: Yes, a little voir dire, if I could, your

03:37:38PM **3** Honor. Good afternoon, your Honor.

03:37:39PM **4** THE COURT: Good afternoon.

03:37:40PM **5** VOIR DIRE

03:37:40PM **6** BY MR. HARPER:

03:37:43PM **7** Q. Good afternoon, Dr. Kehoe. I'm Keith Harper, counsel for

03:37:46PM **8** the plaintiffs. I'm just going to ask you a few questions about

03:37:50PM **9** your experience.

03:37:50PM **10** A. Certainly.

03:37:51PM **11** Q. First let me ask you, are you an accountant?

03:37:57PM **12** A. No, I am not.

03:37:58PM **13** Q. Are you an econometrician?

03:38:01PM **14** A. No, I am not.

03:38:02PM **15** Q. Are you an economist?

03:38:04PM **16** A. No.

03:38:04PM **17** Q. Statistician?

03:38:06PM **18** A. No, I am not.

03:38:06PM **19** Q. Do you claim any expertise in the management practices of

03:38:16PM **20** the Office of the Comptroller of the Currency?

03:38:18PM **21** A. I'm somewhat familiar with the comptroller of the currency

03:38:23PM **22** and its historical role with regard to failed banking

03:38:29PM **23** institutions. That's been part of my research.

03:38:31PM **24** Q. Again, do you claim expertise in the management practices

03:38:36PM **25** and policies of the Office of the Comptroller of the currency,

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03:38:39PM **1** do you consider yourself an expert in that?

03:38:40PM **2** A. No, I do not.

03:38:41PM **3** Q. Do you consider yourself an expert in the United States

03:38:44PM **4** budgetary processes?

03:38:45PM **5** A. No, I do not.

03:38:47PM **6** Q. Do you consider yourself an expert in the debt management

03:38:51PM **7** practices of the Department of Treasury?

03:38:53PM **8** A. No, I do not.

03:38:54PM **9** Q. Do you consider yourself an expert on the management

03:38:57PM **10** practices at the Department of Treasury?

03:38:59PM **11** A. No, I do not.

03:39:00PM **12** Q. Do you believe that you are an expert in the borrowing

03:39:06PM **13** decisions and the way borrowing decisions are made by the

03:39:09PM **14** Department of Treasury?

03:39:10PM **15** A. No, I am not.

03:39:11PM **16** Q. Do you have any expertise regarding the national debt?

03:39:20PM **17** A. No, I do not.

03:39:22PM **18** Q. Do you have any expertise in the rules and regulations

03:39:26PM **19** associated with the regulation of national banks?

03:39:29PM **20** A. No, I do not.

03:39:34PM **21** Q. Do you have expertise in what's called the FDIC? Do you

03:39:42PM **22** know the term FDIC, Federal Deposit Insurance?

03:39:46PM **23** A. Yes, I'm familiar with its general rule and how federal

03:39:48PM **24** deposit insurance is applied.

03:39:51PM **25** Q. Would you consider yourself an expert in that field?

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03:39:53PM **1** A. No, I would not describe myself as an expert in that field.

03:39:59PM **2** Q. Do you consider yourself an expert in public securities?

03:40:08PM **3** A. No, I do not.

03:40:11PM **4** Q. Do you consider yourself an expert on how monies are

03:40:34PM **5** collected at the Department of Treasury?

03:40:36PM **6** A. Again, I have some familiarity with these procedures, but,

03:40:44PM **7** no, I would not describe myself as an expert in that area.

03:40:47PM **8** Q. And what about how disbursements are made from the

03:40:50PM **9** Department of Treasury?

03:40:51PM **10** A. My answer would be the same.

03:40:56PM **11** Q. Do you consider yourself an expert on what is called the

03:41:04PM **12** Treasury general account?

03:41:06PM **13** A. No, I do not.

03:41:08PM **14** Q. Now, you talked a little bit about your experience with

03:41:17PM **15** Indian Affairs?

03:41:18PM **16** A. Yes, sir.

03:41:18PM **17** Q. Do you recall that? And I noticed on your resume,

03:41:24PM **18** however -- we can look on the publication section -- are any of

03:41:29PM **19** the actual publications and journals that you have written, they

03:41:33PM **20** seem to be environmental principally; is that correct?

03:41:35PM **21** A. My publications have been in the field of environmental

03:41:39PM **22** history, that is correct.

03:41:40PM **23** Q. So you haven't had any publications, any journals presently

03:41:44PM **24** as of today on any subjects related to Indian Affairs; is that

03:41:47PM **25** fair?

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03:41:47PM **1** A. No, that's right.

03:41:48PM **2** Q. So that is true, that you do not have any, correct?

03:41:52PM **3** A. That is true.

03:41:53PM **4** Q. Thank you. And what areas of Indian policy do you consider

03:42:02PM **5** yourself an expert?

03:42:10PM **6** MR. SIEMIETKOWSKI: Objection, your Honor; relevance.

03:42:12PM **7** We've offered him as an expert in two particular areas only.

03:42:15PM **8** MR. HARPER: I understood the offer was for generally

03:42:26PM **9** on Indian Affairs, your Honor. I mean, that's a --

03:42:32PM **10** THE COURT: Stand up and repeat your labels for the

03:42:37PM **11** areas in which you expect to ask questions.

03:42:42PM **12** MR. SIEMIETKOWSKI: We asked to qualify Dr. Kehoe,

03:42:45PM **13** your Honor, as an expert in the history of federal Indian

03:42:48PM **14** relations and in federal Indian records.

03:42:52PM **15** MR. HARPER: Your Honor, federal Indian relations is a

03:42:56PM **16** very broad topic area.

03:42:58PM **17** THE COURT: I understand that. I understand that, but

03:43:03PM **18** he knows a lot more about it than I do, and we're talking about

03:43:06PM **19** aiding the finder of fact here, so if he's got something that

03:43:11PM **20** will help me I'm going to listen to it.

03:43:14PM **21** MR. HARPER: Thank you, your Honor. Well, then, at

03:43:17PM **22** this time I will withdraw my objections on those two topic

03:43:21PM **23** areas.

03:43:22PM **24** THE COURT: All right. Thank you.

03:43:22PM **25** BY MR. SIEMIETKOWSKI:

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03:43:39PM **1** Q. Dr. Kehoe, let's talk first about IIM banking policy,

03:43:44PM **2** specifically where the IIM was. Have you looked at the

03:43:48PM **3** placement of IIM throughout its history?

03:43:51PM **4** A. Yes, I have, and historically I think I can say that IIM

03:43:57PM **5** has been placed in three general areas or categories, and that

03:44:01PM **6** is in commercial banks, invested in federal securities, or in

03:44:07PM **7** checking accounts with the Treasury under the control of BIA

03:44:11PM **8** disbursing agents.

03:44:15PM **9** Q. Now, as you discussed these three categories during your

03:44:20PM **10** testimony, Dr. Kehoe, have you prepared any exhibit which might

03:44:23PM **11** assist in your testimony today?

03:44:24PM **12** A. I prepared a Power Point presentation.

03:44:27PM **13** Q. I ask you to look at DX 497 on your screen, please. This

03:44:35PM **14** is a twelve-slide Power Point show. Do you recognize it?

03:44:38PM **15** A. Yes, I do.

03:44:44PM **16** Q. Who prepared it?

03:44:45PM **17** A. I prepared it.

03:44:46PM **18** Q. I ask you now, Dr. Kehoe, to look at slide two, please.

03:44:51PM **19** Dr. Kehoe, why does your slide or your timeline begin in 1898?

03:44:56PM **20** A. I chose 1898 because the law was enacted that made BIA

03:45:04PM **21** disbursing agents legally accountable under their personal bond

03:45:10PM **22** for all monies that came into their possession, the key being

03:45:15PM **23** all monies, not just public funds, and this clarified their

03:45:19PM **24** legal responsibility for handling IIM.

03:45:21PM **25** Q. Dr. Kehoe, what's the significance for the Court of the

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03:45:24PM	**1**	three dates on slide two?
03:45:25PM	**2**	A. Well, these are three important milestones, I would say, in
03:45:31PM	**3**	the history of the handling of IIM.
03:45:33PM	**4**	Q. Now, regarding 1908, what kind of deposits are we talking
03:45:38PM	**5**	about there?
03:45:40PM	**6**	A. Well, this law was giving formal authority or recognition
03:45:46PM	**7**	to a policy BIA had been following for some time. Since at
03:45:50PM	**8**	least 1899 they had been placing IIM in commercial banks either
03:45:55PM	**9**	in checking accounts or in time deposits.
03:45:58PM	**10**	Q. And what's the difference between a time deposit and
03:46:02PM	**11**	another kind of deposit?
03:46:03PM	**12**	A. Well, to put it simply, in a time deposit the depositor
03:46:09PM	**13**	guarantees that the funds will be placed in the bank for a
03:46:12PM	**14**	certain amount of time and will therefore receive a certain rate
03:46:15PM	**15**	of interest because of that.
03:46:17PM	**16**	Q. And what's the contrasted?
03:46:19PM	**17**	A. Contrasted with a demand deposit or what they would call a
03:46:25PM	**18**	checking account in which the money is available at any time.
03:46:28PM	**19**	Q. Was interest paid on those typically?
03:46:31PM	**20**	A. In this period they were.
03:46:31PM	**21**	Q. Let me show you next slide, three, Dr. Kehoe. Now, why
03:46:36PM	**22**	does this period go up to 1933 in your analysis?
03:46:40PM	**23**	A. As I'll be discussing, 1933 is when an important federal
03:46:44PM	**24**	law was enacted that really had a big impact on the management
03:46:48PM	**25**	of the IIM.

