

**Tab H**

Transcript of the Testimony of

**JOHN C. BEYER, Ph.D.**

Date: March 27, 2008

In Re: Ready-Mixed Concrete Antitrust Litigation  
v.

1 A From the author?  
 2 Q Uh-huh.  
 3 A It depends on the journal. Sometimes they are and  
 4 sometimes they are not.  
 5 Q Have you ever published in a journal any  
 6 peer-reviewed article?  
 7 A Yes. One is -- was in the -- both of these are  
 8 some time ago -- in the Journal of Economic  
 9 Development and Cultural Change, which is published  
 10 out of Chicago, University of Chicago, and the  
 11 other is the University of Yorkshire; it's a  
 12 bulletin of economic studies.  
 13 Q How long ago were those?  
 14 A In the 1960s or early 1970s, I don't recall without  
 15 going to my resume.  
 16 Q Are those set forth in the attachment to your  
 17 affidavit in this case?  
 18 A They probably are, but I don't know for a fact  
 19 whether they are.  
 20 Q Now, you're not an expert in econometrics, are you?  
 21 A I would not put forward myself as an expert in  
 22 econometrics, but as an applied micro-economist, I  
 23 use econometrics frequently, as do most  
 24 micro-economists who are doing empirical work. And  
 25 therefore, it is part of what I would consider the

1 A You must have been an union employee.  
 2 Q Indeed. International Brotherhood of Hod Carriers  
 3 and Laborers.  
 4 A See, you were lucky. I couldn't get a card.  
 5 MR. SHEVITZ: I can't let the occasion pass,  
 6 Dan, without telling you that I, too, at least --  
 7 it's questionable whether I'm still a member, but  
 8 I, too, was a member of that very same --  
 9 MR. BURNS: Is there a secret handshake?  
 10 MR. KELLEY: No. But I'll tell you what you  
 11 got, you got your medical. Because back then,  
 12 about 18, you no longer had medical, no matter what  
 13 your parents did. Right?  
 14 MR. SHEVITZ: Made a difference.  
 15 MR. KELLEY: Excuse us for going this way.  
 16 MS. STEINER: Well, I'm just wondering if  
 17 you're going to get along now better that you know  
 18 you're in the same brotherhood here, so...  
 19 MR. KELLEY: I wasn't aware that we didn't get  
 20 along.  
 21 MS. STEINER: No, no, no.  
 22 THE WITNESS: These two.  
 23 MR. KELLEY: Oh, us. We get along fabulously.  
 24 MR. SHEVITZ: We get along fine, but I decline  
 25 to be associated in any brotherhood with

1 arsenal analysis that many economists today use.  
 2 Q So you are not an expert in econometrics; is that  
 3 correct? Yes or no?  
 4 A As a court determines an expert, I would not  
 5 proffer myself as an expert. But I would hasten to  
 6 add, I use it all the time as a tool of analysis in  
 7 applied economics.  
 8 Q Other than this case, have you had any experience  
 9 in ready-mix concrete?  
 10 A Yes.  
 11 Q When was that, sir?  
 12 A In one -- during one of the summers when I was in  
 13 college, which I would like to forget.  
 14 Q Were you a hod carrier?  
 15 A No. I pulled concrete. And let me tell you, that  
 16 is a hard job.  
 17 Q I carried hod.  
 18 A Good for you. How much did it weigh?  
 19 Q It depended on the nature of the mortar and whether  
 20 it was going for block, brick, or otherwise.  
 21 A And we both got paid probably the same slave wages;  
 22 right?  
 23 Q I didn't consider it that.  
 24 A I got paid slave wages.  
 25 Q I didn't consider it that at all. Anyway...

1 Mr. Kelley.  
 2 MS. STEINER: For the record.  
 3 MR. KELLEY: All right.  
 4 Q So other than our rudimentary involvement with  
 5 ready-mix, neither you nor I have had any  
 6 involvement with ready-mix before this case; right?  
 7 A Well, that's not quite the case for me.  
 8 Q Okay.  
 9 A I don't know about you.  
 10 Q Yes.  
 11 A One of the important, or the most important raw  
 12 material in a ready-mixed concrete is cement, and I  
 13 have looked at the cement industry, studied it, not  
 14 only in the United States but a number of other  
 15 countries around the world.  
 16 Q And in regard -- when have you looked at the cement  
 17 industry?  
 18 A Last year or two.  
 19 Q For whom?  
 20 A For several different entities, one being a group  
 21 of Mexican users of cement, because they were  
 22 concerned -- direct purchasers of cement, concerned  
 23 that Cemex -- whether there was a concern there or  
 24 not, I don't know, but that Cemex was in a monopoly  
 25 position in Mexico, and wanted to see if there was