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03:46:49PM	**1**	Q. And what law was that?
03:46:50PM	**2**	A. That was the Banking Act of 1933, sometimes referred to as
03:46:55PM	**3**	the Glass Ceiling Act.
03:46:56PM	**4**	Q. Before we get to that, let's talk about the different
03:46:59PM	**5**	columns here on slide three. What is meant by in "bonded banks
03:47:04PM	**6**	to the credit of individual Indians"?
03:47:07PM	**7**	A. Before we go any further, Mr. Siemietkowski, can I just
03:47:11PM	**8**	make a comment about what I tried to achieve with these tables
03:47:14PM	**9**	that we will be discussing?
03:47:16PM	**10**	Q. Go right ahead.
03:47:18PM	**11**	A. I'll be providing figures for various years throughout the
03:47:23PM	**12**	20th century. What I'm trying to do is to show for years in
03:47:28PM	**13**	which complete data is available where all IIM was kept at any
03:47:33PM	**14**	particular time. Using those three categories, bank, securities
03:47:37PM	**15**	and then the Treasury, and as you'll see I only used years when
03:47:40PM	**16**	I felt a complete picture was available that would allow us to
03:47:44PM	**17**	fill in all those categories.
03:47:46PM	**18**	Q. So with that explanation in mind, what's meant then by "in
03:47:50PM	**19**	bonded banks"?
03:47:51PM	**20**	A. Well, this refers to the practice we just discussed of
03:47:55PM	**21**	placing IIM in commercial banks for individual Indians.
03:48:01PM	**22**	Q. And what about "in the hands of disbursing officers"?
03:48:05PM	**23**	A. I have not been able to determine exactly what that phrase
03:48:08PM	**24**	means. I think it's quite likely that refers to the IIM that
03:48:12PM	**25**	was kept in Treasury checking accounts.

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03:48:15PM	**1**	Q. Now, the dollar value figures, Dr. Kehoe, where are they
03:48:20PM	**2**	from?
03:48:20PM	**3**	A. For this period they're taken from the annual reports of
03:48:24PM	**4**	the commissioner of Indian affairs.
03:48:25PM	**5**	Q. What about the percentage figures, who were they taken
03:48:29PM	**6**	from?
03:48:29PM	**7**	A. Those were just simple calculations that we did.
03:48:32PM	**8**	Q. Well, let me show you next DX 33 previously admitted in
03:48:39PM	**9**	October. Do you recognize that, Dr. Kehoe?
03:48:46PM	**10**	A. Yes. I believe the Court is probably quite familiar with
03:48:49PM	**11**	this document by now. It's the annual report of the
03:48:52PM	**12**	commissioner of Indian affairs for 1910.
03:48:55PM	**13**	Q. I ask you next to look at page two of this document, Dr.
03:48:58PM	**14**	Kehoe. And what if any data did you use on this for your Power
03:49:05PM	**15**	Point slide that you were just discussing?
03:49:06PM	**16**	A. In the highlighted area I drew upon two figures. The
03:49:12PM	**17**	figure of approximately $2.6 million for in hands of disbursing
03:49:18PM	**18**	officers, and the figure for approximately $6.8 million in
03:49:21PM	**19**	bonded banks to credit of individual Indians.
03:49:24PM	**20**	Q. Now, to see this more clearly I ask that we look at the
03:49:27PM	**21**	first split screen. Could you kind of talk us through those two
03:49:38PM	**22**	screens and how they transpose in terms of data from one to
03:49:41PM	**23**	another?
03:49:41PM	**24**	A. Well, I think it's pretty straightforward. In balance --
03:49:47PM	**25**	excuse me, in hands of disbursing officers is under that second

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03:49:51PM	**1**	column for 1910 that says in hands of disbursing officers, and
03:49:56PM	**2**	that $6.8 million figure in bonded banks to credit of individual
03:50:00PM	**3**	Indians is in that first column next to 1910.
03:50:04PM	**4**	Q. Let's go to slide four then of your slide show then, Dr.
03:50:08PM	**5**	Kehoe. Now, why here, Dr. Kehoe, do the top horizontal columns
03:50:20PM	**6**	change names?
03:50:20PM	**7**	A. Well, in this period in the subsequent periods that we'll
03:50:27PM	**8**	be discussing, the data is more straightforward, I believe, and
03:50:33PM	**9**	with some confidence we can place it in one of these three
03:50:36PM	**10**	categories, that is, in banks, in federal securities, held at
03:50:41PM	**11**	Treasury.
03:50:41PM	**12**	Q. Now, you talked before about funds in banks. What's meant
03:50:45PM	**13**	by funds invested in the federal securities?
03:50:47PM	**14**	A. That refers to IIM that was invested in Treasury bills,
03:50:53PM	**15**	notes and bonds, Treasury securities, you might refer to them
03:50:57PM	**16**	as, and later on this could also include what were called agency
03:51:02PM	**17**	issues. That is securities that could be issued by Fannie Mae,
03:51:05PM	**18**	the small business administration; agencies like that.
03:51:08PM	**19**	Q. What about that time period up to 1933, can you provide the
03:51:11PM	**20**	Court of any examples of what type of federal securities are in
03:51:14PM	**21**	that time period?
03:51:15PM	**22**	A. Well, this is before the 1938 law that expanded the range
03:51:24PM	**23**	of federal securities that IIM could be invested in, so this
03:51:29PM	**24**	would primarily consist of Treasury securities of different
03:51:33PM	**25**	kinds, different maturity dates and so forth.

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03:51:36PM	**1** Q. Let's turn next to the next slide, Dr. Kehoe. Why does the
03:51:43PM	**2** next period in your analysis go to 1966?
03:51:47PM	**3** A. 1966, as we'll be discussing, is when the BIA began to
03:51:51PM	**4** centralize IIM investment. Prior at this it had been quite
03:51:56PM	**5** decentralized.
03:51:56PM	**6** Q. Let's talk, before we get to that, about 1933. You touched
03:51:59PM	**7** upon this briefly a moment ago, but what was the impact as
03:52:03PM	**8** reflected in your second sentence there of glass ceiling?
03:52:06PM	**9** A. Well, glass ceiling prohibited banks from paying interest
03:52:10PM	**10** on demand deposits or checking accounts, so the BIA had no
03:52:14PM	**11** choice but to close all of the checking accounts at commercial
03:52:19PM	**12** banks that had been handling IIM, and move those funds into the
03:52:23PM	**13** Treasury checking accounts controlled by special disbursing
03:52:27PM	**14** agents.
03:52:27PM	**15** Q. And Dr. Kehoe, what's the significance of 1938?
03:52:30PM	**16** A. This is an important general investment law for Indian
03:52:36PM	**17** trust funds. I believe its basic structure is still in place
03:52:40PM	**18** today and it lays out the legal investments for IIM, again,
03:52:45PM	**19** federal securities, and also it can be placed in banks, paying a
03:52:50PM	**20** more reasonable rate of interest.
03:52:52PM	**21** Q. Dr. Kehoe, the Great Depression happened during this time
03:52:54PM	**22** period, did it not?
03:52:55PM	**23** A. Yes, sir.
03:52:56PM	**24** Q. Did the Great Depression affect IIM?
03:53:00PM	**25** A. It certainly did. It affected everything in the United

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03:53:04PM	**1** States. At the reservation level certainly this slowed leasing
03:53:08PM	**2** and other economic operations, so IIM revenue would certainly be
03:53:13PM	**3** decreased. Oh, and it certainly impacted the financial sector.
03:53:19PM	**4** Many banks failed during this period.
03:53:20PM	**5** Q. Did any of those banks that failed include IIM?
03:53:24PM	**6** A. Yes. Quite a few did.
03:53:26PM	**7** Q. And how, if at all, did Interior and Congress react to
03:53:30PM	**8** those bank failures?
03:53:31PM	**9** A. Well, the BIA had been following a policy for some time of
03:53:35PM	**10** securing IIM deposits either by requiring banks to purchase a
03:53:41PM	**11** surety bond or else to purchase federal securities and to post
03:53:44PM	**12** them as collateral.
03:53:46PM	**13** Q. How effective were those surety bonds or collateral in
03:53:50PM	**14** recovering any losses?
03:53:52PM	**15** A. My research indicates that those safeguards were quite
03:53:56PM	**16** effective, and just about all the cases that I've seen discussed
03:53:59PM	**17** or referred to it appears that all of that money that was
03:54:04PM	**18** temporary unavailable because the bank closed was made available
03:54:08PM	**19** to the BIA when the surety bond paid up or those collateral
03:54:14PM	**20** securities were turned over to the BIA.
03:54:18PM	**21** Q. Dr. Kehoe, did tribal IIM have a role during this time
03:54:22PM	**22** period?
03:54:22PM	**23** A. Well, I believe that the tribal IIM accounts really
03:54:28PM	**24** originated in the 1930s after the Indian Reorganization Act, and
03:54:32PM	**25** my research indicates that they were invested very much like the

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03:54:37PM	**1** other types of IIM accounts.
03:54:40PM	**2** Q. Let's move from slide five and show you slide six, Dr.
03:54:45PM	**3** Kehoe. What is the significance in the first bullet there?
03:54:48PM	**4** A. Well, this indicates a major trend in investments. Between
03:54:56PM	**5** the mid-30s and the mid-1940s almost all of the IIM that had
03:55:00PM	**6** still been maintained in time deposits was gradually shifted
03:55:06PM	**7** into federal securities so very little money in banks by, say,
03:55:10PM	**8** the late 1940s.
03:55:12PM	**9** Q. And what about 1960, why did you add that date to the
03:55:15PM	**10** slide?
03:55:15PM	**11** A. This is when the commissioner of Indian affairs began to
03:55:19PM	**12** implement a policy in which once again large amounts of IIM
03:55:23PM	**13** would be placed back in commercial banks, I should note strictly
03:55:27PM	**14** for purposes of investment, that is, in time deposits, later
03:55:32PM	**15** certificates of deposit, but not in checking accounts.
03:55:35PM	**16** Q. I'm going to show you slide seven, Dr. Kehoe. What trend,
03:55:42PM	**17** if any, is evident on this chart?
03:55:45PM	**18** A. Well, I think it's clear that we see a decline in IIM kept
03:55:51PM	**19** in commercial banks and federal securities become overwhelmingly
03:55:56PM	**20** the main avenue of investment with the remaining funds held in
03:56:01PM	**21** the Treasury.
03:56:02PM	**22** Q. Let me show you DX 408, if I could briefly, Dr. Kehoe. Now
03:56:19PM	**23** I'll ask you to look at page seven of this, please. What is
03:56:28PM	**24** this, if you recognize it, please?
03:56:29PM	**25** A. This is part of one of those annual reports of the balances

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03:56:35PM	**1** of Indian service special disbursing agents that the BIA
03:56:39PM	**2** submitted to the Treasury on an annual basis during this period.
03:56:43PM	**3** Q. Now, using our second split screen, I'll ask you to please
03:56:47PM	**4** describe for the Court how you used that data for use in your
03:56:49PM	**5** Power Point slide.
03:56:51PM	**6** A. This requires a little more explanation. Down at the
03:57:03PM	**7** bottom left-hand column of the lower excerpt deposits in banks
03:57:09PM	**8** and cash and personal possession of disbursing officers, $3.9
03:57:14PM	**9** million roughly that goes to the column in my table IIM system
03:57:22PM	**10** funds in banks. Above that under that subheading with the
03:57:27PM	**11** Treasury of the United States it reads subject to check of.
03:57:33PM	**12** $6.3 million. That was placed in the column for IIM system
03:57:37PM	**13** funds held at Treasury. The remaining two values, investments
03:57:42PM	**14** and first we see investments with the Treasury of the United
03:57:46PM	**15** States and then investments with other depositories, adding
03:57:50PM	**16** those two together we get the total for IIM invested in federal
03:57:55PM	**17** securities.
03:57:57PM	**18** Q. Let's talk next about slide eight, Dr. Kehoe. Now, why
03:58:09PM	**19** does this chart have less data?
03:58:11PM	**20** A. Well, this reflects the fact that between the mid-1940s and
03:58:19PM	**21** the mid-'60s I was able to find just a couple of years which
03:58:23PM	**22** provided hard data that addresses all three of these general
03:58:31PM	**23** categories: banks, securities, and held at Treasury.
03:58:34PM	**24** Q. We'll move next to slight nine, Dr. Kehoe. Now, why are
03:58:41PM	**25** these dates important?

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03:58:42PM	**1** **A.** Well, as I mentioned, 1966 is when the BIA took steps to
03:58:46PM	**2** centralize the investment function, and in 1985 has been
03:58:51PM	**3** referred to at the beginning of the so-called electronic era in
03:58:55PM	**4** terms of IIM accounting.
03:58:56PM	**5** **Q.** You talk a little bit about your 1980s bullet?
03:59:04PM	**6** **A.** Well, this refers to the fact that the 1980s in a way was
03:59:07PM	**7** so much similar to the 1930s. It was a period of instability in
03:59:11PM	**8** the financial industry and as a result some IIMs were lost when
03:59:17PM	**9** depository institutions of different kinds, banks, savings and
03:59:21PM	**10** loans, credit unions, became insolvent.
03:59:26PM	**11** **Q.** Now, you talk about funds being lost. Do you know whether
03:59:30PM	**12** Interior or Congress reacted to that at all?
03:59:33PM	**13** **A.** Well, eventually when, and we're talking here about funds
03:59:38PM	**14** that were lost and could not be regained through federal deposit
03:59:42PM	**15** insurance coverage or through those collateral securities, in
03:59:47PM	**16** those cases the Interior department went to Congress and
03:59:52PM	**17** requested that money be appropriated to cover those loses, which
03:59:57PM	**18** it was --
03:59:57PM	**19** **Q.** I'm sorry. What was the last part of your answer?
04:00:00PM	**20** **A.** Money was appropriated to cover those losses.
04:00:03PM	**21** **Q.** Dr. Kehoe, let's talk next about slide ten, please. I want
04:00:07PM	**22** to focus you here initially on the note on the far right column.
04:00:11PM	**23** What does that refer to?
04:00:13PM	**24** **A.** This refers to the fact that by this period, the 1970s, IIM
04:00:23PM	**25** investment was completely centralized and investing as much IIM

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04:00:32PM	**1** as at all possible was a priority for the BIA investment branch.
04:00:38PM	**2** Those wanted to keep IIM fully invested as much as they could.
04:00:42PM	**3** Therefore, I made the assumption that together IIM and banks and
04:00:45PM	**4** in securities constitutes the great majority of the IIM system
04:00:50PM	**5** funds in any particular year, but keeping in mind that there was
04:00:55PM	**6** always a small amount of IIM on any particular day that would
04:00:59PM	**7** not have been invested.
04:01:00PM	**8** **Q.** Now, what trend, if any, is evident on this chart?
04:01:05PM	**9** **A.** Well, I think you see that during this period money could
04:01:08PM	**10** shift back and forth in its concentration in terms of
04:01:12PM	**11** investment, that is, in certain years the majority of it is in
04:01:16PM	**12** federal securities and in other years it's in banks,
04:01:20PM	**13** certificates of deposit, and then this just reflects the fact
04:01:24PM	**14** that the investment branch was intent on trying to obtain the
04:01:27PM	**15** highest return possible for IIM.
04:01:29PM	**16** **Q.** Let me show you now, Dr. Kehoe, DX 380. If we can enlarge
04:01:43PM	**17** that a bit so Dr. Kehoe can see the first page, please. Do you
04:01:47PM	**18** recognize that, and, if so, what is it?
04:01:49PM	**19** **A.** Yes, I do. That's one of the annual investment reports
04:01:52PM	**20** that was issued by the Bureau of Indian Affairs during this
04:01:56PM	**21** period.
04:01:56PM	**22** **Q.** And I'll direct your attention to page nine of this report.
04:02:01PM	**23** What does this show, Dr. Kehoe?
04:02:02PM	**24** **A.** Well, this shows the status of IIM investments as of the
04:02:10PM	**25** end of fiscal year 1980, and like the other examples we've

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04:02:15PM	**1** looked at, this represents a snapshot in time where IIM was
04:02:19PM	**2** invested at this point in time.
04:02:21PM	**3** **Q.** Now, once more we'll go to the third and last split screen,
04:02:25PM	**4** and I'll ask you to please describe for the Court how you used
04:02:28PM	**5** that data for your Power Point slide.
04:02:30PM	**6** **A.** Well, looking at the lower excerpt, the one under the
04:02:36PM	**7** September 30th, 1980 heading, if you go down to the bottom row,
04:02:41PM	**8** deposit funds, ISSDA, that refers to the IIM, about 230,000
04:02:48PM	**9** accounts, and if you move over to the first column you see about
04:02:55PM	**10** $135,800,000 in time certificates of deposit, that is bank CDs,
04:02:59PM	**11** I've taken that figure and placed in the column for IIM system
04:03:03PM	**12** funds in banks.
04:03:06PM	**13** **Q.** Thank you. Let's look next at slide, eleven, Dr. Kehoe.
04:03:18PM	**14** Now, why does that first bullet cover a two-year period?
04:03:22PM	**15** **A.** Well, again, 1986 is when the so-called electronic era
04:03:32PM	**16** started in IIM accounting, and I thought it appropriate to try
04:03:37PM	**17** to take the story up to the present day, 2008.
04:03:41PM	**18** **Q.** Now, the last bullet there, 1995, is that the same
04:03:55PM	**19** information you were testifying to a few moments ago regarding
04:03:59PM	**20** covering losses?
04:04:00PM	**21** **A.** That's right. Ultimately approximately $5.7 million was
04:04:05PM	**22** appropriated by Congress to reimburse IIM trust funds for money
04:04:12PM	**23** that had been lost when depository institutions failed, and I
04:04:15PM	**24** should be clear on this. They reimbursed principal lost at
04:04:19PM	**25** these failed institutions and interest that was earned up to the

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04:04:23PM	**1** date of the closure of these institutions.
04:04:26PM	**2** **Q.** Lastly, in your slide show, Dr. Kehoe, we'll look at slide
04:04:30PM	**3** number twelve. What are these?
04:04:34PM	**4** **A.** This merely refers to the sources for the data in the
04:04:36PM	**5** various tables that I've discussed.
04:04:38PM	**6** **Q.** Are these sources publicly available?
04:04:40PM	**7** **A.** Yes. Some of them could probably be obtained at libraries,
04:04:51PM	**8** Didn't of Interior library, maybe the Library of Congress, and
04:04:55PM	**9** the others I believe are all collected at various archives.
04:04:59PM	**10** **Q.** Thank you. Now, when you reviewed of all these sources,
04:05:05PM	**11** Dr. Kehoe, and in your preparation of these slides, didn't you
04:05:09PM	**12** see any evidence of IIM sitting outside of those three
04:05:16PM	**13** categories you described at the beginning of your testimony?
04:05:19PM	**14** **A.** No, no, I have not.
04:05:26PM	**15** **Q.** In reviewing your sources and in preparing your slide
04:05:31PM	**16** presentation, did you see any evidence of IIM wrongfully
04:05:37PM	**17** withheld from beneficiaries?
04:05:38PM	**18** **A.** No. During certain periods it's clear that the BIA was
04:05:46PM	**19** withholding money from accountholders, but this was considered
04:05:49PM	**20** the proper policy at the time. There was nothing illegal about
04:05:54PM	**21** it. That was just the policy.
04:05:56PM	**22** **Q.** Dr. Kehoe, let's change gears here now, and having talked
04:06:04PM	**23** about where the IIM has been throughout the history of the IIM
04:06:08PM	**24** system, let's talk about the Plaintiffs' calculation of alleged
04:06:12PM	**25** benefit to the government. Have you reviewed and analyzed

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1 Plaintiffs' March 19 remedies brief, including its attachments?

2 **A.** Yes, I have.

3 **Q.** Have you reviewed and analyzed Plaintiffs' April 22 reply

4 brief?

5 **A.** Yes, I have.

6 **Q.** Do you recall the term "in bonded banks to the credit of

7 individual Indians" from your slides?

8 **A.** Certainly.

9 **Q.** Dr. Kehoe, does your historical research show any benefit

10 to the government from funds held in bonded banks to the credit

11 of individual Indians?

12 MR. HARPER: Objection, your Honor. This is well

13 beyond the scope of his expertise.

14 THE COURT: Sustained.

15 BY MR. SIEMIETKOWSKI:

16 **Q.** Dr. Kehoe, in looking at the historical documents which

17 you've reviewed to prepare your slide show, did those documents

18 show anything or indicate anything or ever address in any way a

19 benefit to the government from funds held in government

20 securities?

21 MR. HARPER: Objection, your Honor; relevance.

22 THE COURT: Sustained. "Relevance" isn't your

23 objection, but I'll sustain the objection anyway.

24 BY MR. SIEMIETKOWSKI:

25 **Q.** Dr. Kehoe, let me show you slide four of your presentation

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1 if I could, please. Regarding the far right column, system

2 funds held at Treasury, do you have from your historical

3 research any familiarity with the ability of the government to

4 spend funds in that column?

5 MR. HARPER: Objection, your Honor. He testified that

6 he is not an expert with respect to anything related to the

7 Department of Treasury.

8 MR. SIEMIETKOWSKI: Your Honor, we're not asking --

9 MR. HARPER: This is about Department of Treasury.

10 THE COURT: I'll overrule that objection and let the

11 witness answer, if he can.

12 THE WITNESS: Could you please restate the question?

13 BY MR. SIEMIETKOWSKI:

14 **Q.** Yes. Dr. Kehoe, do you have through your historical

15 research any familiarity with the government's ability to spend

16 the funds that you reference in the far right column held at

17 Treasury?

18 **A.** As I mentioned, this refers to funds that were held in what

19 were called Treasury checking accounts that were under the

20 supervision -- under the control, rather, of BIA disbursing

21 agents in the field, and they certainly had the authority to

22 disburse IIM from these checking accounts just as they did to

23 disburse IIM from banks.

24 **Q.** Now, Dr. Kehoe, looking at slide four, during this time

25 period, 1898 to 1933, where was most of the IIM held?

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1 THE COURT: That kind of speaks for itself, doesn't

2 it, counsel?

3 MR. SIEMIETKOWSKI: It does, your Honor. What I would

4 like then to do is show the Court slide seven once the court has

5 finished looking at slide four.

6 THE COURT: I'm finished.

7 MR. SIEMIETKOWSKI: Slide seven, please.

8 And then again, once the Court is finished we'd like

9 to show slide eight.

10 THE COURT: I'm finished with that one and that one.

11 MR. SIEMIETKOWSKI: Slide ten, please.

12 THE COURT: And that one.

13 MR. SIEMIETKOWSKI: And slide eleven.

14 THE COURT: All right.

15 BY MR. SIEMIETKOWSKI:

16 **Q.** Dr. Kehoe, from your review of Plaintiffs' two pleadings

17 which were earlier discussed, did they ever consider where the

18 money was in arguing for an added benefit to the government?

19 **A.** There appeared to be an assumption that the money was

20 always kept in the U.S. Treasury, and that would appear to me to

21 be a weakness of the model of that assumption.

22 MR. HARPER: Again, your Honor, I just renew my

23 objection. Again, that is well beyond the scope of his

24 expertise.

25 THE COURT: I'm going to allow the answer, but barely.

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1 MR. SIEMIETKOWSKI: Obviously, your Honor, the witness

2 is testifying as a historian. If he's testifying as to where

3 the money is historically.

4 THE COURT: Look, I gave a little brief little seminar

5 on this whole subject yesterday morning. The burden hasn't even

6 shifted to the government on this question yet in my view, and

7 you're basically now adding filigree to the numbers that you've

8 already shown me. If somebody from the Treasury department

9 wants to come in here and tell me about how those balances are

10 dealt with in the Treasury department I'll listen to it, but I

11 don't think it's really a historical matter.

12 MR. SIEMIETKOWSKI: Yes, your Honor.

13 BY MR. SIEMIETKOWSKI:

14 **Q.** To conclude your testimony then, Dr. Kehoe, what is your

15 opinion regarding what the historical records show regarding the

16 placement of IIM?

17 **A.** Well, I would say the historical record indicates that

18 throughout the 20th century the majority of IIM was kept outside

19 of the Treasury. In some years the great majority and that

20 those funds kept outside the Treasury also earned interest for

21 the accountholders.

22 MR. SIEMIETKOWSKI: Thank you, your Honor. That

23 concludes my direct.

24 We would like to move the admission of two exhibits.

25 That would be DX 497, Dr. Kehoe's Power Point show, and then DX

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04:12:18PM	**1**	498, his C.V. as well.
04:12:20PM	**2**	THE COURT: 497 and 498 will be received.
04:12:24PM	**3**	MR. SIEMIETKOWSKI: Thank you, sir.
04:12:24PM	**4**	(Exhibit Nos. DX 497 and DX 498 received into evidence
04:12:24PM	**5**	at about 4:12 p.m.)
04:12:26PM	**6**	CROSS-EXAMINATION
04:12:26PM	**7**	BY MR. HARPER:
04:12:36PM	**8**	**Q.** Dr. Kehoe, I'd like to start with your Power Point
04:12:38PM	**9**	presentation, if I could.
04:12:40PM	**10**	**A.** Certainly.
04:12:41PM	**11**	**Q.** And ask that we turn to DX 497, 0010. Do you recall
04:12:57PM	**12**	testifying about this page?
04:12:58PM	**13**	**A.** Yes, I do.
04:13:00PM	**14**	**Q.** Now, first I'd like to ask you, who came up with this Power
04:13:06PM	**15**	Point and the titles in the Power Point?
04:13:08PM	**16**	**A.** This is my creation, this Power Point.
04:13:11PM	**17**	**Q.** Yours and yours solely?
04:13:13PM	**18**	**A.** I made the final decisions about what to include.
04:13:17PM	**19**	**Q.** Who else was involved in forming the analysis as to what to
04:13:22PM	**20**	include?
04:13:22PM	**21**	**A.** Well, I also collaborated with a few members of the staff
04:13:27PM	**22**	at Morgan Angel.
04:13:28PM	**23**	**Q.** And that was it?
04:13:29PM	**24**	**A.** Could you clarify your question as to what was involved in
04:13:38PM	**25**	creating the Power Point?

04:13:39PM	**1**	**Q.** Let me ask some specifics about it.
04:13:41PM	**2**	**A.** Okay.
04:13:41PM	**3**	**Q.** You have three columns, correct?
04:13:43PM	**4**	**A.** Yes, I do.
04:13:44PM	**5**	**Q.** And you have three columns in a number of different eras,
04:13:47PM	**6**	is that a fair statement?
04:13:48PM	**7**	**A.** Yes, I do.
04:13:48PM	**8**	**Q.** And the same three columns, correct?
04:13:50PM	**9**	**A.** Yes.
04:13:50PM	**10**	**Q.** And one of those three columns is IIM System Funds in
04:13:55PM	**11**	Banks, correct?
04:13:55PM	**12**	**A.** That's right.
04:13:56PM	**13**	**Q.** Okay. Who came up with that specific title?
04:14:00PM	**14**	**A.** The Department of Justice requested that we use the term
04:14:05PM	**15**	IIM system funds to be consistent with other experts.
04:14:09PM	**16**	**Q.** The Department of Justice directed you to use that title?
04:14:14PM	**17**	**A.** They suggested it, and I was fine with it because before
04:14:19PM	**18**	that I was using Total IIM, which I believe is synonymous with
04:14:23PM	**19**	IIM system funds.
04:14:28PM	**20**	**Q.** Okay. What about the notion of IIM System Funds in Banks?
04:14:33PM	**21**	**A.** I mean, I have always thought of it and originally used
04:14:41PM	**22**	that descriptor in banks.
04:14:42PM	**23**	**Q.** Now, let me ask you to first take note of that, of this
04:14:48PM	**24**	page where you say IIM System Funds in Banks, and then if you
04:14:52PM	**25**	could flip back to 3004 where it says IIM System Fund in Banks.

04:15:06PM	**1**	Now, are the funds on page 004 from the period 19 -- excuse me
04:15:11PM	**2**	-- 1899 to 1933 and the ones later on on 010 from 1966 to 1985,
04:15:20PM	**3**	when you use that term IIM System Funds in Banks, are those
04:15:23PM	**4**	funds treated any differently in those two periods?
04:15:36PM	**5**	**A.** I'm not sure I understand your question. Could you
04:15:36PM	**6**	rephrase it for me?
04:15:36PM	**7**	**Q.** Okay. So we have two periods of time where you use the
04:15:37PM	**8**	same diction, correct?
04:15:38PM	**9**	**A.** Yes.
04:15:38PM	**10**	**Q.** To describe how funds are being held, correct?
04:15:42PM	**11**	**A.** That's right.
04:15:43PM	**12**	**Q.** Are they being held in identical ways in both instances?
04:15:50PM	**13**	**A.** No, they are not.
04:15:51PM	**14**	**Q.** So you use the exact same term but they're held in really
04:15:55PM	**15**	very different ways, correct?
04:15:56PM	**16**	**A.** They're held in somewhat different ways. It's a general
04:15:59PM	**17**	descriptive term that I think is appropriate.
04:16:01PM	**18**	**Q.** Okay. In the later period when you're saying IIM system
04:16:05PM	**19**	funds held in banks, how were they held?
04:16:07PM	**20**	**A.** Primarily through the purchase of bank CDs, certificates of
04:16:12PM	**21**	deposit.
04:16:13PM	**22**	**Q.** By whom?
04:16:14PM	**23**	**A.** Well, they're purchased on behalf of IIM accountholders.
04:16:20PM	**24**	**Q.** By whom?
04:16:20PM	**25**	**A.** By the Bureau of Indian Affairs.

04:16:22PM	**1**	**Q.** By the Bureau of Indian Affairs or the Department of
04:16:25PM	**2**	Treasury?
04:16:25PM	**3**	**A.** I'm trying to recall exactly who executed the transactions
04:16:38PM	**4**	purchasing the CDs. If the Treasury didn't execute the
04:16:42PM	**5**	transactions they were still acting at the behest of the BIA.
04:16:46PM	**6**	It was the BIA who was making these investment decisions.
04:16:50PM	**7**	**Q.** Fair enough. BIA is making the investment decisions but
04:16:54PM	**8**	the actual action taken on whether to purchase a security or
04:16:57PM	**9**	whether to invest it in banks is one done by the Department of
04:17:00PM	**10**	Treasury, correct?
04:17:00PM	**11**	**A.** Could you rephrase the question again? I want to make sure
04:17:03PM	**12**	I understand the word correctly, Mr. Harper.
04:17:06PM	**13**	**Q.** Whether you're investing in banks or investing in federal
04:17:09PM	**14**	securities, the person deciding where to invest it is the
04:17:12PM	**15**	Department of Treasury, correct?
04:17:13PM	**16**	**A.** No. No. That's exactly wrong. The person making the
04:17:17PM	**17**	decision about how and where to invest it is the Bureau of
04:17:20PM	**18**	Indian Affairs.
04:17:21PM	**19**	**Q.** Actually it's OFTM, isn't it?
04:17:25PM	**20**	**A.** After 1989.
04:17:26PM	**21**	**Q.** So prior to 1989 the Bureau of Indian Affairs is making
04:17:30PM	**22**	this decision but it's executed by the Department of Treasury,
04:17:33PM	**23**	they're the ones taking the action on either buying the federal
04:17:37PM	**24**	securities or investing it in banks, correct?
04:17:39PM	**25**	MR. SIEMIETKOWSKI: Objection, your Honor; asked and

04:17:41PM **1**	answered.
04:17:42PM **2**	THE COURT: Overruled.
04:17:43PM **3**	THE WITNESS: Well, I think we need to look at
04:17:45PM **4**	different periods. If we're looking at this period that you
04:17:48PM **5**	have on the screen, 1928 to 1933, based on the research I've
04:17:53PM **6**	done, Treasury really had no involvement in placing IIM in
04:17:57PM **7**	banks.
04:17:57PM **8**	BY MR. HARPER:
04:17:58PM **9**	Q. Let me ask you a more specific question and we can again
04:18:01PM **10**	turn to DEX 4970010. If we can focus on the final line, 1985.
04:18:09PM **11**	A. Very well.
04:18:10PM **12**	Q. Can you make that little bigger, Antonio? Thank you.
04:18:19PM **13**	Now, you have $335 million under the heading IIM
04:18:23PM **14**	systems funds in banks, correct?
04:18:26PM **15**	A. That is correct.
04:18:27PM **16**	Q. And what this really is is funds that are invested at banks
04:18:35PM **17**	for commercial banks for investment purposes, correct?
04:18:38PM **18**	A. That's right.
04:18:39PM **19**	Q. So that is very different from what I think you're
04:18:44PM **20**	testifying in the earlier period, which is that there was no
04:18:46PM **21**	involvement by the Treasury department whatsoever, correct?
04:18:51PM **22**	Here there is.
04:18:52PM **23**	A. In the earlier period that we're looking at, 1920s, 1930s,
04:18:58PM **24**	placing IIM in banks, no involvement by the Treasury department.
04:19:03PM **25**	During the 1980s -- I'm not sure you're correct about the role

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04:19:12PM **1**	of the Treasury department. The more I think about it I recall
04:19:15PM **2**	there was an auction process set up in which equally qualified
04:19:20PM **3**	banks would bid for having IIMs placed in their CDs and it was
04:19:24PM **4**	conducted by the branch of investments in the Bureau of Indian
04:19:29PM **5**	Affairs. I'm trying to recall Treasury involvement in that
04:19:33PM **6**	process. I'm just not certain, Mr. Harper.
04:19:39PM **7**	Q. Have you ever heard of the term 14X6039 account?
04:19:43PM **8**	A. Yes, I have.
04:19:44PM **9**	Q. Is this $335 million while invested in banks credited to
04:19:51PM **10**	the 14X6039 account?
04:19:53PM **11**	A. Well, these are funds that are part of that account which
04:19:57PM **12**	represents IIM.
04:20:01PM **13**	Q. So what is your answer to the question? Is the $335
04:20:05PM **14**	million you have cited here credited here to the 14X6039
04:20:11PM **15**	account?
04:20:11PM **16**	A. Well, if it's invested in bank CDs it's outside of the
04:20:16PM **17**	Treasury.
04:20:17PM **18**	Q. So you're saying it's not credited to the 14X6039, is that
04:20:24PM **19**	your testimony?
04:20:25PM **20**	A. I'm not sure. I'm not sure exactly how at the Department
04:20:29PM **21**	of the Treasury in 6039, how this was accounted for.
04:20:33PM **22**	Q. So you really don't know when you say this is outside of
04:20:36PM **23**	the bank, you don't know what the relationship is between this
04:20:40PM **24**	and what is credited at the Department of Treasury, fair?
04:20:42PM **25**	A. Well, what I'm testifying to in terms of my understanding

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04:20:50PM **1**	is how the Treasury department is tracking these funds and their
04:20:55PM **2**	involvement. I know that if these funds are invested in bank
04:21:01PM **3**	CDs they're not held by the Treasury, they're in these bank CDs
04:21:07PM **4**	belonging to commercial banks.
04:21:10PM **5**	Q. Let me try to get at this $335 million a different way.
04:21:15PM **6**	A. Okay.
04:21:16PM **7**	Q. How does the bank get this $335 million during this period?
04:21:27PM **8**	A. The branch of investment would have used IIM funds
04:21:30PM **9**	available to it and purchased a bank certificate of deposit from
04:21:34PM **10**	a financial institution.
04:21:35PM **11**	Q. And where do they get the money to do that?
04:21:37PM **12**	A. It's under their control.
04:21:43PM **13**	Q. But where, okay? Where is the money derived from by which
04:21:48PM **14**	they are able to invest $335 million in banks?
04:21:53PM **15**	A. I understand. In other words, where is the money before
04:21:56PM **16**	they buy the CD?
04:21:57PM **17**	Q. Precisely.
04:21:58PM **18**	A. It would be in the Treasury.
04:21:59PM **19**	Q. Okay. So you have Treasury funds and they come in through
04:22:06PM **20**	normal deposit streams just like other Treasury funds into the
04:22:10PM **21**	Department of Treasury, correct?
04:22:14PM **22**	MR. SIEMIETKOWSKI: Your Honor, objection to the
04:22:15PM **23**	mischaracterization of the testimony. I don't believe the
04:22:18PM **24**	witness testified they were Treasury funds. I believe he
04:22:20PM **25**	testified --

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04:22:21PM **1**	THE COURT: Overruled. He can answer if he can.
04:22:23PM **2**	BY MR. HARPER:
04:22:24PM **3**	Q. Let me rephrase the question. These funds are funds that
04:22:28PM **4**	belong to individual Indians, correct?
04:22:31PM **5**	A. That's right. That's why they're classified as deposit
04:22:33PM **6**	funds.
04:22:34PM **7**	Q. But the title of the funds are held by the United States
04:22:38PM **8**	government, correct?
04:22:38PM **9**	A. What do you mean, the title of the funds?
04:22:40PM **10**	Q. You never heard of that term, title of the funds?
04:22:43PM **11**	MR. SIEMIETKOWSKI: Objection, your Honor. Counsel
04:22:45PM **12**	had tried earlier to establish the lack of knowledge of the
04:22:47PM **13**	witness in this particular field. Now he's pursuing a line of
04:22:51PM **14**	questioning in the same field.
04:22:52PM **15**	THE COURT: He's opening a door. You can drive right
04:22:54PM **16**	through it on redirect if you think it's appropriate.
04:22:59PM **17**	THE WITNESS: Can you explain what you mean by the
04:23:01PM **18**	term "title of funds"?
04:23:02PM **19**	BY MR. HARPER:
04:23:02PM **20**	Q. Well, let me ask, do you know, do you not know what that
04:23:05PM **21**	term means?
04:23:06PM **22**	A. Title of funds?
04:23:09PM **23**	Q. Who holds the title for these funds?
04:23:11PM **24**	A. No, I'm not familiar with that term.
04:23:13PM **25**	Q. These funds come into the Department of Treasury through

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04:23:19PM **1** various commercial banks that are where deposits are made and

04:23:23PM **2** they are then credited to Treasury accounts, correct?

04:23:26PM **3** **A.** They would be credited to the 6039 account at the Treasury.

04:23:33PM **4** **Q.** Well, first they would just come in to the TGA, correct,

04:23:36PM **5** like all funds collected and deposited, they would come in first

04:23:40PM **6** to the TGA and then credited?

04:23:43PM **7** **A.** I'm not familiar enough with the TGA to speak to that, Mr.

04:23:46PM **8** Harper.

04:23:47PM **9** **Q.** So you wouldn't know one way or the other whether or not

04:23:49PM **10** when funds initially come in to the Department of Treasury that

04:23:53PM **11** are ultimately, as you put it, in funds in banks, that they

04:23:57PM **12** first go to the TGA account, you wouldn't know that one way or

04:24:02PM **13** the other?

04:24:02PM **14** **A.** I'm not familiar enough with the workings of the TGA

04:24:05PM **15** account to comment on that.

04:24:06PM **16** **Q.** And you wouldn't know that if monies were somehow not

04:24:09PM **17** properly credited to 14X6039 once after the TGA you would have

04:24:15PM **18** no idea whether those monies are either still in the TGA or

04:24:18PM **19** credited some other place in Treasury, correct, you just don't

04:24:21PM **20** have the familiarity with that?

04:24:22PM **21** **A.** As I testified, I'm not that familiar with the Treasury

04:24:29PM **22** accounts system once funds have entered the Treasury. Speaking

04:24:33PM **23** in terms of the broad federal central accounting system, I am

04:24:36PM **24** not.

04:24:38PM **25** **Q.** Do you know what the term "deposit fund" is?

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04:24:43PM **1** **A.** Yes, I am familiar with that term.

04:24:45PM **2** **Q.** And what is the deposit fund?

04:24:47PM **3** **A.** A deposit fund refers to monies that are held by the

04:24:51PM **4** federal government for individuals or institutions outside the

04:24:57PM **5** government. In other words, it is not government funds. It's

04:25:01PM **6** restricted on what they could do with the money because it is a

04:25:04PM **7** deposit fund.

04:25:05PM **8** **Q.** And are those funds that are in deposit funds, are think

04:25:12PM **9** considered, quote/unquote, available to the Treasury, end quote?

04:25:19PM **10** **A.** I'm not sure what is meant by that phrase.

04:25:26PM **11** **Q.** So you've not heard the phrase "available to the Treasury"?

04:25:29PM **12** **A.** I've heard the phrase before. I'm not sure if I understand

04:25:34PM **13** exactly its meaning in this context.

04:25:38PM **14** **Q.** But what it's fair to say is that the $335 million here as

04:25:46PM **15** is under the head IIM system funds in banks went through

04:25:51PM **16** necessarily the Treasury department first?

04:25:54PM **17** **A.** Well, I think it's fair to say that before the money could

04:26:03PM **18** be invested it first had to be selected by the Bureau of Indian

04:26:06PM **19** Affairs in some manner and would have been deposited to the 6039

04:26:12PM **20** account and it then becomes available for investment.

04:26:15PM **21** **Q.** At the Department of Treasury?

04:26:17PM **22** **A.** It becomes available for investment by the BIA.

04:26:22PM **23** **Q.** But you understand that the 14X6039 is an account held at

04:26:28PM **24** the Department of Treasury, you do understand that?

04:26:28PM **25** **A.** I understand that. I think it's a question of who controls

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04:26:30PM **1** that money and makes the investment decisions, which was the

04:26:33PM **2** BIA.

04:26:35PM **3** **Q.** Okay. Making the decision is one thing but who holds the

04:26:41PM **4** money is a different thing as you just testified, fair

04:26:43PM **5** statement?

04:26:43PM **6** **A.** Fair statement.

04:26:44PM **7** **Q.** Okay. So it's fair to say that when you use a term like

04:26:56PM **8** these headings here, they may mean different things in different

04:27:00PM **9** periods, fair statement?

04:27:05PM **10** **A.** Yes, it's a general category, and as we've just discussed,

04:27:08PM **11** there are some differences between the different periods, yes.

04:27:11PM **12** **Q.** Some important differences, no?

04:27:12PM **13** **A.** I suppose it depends on how you understand the term

04:27:19PM **14** "important." I mean, that's a judgment call.

04:27:22PM **15** **Q.** Do you know, Dr. Kehoe, what is meant by the term "Treasury

04:28:06PM **16** depository"?

04:28:06PM **17** **A.** Yes, I'm familiar with that term.

04:28:08PM **18** **Q.** These funds that are invested in commercial banks, when

04:28:14PM **19** they first enter the Department of Treasury do they enter

04:28:18PM **20** through Treasury depositories?

04:28:20PM **21** **A.** Well, if they're being deposited to the Treasury I believe

04:28:25PM **22** they would have to be deposited through a Treasury depository,

04:28:29PM **23** an official government depository.

04:28:31PM **24** **Q.** Can we bring up PX 136 on the front cover, please?

04:28:55PM **25** Dr. Kehoe, do you recognize this document?

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04:28:57PM **1** **A.** I don't believe I've seen it before.

04:29:06PM **2** **Q.** And do you know approximately how many Treasury

04:29:14PM **3** depositories there are presently?

04:29:17PM **4** **A.** No, I do not.

04:29:19PM **5** **Q.** Would it surprise you that there were about five hundred

04:29:25PM **6** back at this date, 1985?

04:29:32PM **7** **A.** No, I wouldn't say that surprises me.

04:29:34PM **8** **Q.** For the record, this is PX 136, and it's a General

04:29:40PM **9** Accounting Office document, Report to the Secretary of the

04:29:41PM **10** Treasury entitled Improvements Needed in Controlling and

04:29:45PM **11** Accounting for Treasury Banking Arrangements. If I could turn

04:29:49PM **12** your attention to page twelve of this document.

04:29:55PM **13** MR. SIEMIETKOWSKI: Objection, your Honor; foundation.

04:29:57PM **14** The witness has said he's not familiar with the document and yet

04:30:01PM **15** counsel is asking the witness to testify regarding the document.

04:30:04PM **16** THE COURT: Well, let's see what the question is.

04:30:07PM **17** BY MR. HARPER:

04:30:15PM **18** **Q.** If you can just read that to yourself, Dr. Kehoe, and let

04:30:19PM **19** me know when you are ready.

04:30:37PM **20** **A.** I have read it.

04:30:38PM **21** **Q.** So basically we have FRBs and we have supplementing those

04:30:43PM **22** all these commercial banks that accept deposits on behalf of the

04:30:46PM **23** Treasury department, correct? I mean, that is how you read

04:30:48PM **24** that?

04:30:48PM **25** **A.** Yes.

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04:30:49PM **1**   Q.   And those would be the places that you just identified were

04:30:54PM **2**   individual Indian monies would go into the Treasury department,

04:30:57PM **3**   fair statement?

04:30:58PM **4**   A.   I believe that's how the system works.

04:31:00PM **5**   Q.   And so these funds that you're saying this latter period

04:31:04PM **6**   until 1985 on DX 497, 0010, 1967 to 1985, they would first enter

04:31:15PM **7**   Treasury through this system and then they would ultimately get

04:31:20PM **8**   invested in various commercial banks, fair statement?

04:31:23PM **9**   A.   I think that's accurate.

04:31:25PM **10**   Q.   Now, are you familiar with the practice by which banking

04:31:47PM **11**   services on behalf of the United States are compensated for by

04:31:55PM **12**   investing monies that do not earn interest, are you familiar

04:31:59PM **13**   with that practice?

04:31:59PM **14**   A.   No, I am not.

04:32:01PM **15**   Q.   So if I could turn to page four of this same document. And

04:32:30PM **16**   we can go down to the seventh bullet point and just the first

04:32:37PM **17**   two sentences. Yes. So here it says, I'll just read the two

04:32:48PM **18**   sentences into the record: FMS pays for banking services with

04:32:55PM **19**   compensating balances, i.e. -- it doesn't say "i.e." -- non-

04:33:01PM **20**   interest bearing deposits at the bank. These balances are not a

04:33:04PM **21**   part of the FMS appropriation and FMS does not include them in

04:33:10PM **22**   its budget. You can continue to read for context.

04:33:16PM **23**   MR. SIEMIETKOWSKI: Your Honor, we have an objection

04:33:17PM **24**   as to relevance. This is not tied, I don't believe, to IIM.

04:33:26PM **25**   THE COURT: I'm going to allow it.

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04:33:29PM **1**   BY MR. HARPER:

04:33:30PM **2**   Q.   Did you have any knowledge prior to reading this of this

04:33:33PM **3**   practice?

04:33:33PM **4**   A.   No, I did not.

04:33:34PM **5**   Q.   One other question. If we can turn yet again back to the

04:34:15PM **6**   DX-49710. Concentrating once again, Dr. Kehoe, your attention

04:34:26PM **7**   to this page, do you understand how or do you have any knowledge

04:34:37PM **8**   as to how funds from here would then get disbursed to a

04:34:41PM **9**   beneficiary?

04:34:42PM **10**   A.   Well, this is an investment so the investment would have to

04:34:53PM **11**   be cashed in, you might say. In other words, the certificate of

04:34:58PM **12**   deposit is allowed to expire and the bank pays the money and

04:35:03PM **13**   interest to the BIA and then if a disbursement is appropriate

04:35:09PM **14**   one is made or many are made.

04:35:13PM **15**   Q.   Once you get back the returns from your investment, where

04:35:23PM **16**   are the returns placed?

04:35:25PM **17**   A.   In the Treasury, I believe.

04:35:28PM **18**   Q.   Do you know which account at the Department of Treasury?

04:35:28PM **19**   A.   I assume it would be 6039.

04:35:31PM **20**   Q.   But you don't know one way or the other?

04:35:34PM **21**   A.   Based on my knowledge of the Bureau of Indian Affairs, that

04:35:40PM **22**   would seem to be logical that we go to 63039. I mean, that is

04:35:44PM **23**   the account for IIM.

04:35:45PM **24**   Q.   And once the check is made out to an individual beneficiary

04:35:48PM **25**   then where do the funds go?

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04:35:54PM **1**   A.   It goes to the Indian when it's disbursed.

04:35:57PM **2**   Q.   A check is sent and it goes to the Indian once he receives

04:36:00PM **3**   and cashes it, correct?

04:36:01PM **4**   A.   Well, I believe it's the Treasury's bookkeeping practice

04:36:10PM **5**   that once a check is cut and leaves their system the

04:36:15PM **6**   disbursement is considered complete, unlike a bank where the

04:36:19PM **7**   disbursement is not considered complete and credited until that

04:36:22PM **8**   check is presented for payment.

04:36:25PM **9**   Q.   But once the check is issued and sent out to the

04:36:31PM **10**   beneficiary if there is a lapse in time where are the funds

04:36:39PM **11**   held, if you know? If you don't know just say you don't know.

04:36:43PM **12**   MR. SIEMIETKOWSKI: I'm going to object. This is

04:36:45PM **13**   beyond the scope of my direct even with regard to the questions

04:36:49PM **14**   I had asked regarding Treasury.

04:36:51PM **15**   MR. HARPER: Your Honor, you allowed at least two --

04:36:54PM **16**   THE COURT: It's cross. Go ahead.

04:36:55PM **17**   THE WITNESS: Refresh my memory, Mr. Harper. Would

04:36:58PM **18**   you mind rephrasing that question? Just state the same question

04:37:01PM **19**   again.

04:37:01PM **20**   BY MR. HARPER:

04:37:01PM **21**   Q.   You testified that these securities get redeemed?

04:37:04PM **22**   A.   Okay.

04:37:05PM **23**   Q.   They or the investment in the banks get redeemed. That

04:37:11PM **24**   goes into, in your view, 14X63039. Once a check is cut and it

04:37:19PM **25**   is sent out where do the funds go at that point?

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04:37:23PM **1**   A.   As I stated, my understanding is that the Treasury

04:37:27PM **2**   department has treated check disbursements as leaving their

04:37:32PM **3**   system once the check is cut. Therefore, from an accounting

04:37:36PM **4**   standpoint, I would have to say that the money has then left the

04:37:39PM **5**   IIM system once that check is cut.

04:37:42PM **6**   Q.   So for a six-month period it's where would you find those

04:37:47PM **7**   funds where is it, where are those funds credited, they're just

04:37:52PM **8**   not credited anywhere?

04:37:53PM **9**   A.   Well, they're considered to be in the hands of the Indian

04:37:55PM **10**   to whom the check was sent.

04:37:57PM **11**   Q.   Well, we'll talk a little bit about that further later and

04:38:01PM **12**   I'll show you some testimony and see if you agree with that.

04:38:07PM **13**   Now I want to talk a little bit further about your

04:38:20PM **14**   exhibit here, DX 4970010. And you had testified regarding --

04:38:31PM **15**   actually, let's turn back to page four of this exhibit. Dr.

04:38:44PM **16**   Kehoe, is that all the information you were able to uncover from

04:38:50PM **17**   various places, is all the information you were able to uncover

04:38:54PM **18**   in this chart?

04:38:56PM **19**   A.   This is all the data that I was able to locate which I

04:39:03PM **20**   believe provides a complete picture of where IIM is at in a

04:39:08PM **21**   particular year.

04:39:09PM **22**   Q.   So this would not include then, is it fair to say,

04:39:15PM **23**   information where you had one column but not the others?

04:39:17PM **24**   A.   That's right. I did not include years for which we had a

04:39:20PM **25**   partial picture.

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04:39:21PM **1**	**Q.** Okay. And I'd like to bring up PX 124. Dr. Angel, do you
04:39:46PM **2**	recognize this report?
04:39:47PM **3**	**A.** You mean --
04:39:49PM **4**	**Q.** I'm sorry. Dr. Kehoe. I saw "Angel" here and I misspoke.
04:39:54PM **5**	Dr. Kehoe, do you recognize this report?
04:39:56PM **6**	**A.** Yes, I do.
04:39:57PM **7**	**Q.** And you're the drafter of this document?
04:40:02PM **8**	**A.** Yes, I am.
04:40:03PM **9**	**Q.** And would it be fair to say that one of the things this
04:40:09PM **10**	document tries to do is talk about the investment history of IIM
04:40:14PM **11**	funds?
04:40:14PM **12**	**A.** That's right, with the focus on banks, less so on
04:40:18PM **13**	securities.
04:40:19PM **14**	**Q.** And it also talks a little bit about how at various stages
04:40:27PM **15**	there were people who were trying to get the highest return for
04:40:30PM **16**	investment, is that a fair statement?
04:40:32PM **17**	**A.** Yes, it is.
04:40:33PM **18**	**Q.** And that goes all the way back to these funds being kind of
04:40:36PM **19**	regularly invested in the early 1900s?
04:40:40PM **20**	**A.** I would say that's a true statement.
04:40:42PM **21**	**Q.** And even before that there were investments made?
04:40:46PM **22**	**A.** You say "before that." How far back are you referring to?
04:40:50PM **23**	**Q.** How far back would you say that they went?
04:40:53PM **24**	**A.** Well, I have seen documents discussing depositing IIM in
04:40:59PM **25**	banks as early as 1899. I could not speak to twenty years

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04:42:30PM **1**	**Q.** And what was the reason for that?
04:42:33PM **2**	**A.** Well, for one thing -- can I see the footnote to that
04:42:42PM **3**	quotation or that statement that you showed me?
04:42:45PM **4**	**Q.** Sure.
04:42:51PM **5**	**A.** Those are figures in a letter, so it's not the end of a
04:42:53PM **6**	fiscal year as my other data is. That would be one reason for
04:42:57PM **7**	not including it. All of the other data is for the end of the
04:43:01PM **8**	fiscal year. That figure he gave for securities looks like this
04:43:05PM **9**	is from a January 23 letter.
04:43:07PM **10**	**Q.** Okay. So all your figures and all your charts are
04:43:12PM **11**	end-of-fiscal-year figures?
04:43:13PM **12**	**A.** I believe.
04:43:16PM **13**	**Q.** But this is a snapshot figure and those are snapshot
04:43:20PM **14**	figures, correct?
04:43:21PM **15**	**A.** That's true, but I think you want to have a snapshot of the
04:43:25PM **16**	same period the exact same time.
04:43:27PM **17**	**Q.** Because you're using different months with different --
04:43:32PM **18**	**A.** Different time periods you might not get an accurate
04:43:35PM **19**	picture.
04:43:35PM **20**	**Q.** But this is really a balance, correct?
04:43:37PM **21**	**A.** That shows at that point in time how much is in securities,
04:43:41PM **22**	if I'm reading this correctly.
04:43:42PM **23**	**Q.** Okay. Let me ask you a couple questions about that notion
04:43:49PM **24**	of a snapshot, and that does not, the values there associated
04:43:54PM **25**	with those securities, are those face value of the securities?

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04:41:03PM **1**	before that.
04:41:04PM **2**	**Q.** So you wouldn't know before 1899, but since 1899 there's
04:41:11PM **3**	been regular investment, is that fair?
04:41:12PM **4**	**A.** Yes, that's fair to say.
04:41:14PM **5**	**Q.** Now I want to turn your attention to page fifteen of this
04:41:23PM **6**	document. I'm sorry, it's page sixteen. I'm sorry, page
04:41:34PM **7**	seventeen.
04:41:34PM **8**	**A.** Mr. Harper, I get the sense that there might be a lot of
04:41:40PM **9**	questions on this report. If that's the case, would I be able
04:41:40PM **10**	to get a paper copy to use?
04:41:46PM **11**	**Q.** Let's see how it goes and then if you like -- I only have
04:41:46PM **12**	my one marked-up copy with me. I don't think you're going to
04:41:50PM **13**	have as many questions on this as you may think.
04:41:52PM **14**	**A.** Okay.
04:41:52PM **15**	**Q.** And if it turns out differently, then we'll be glad to
04:41:56PM **16**	provide one.
04:41:57PM **17**	If you can turn your attention down to the bottom of
04:42:00PM **18**	the page, and you note here that by 1926, Commissioner Merit
04:42:09PM **19**	reports $27 million in monies held in trust for individual
04:42:14PM **20**	Indians are invested at the present time in United States bonds
04:42:18PM **21**	and notes.
04:42:22PM **22**	**A.** Yes, I see that.
04:42:23PM **23**	**Q.** And now you did not include this information in your chart,
04:42:28PM **24**	though, correct?
04:42:29PM **25**	**A.** No, I did not.

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04:43:57PM **1**	**A.** I don't believe he specifies how they were valued.
04:44:01PM **2**	**Q.** You don't know if it's the value at the purchase or at the
04:44:08PM **3**	redemption?
04:44:08PM **4**	**A.** No. You cannot tell from that statement.
04:44:10PM **5**	**Q.** What about with respect to your numbers that you use in
04:44:14PM **6**	your chart?
04:44:14PM **7**	**A.** These were the numbers taken from government documents, and
04:44:24PM **8**	I don't recall any descriptive term explaining exactly how the
04:44:29PM **9**	securities were valued.
04:44:31PM **10**	**Q.** But you understood there was a significant difference
04:44:35PM **11**	between the purchase price of the government's security and what
04:44:38PM **12**	you would get --
04:44:40PM **13**	**A.** It could be the actual market value might be quite
04:44:43PM **14**	different from the price paid for the security.
04:44:45PM **15**	**Q.** So you don't know whether these are the purchase price or
04:44:49PM **16**	the redemption value?
04:44:51PM **17**	**A.** I could not say.
04:44:52PM **18**	**Q.** Okay. Now, if we can turn back to your Power Point, DX 497
04:45:13PM **19**	and 004 again, and now I want to concentrate a little bit on the
04:45:23PM **20**	middle line there. You have there a number of IIM system funds,
04:45:32PM **21**	47.41 percent, dollar value $35 million, and this is for the
04:45:40PM **22**	year 1928. Do you see that?
04:45:42PM **23**	**A.** That's correct.
04:45:42PM **24**	**Q.** Okay. These securities are held principally by the
04:45:47PM **25**	Treasury department, fair statement?

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04:45:50PM **1** **A.** It was procedure at the time for the BIA to send the stock

04:45:55PM **2** certificates -- you'll get an actual certificate of some kind --

04:45:59PM **3** to the treasurer of the United States to hold for safekeeping.

04:46:02PM **4** **Q.** So it was the policy of the United States to have these at

04:46:08PM **5** the Department of Treasury?

04:46:09PM **6** **A.** Yes.

04:46:12PM **7** **Q.** If we can bring up PX 135.

04:46:35PM **8** Dr. Kehoe, do you recognize this document?

04:46:36PM **9** **A.** Yes, I do.

04:46:37PM **10** **Q.** And could you explain what this document is?

04:46:40PM **11** **A.** This was a report from the comptroller general, that is the

04:46:45PM **12** General Accounting Office, on its examination of Indian trust

04:46:50PM **13** funds.

04:46:51PM **14** **Q.** And you've relied on this report significantly, is that a

04:47:05PM **15** fair statement, in your reporting?

04:47:07PM **16** **A.** It is a standard source and I have used it, that is

04:47:14PM **17** correct.

04:47:14PM **18** **Q.** If I could turn your attention to page 84 of this document.

04:47:26PM **19** Now, as you'll recall the IIM system funds invested in federal

04:47:31PM **20** securities on your DX 497004 had a dollar figure of $35,400,177,

04:47:41PM **21** and was that taken from this report?

04:47:43PM **22** **A.** It is. Not this page, but it's from the report.

04:47:46PM **23** **Q.** Okay. And as you scroll down the page to the highlighted

04:47:52PM **24** section on the bottom, again, that's the reference where they

04:47:54PM **25** make clear that the vast majority of those funds, some 32

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04:47:59PM **1** million, was found in the custody of the Treasury department?

04:48:02PM **2** **A.** That is correct.

04:48:03PM **3** **Q.** And indeed isn't it true that it was considered not proper

04:48:13PM **4** internal controls to hold these securities by superintendents?

04:48:18PM **5** **A.** Generally they were supposed to be forwarded to Washington

04:48:25PM **6** for safekeeping by the treasurer. The Osage agency might be one

04:48:31PM **7** exception. They were permitted by a couple of laws in the 1920s

04:48:31PM **8** to invest IIM outside of federal securities, so if money was

04:48:35PM **9** invested it stayed in Oklahoma state bond in a real estate

04:48:42PM **10** mortgage those securities might be held at Osage in order to be

04:48:44PM **11** considered acceptable.

04:48:46PM **12** **Q.** And this would be true for all other periods on your line

04:49:03PM **13** there, that most -- excuse me -- not the funds, but most of the

04:49:10PM **14** investments are basically held by the Treasury department, is

04:49:14PM **15** that a fair statement?

04:49:15PM **16** **A.** At least through the end of the 1950s. I've collected a

04:49:18PM **17** number of audit reports from the Treasury of the United States

04:49:21PM **18** to the BIA reporting on their holdings of federal securities

04:49:25PM **19** that the BIA could check it against its own records.

04:49:29PM **20** **Q.** By the way, has this report that you did -- I meant to ask

04:49:49PM **21** you this when I had it up and I forgot. What we identified as

04:49:55PM **22** PX 124 -- we don't have to put it up, but it's the IIM policy

04:49:59PM **23** report that's been updated and finalized?

04:50:02PM **24** **A.** I have updated the report, yes.

04:50:03PM **25** **Q.** And what year have you brought it up-to-date to?

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04:50:08PM **1** **A.** In the revised report I attempted to bring the narrative up

04:50:15PM **2** to the present day, that is, 2008.

04:50:17PM **3** **Q.** Now I'd like to go back to some of the questions we had

04:50:32PM **4** before about the practices of how money moves, IIM money

04:50:38PM **5** specifically, within the Department of Treasury. Are you

04:50:43PM **6** familiar with a gentleman by the name of --

04:50:46PM **7** MR. SIEMIETKOWSKI: Objection, your Honor; beyond the

04:50:48PM **8** scope of my direct and of this witness' knowledge.

04:50:59PM **9** THE COURT: Sustained as to the scope of the direct.

04:51:17PM **10** BY MR. HARPER:

04:51:52PM **11** **Q.** Dr. Kehoe, when funds come in to the IIM system, we had

04:51:59PM **12** talked a little bit earlier about how they come in to the

04:52:04PM **13** Department of Treasury. Do you recall that discussion?

04:52:04PM **14** **A.** Yes, I do.

04:52:05PM **15** **Q.** Okay. And I'd like to bring up some testimony of

04:52:12PM **16** Commissioner Greg from the Department of Treasury.

04:52:17PM **17** MR. SIEMIETKOWSKI: Same objection, your Honor.

04:52:19PM **18** MR. HARPER: Your Honor?

04:52:20PM **19** THE COURT: I'll hear you, Mr. Harper. Where are you

04:52:26PM **20** going with this? I mean, you're talking about movement of

04:52:29PM **21** money. He's disclaimed any expertise in that.

04:52:32PM **22** MR. HARPER: Well, your Honor, I think that even

04:52:34PM **23** though there weren't specific questions on it, during the direct

04:52:39PM **24** they went over it and what was moved into evidence was an

04:52:42PM **25** exhibit which contained some information, and I think it is

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04:52:47PM **1** intended to give the idea that when funds are held in commercial

04:52:50PM **2** banks there is no way for the government to get benefit from

04:52:55PM **3** those funds, but I think the answer to that is that the way

04:53:01PM **4** money goes in and out of the Department of Treasury that ends up

04:53:05PM **5** in that $335 million in 1985 held by banks is the way in which

04:53:12PM **6** you can have funds going to other accounts that aren't credited

04:53:17PM **7** there, so I want to ask this witness if he's familiar with how

04:53:21PM **8** those things go in and out, and it answers directly his exhibit.

04:53:27PM **9** THE COURT: Go ahead and ask the question, but here's

04:53:30PM **10** what I understand to be the record on this so far. The

04:53:34PM **11** plaintiffs' theory of benefit to the government is that funds on

04:53:41PM **12** deposit with the Treasury eliminate the need for Treasury to

04:53:45PM **13** borrow those monies at the ten-year T bill rate or whatever that

04:53:50PM **14** rate was. That's the theory of the plaintiffs', benefit to the

04:53:54PM **15** government case. Now, the question I suppose is whether monies

04:53:59PM **16** held by the Treasury in banks fulfills the same function, and

04:54:05PM **17** I'm not sure that this witness or any witness I've heard yet

04:54:09PM **18** answers that question. If money is being held in banks drawing

04:54:13PM **19** interest it's an interesting concept that the government can

04:54:17PM **20** sort of double-count the money that is drawing interest and be

04:54:24PM **21** able to borrow money on it. That's a pretty good trick. That's

04:54:32PM **22** the level of my interest in this subject. If this witness knows

04:54:37PM **23** anything about these subjects, go ahead, feel free. Have a

04:54:42PM **24** field day.

04:54:43PM **25** MR. HARPER: Well, your Honor, I have a couple

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04:54:48PM **1** questions. If they're not helpful to the Court I'll move on.

04:54:53PM **2** BY MR. HARPER:

04:54:53PM **3** **Q.** If can I turn your attention to July 7, 1999, Commissioner

04:55:00PM **4** Greg's testimony, if we can.

04:55:04PM **5** MR. SIEMIETKOWSKI: For the record, your Honor, we'd

04:55:06PM **6** like to add a hearsay objection as well.

04:55:07PM **7** THE COURT: Your objection is noted in perpetuity.

04:55:13PM **8** Go ahead.

04:55:16PM **9** BY MR. HARPER:

04:55:17PM **10** **Q.** This is an in-court statement, your Honor. If we can turn

04:55:50PM **11** to 3350 starting at the top and through line 11, and you can

04:56:07PM **12** just let me know when you've had a chance to read that.

04:56:25PM **13** **A.** I've read it.

04:56:26PM **14** **Q.** Is that consistent with your understanding?

04:56:34PM **15** **A.** I'm not sure that I completely understand Mr. Greg's

04:56:43PM **16** discussion of the money flow here.

04:56:47PM **17** **Q.** Okay, so you would agree that he says Treasury general

04:56:51PM **18** accounts, the money flows into Treasury general accounts and

04:57:00PM **19** then into the OTFM account, and that would be what we talked

04:57:00PM **20** about earlier, 14X6039 to the extent that it was credited

04:57:05PM **21** properly, correct?

04:57:06PM **22** **A.** Okay.

04:57:07PM **23** **Q.** So you understand that part. What part do you not

04:57:15PM **24** understand of that or have a question about?

04:57:17PM **25** **A.** When he's talking about, quote, what we call the Treasury

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04:57:29PM **1** general accounts and commercial banks, end quote, I'm not sure

04:57:35PM **2** exactly what that means.

04:57:47PM **3** **Q.** And I'll move on.

04:57:49PM **4** **A.** If I can bring up --

04:57:55PM **5** **Q.** Before I bring up the exhibit, what does the term "public

04:58:00PM **6** monies" mean to you?

04:58:02PM **7** **A.** I understand public monies to mean government money, money

04:58:10PM **8** that is owned in effect by the government. They can do with it

04:58:16PM **9** as they please. It is their money. It's public monies.

04:58:19PM **10** **Q.** And you understand individual Indians trust funds for

04:58:22PM **11** purposes of rules related to how money is used were generally

04:58:30PM **12** considered public monies, correct?

04:58:32PM **13** **A.** No, that's not my understanding. There was a series of

04:58:38PM **14** exchanges early in the 20th century on this very issue and the

04:58:41PM **15** BIA wanted IIM to be considered public money but the Treasury

04:58:44PM **16** department was pretty firm that it should not be classified as

04:58:49PM **17** such.

04:58:49PM **18** **Q.** If I could put bring up PX 134.

04:59:00PM **19** And this is the best copy we have, your Honor.

04:59:04PM **20** It's an, as you can see from the top, it's a

04:59:07PM **21** comptroller general of the United States report. If we can go

04:59:11PM **22** up to the top part with the date. This looks like 1928. Dr.

04:59:19PM **23** Kehoe, do you recognize this document?

04:59:21PM **24** **A.** Not at this point. Maybe as we read through it it might

04:59:28PM **25** become familiar to me.

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04:59:29PM **1** **Q.** Starting off by quoting on the first highlighted paragraph,

04:59:35PM **2** a law called section of two, I believe, if I'm reading that

04:59:41PM **3** right, after you read this could you tell me whether you

04:59:45PM **4** recognize that law?

04:59:48PM **5** **A.** I've read the paragraph and I cannot recall seeing this

05:00:28PM **6** before.

05:00:29PM **7** **Q.** Okay. If you look down at the second highlighted

05:00:39PM **8** paragraph, and I'll read that into the record. The question has

05:00:45PM **9** arisen whether or not the term "public money" as outlined in the

05:00:49PM **10** above statute apply to funds of Indian pupils and other

05:00:54PM **11** individual Indian funds held in trust by disbursing officers of

05:00:58PM **12** the Indian service. While on this particular case the deposit

05:01:02PM **13** is held in the official credit of Mr. Brown and the Treasury.

05:01:06PM **14** These funds were carried in large measure in bonded depositories

05:01:13PM **15** scattered over the country, which are not subject to the

05:01:19PM **16** jurisdiction of the Treasury department. Do you see that?

05:01:22PM **17** **A.** May I have a moment?

05:01:26PM **18** **Q.** Yes, sure.

05:01:37PM **19** **A.** Well, he is referring to the above statute. I think this

05:01:47PM **20** might be a case, Mr. Harper, where I'd really like to see the

05:01:50PM **21** entire document to understand just how the phrase is being used.

05:01:54PM **22** **Q.** Sure.

05:01:55PM **23** MR. HARPER: Your Honor, could I get a copy of it?

05:02:03PM **24** THE COURT: It's five o'clock, Mr. Harper. How much

05:02:05PM **25** more do you have for this witness?

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05:02:07PM **1** MR. HARPER: I think I have about an hour more, your

05:02:09PM **2** Honor.

05:02:09PM **3** THE COURT: In that case we're not going to get an

05:02:11PM **4** answer to that question today. You can give him a copy of the

05:02:13PM **5** document.

05:02:14PM **6** MR. HARPER: I will do so.

05:02:15PM **7** THE COURT: That will be his homework assignment.

05:02:18PM **8** We'll reconvene tomorrow morning.

05:02:20PM **9** MR. SIEMIETKOWSKI: Your Honor, we would like to

05:02:22PM **10** request copies of and full copies of all the documents, exhibits

05:02:25PM **11** which plaintiffs are showing this witness.

05:02:27PM **12** THE COURT: Have shown or are showing?

05:02:30PM **13** MR. SIEMIETKOWSKI: Have shown and will show.

05:02:31PM **14** THE COURT: You know if he's on cross-examination

05:02:34PM **15** you're not going to prep him while he's on cross. You don't do

05:02:38PM **16** that. If he's on cross he's on cross. You're not to talk to

05:02:41PM **17** these people during cross-examination.

05:02:44PM **18** MR. SIEMIETKOWSKI: Your Honor, it's not so much to

05:02:46PM **19** prep the witness. It's rather for my own preparation.

05:02:48PM **20** THE COURT: You're a quick study. They'll show you

05:02:51PM **21** the documents when they show them to you.

05:02:53PM **22** MR. HARPER: Your Honor, I'll provide documents as I

05:02:55PM **23** go along.

05:02:57PM **24** THE COURT: Mr. Kirschman, I haven't seen you or heard

05:03:03PM **25** you for days.

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05:03:07PM 1   MR. KIRSCHMAN: So as not to disappoint you, your

05:03:10PM 2 Honor, I'd like to raise a procedural matter, and it goes back

05:03:12PM 3 to the argument yesterday and something you said during the

05:03:15PM 4 course of the recent testimony. Our next two witnesses are

05:03:23PM 5 intended to be Treasury employees who would address the issue of

05:03:27PM 6 benefit. Your Honor just made the statement related to Dr.

05:03:33PM 7 Kehoe's testimony that --

05:03:34PM 8   THE COURT: No, no, no. I want to hear them.

05:03:36PM 9   MR. KIRSCHMAN: That was my question, your Honor.

05:03:37PM 10   THE COURT: I want to hear them.

05:03:39PM 11   MR. KIRSCHMAN: They will be here tomorrow.

05:03:40PM 12   THE COURT: Okay.

05:03:42PM 13   All right. We'll adjourn until 9:30 tomorrow morning.

05:03:45PM 14 Thank you.

05:03:54PM 15   COURTROOM DEPUTY: This Honorable Court is adjourned.

05:03:57PM 16   (Proceedings adjourned at about 5:03 p.m.)

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15   E X H I B I T S

Defendants'
16 Exhibit
No.   Identification   Marked   Admitted
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18
DX 498   1094
19
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1   CERTIFICATE

2   I, JACQUELINE M. SULLIVAN, Official Court Reporter,

3 certify that the foregoing pages are a correct transcript from

4 the record of proceedings in the above-entitled matter.

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JACQUELINE M. SULLIVAN

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