1 A I assumed what is in the complaint, and I took the  
 2 class definition as in the complaint. And I have  
 3 concluded that all purchasers of ready-mixed  
 4 concrete in the central Indiana area would be  
 5 impacted; would have paid, at some point during the  
 6 class period, a higher price than they would have  
 7 paid given the alleged conspiracy.  
 8 Q So you did assume that the conspiracy was to fix  
 9 prices to all class members. Correct?  
 10 A I didn't assume that. I came to the conclusion --  
 11 I took the definition of the class as it is in the  
 12 complaint, and then I examined would all -- all  
 13 purchasers of ready-mixed concrete be affected or  
 14 impacted, and my conclusion is yes. I didn't  
 15 assume it.  
 16 Q As you understand the complaint, does it allege  
 17 that there were any class members or customers as  
 18 to which there was no conspiracy to fix their  
 19 prices?  
 20 A My recollection is that the complaint is silent on  
 21 that. But there might have -- that there might  
 22 have been a certain category of purchasers of  
 23 ready-mixed cement who were not subject to the  
 24 cartel.  
 25 Q Did you assume, for the purposes of your report,

1 And then the supplemental materials most  
 2 recently is in terms of consumption, or cubic yards  
 3 of cement produced -- sold, I should say, by the  
 4 defendants over the period for which the data are  
 5 available for central Indiana.  
 6 Q So the purpose of what you were doing was to  
 7 investigate demand with respect to the central  
 8 Indiana area? Is that what I take your answer to  
 9 be?  
 10 A That would be, if the data were available, would  
 11 have been the most desirable thing to do.  
 12 Q That was what you were attempting to do; correct?  
 13 A Yes.  
 14 Q Is investigate demand --  
 15 A Yes.  
 16 Q -- for the central Indiana area.  
 17 A Yes.  
 18 Q And the central Indiana area is the area as defined  
 19 in the complaint. Is that correct, sir?  
 20 A Those ten counties, yes.  
 21 Q You said you initially investigated the consumption  
 22 of concrete, and you did that through the GDP  
 23 construction numbers?  
 24 A No. Well, actually I did it for central Indiana,  
 25 but I knew that I had incomplete data from the

1 the definitions set forth in paragraph 7  
 2 encompassing class, class period, ready-mixed  
 3 concrete, person, and central Indiana area?  
 4 A Yes. Those dimensions of the complaint, I did take  
 5 as given.  
 6 Q Did you investigate the demand for ready-mixed  
 7 concrete in any particular area for purposes of  
 8 your report?  
 9 A Yes.  
 10 Q And what area did you investigate that with respect  
 11 to?  
 12 A As I reported in my report, the information that  
 13 was available was for Indiana as a whole, at that  
 14 time, and it has since -- I have since improved  
 15 upon that with the additional electronic  
 16 transaction data that American and Builder's have  
 17 provided through the plaintiff attorneys to Nathan  
 18 Associates, and these are in the supplemental  
 19 materials that you received this morning, but that,  
 20 what was done at the Indiana level, showed concrete  
 21 consumption over a period of time, which is the  
 22 most direct method of examining the demand for it.  
 23 And then secondly, GDP in -- gross domestic  
 24 product in the construction sector for Indiana,  
 25 that was presented.

1 defendants as of the time my report was filed, so I  
 2 didn't report on it, but do now have it because  
 3 since I filed my report additional transaction data  
 4 from the defendants, namely American and Builder's,  
 5 have been available.  
 6 But I also looked at consumption of  
 7 ready-mixed concrete in Indiana as a whole. I  
 8 don't recall the source exactly, but we can look --  
 9 turn to my report for that, it's shown in the  
 10 table.  
 11 And then separately there was an examination  
 12 of the gross domestic product output of Indiana,  
 13 and specifically in the construction sector, which  
 14 represents the area in which ready-mixed concrete  
 15 obviously is going to be used.  
 16 Q Did you conduct an investigation as to the best  
 17 available data?  
 18 A Yes.  
 19 Q How did you do that?  
 20 A Well, I knew the best available data would be from  
 21 the defendants, but since it was incomplete at the  
 22 time of my report, I did not report in that  
 23 affidavit the defendants' data.  
 24 Q So it's since that time that you have attempted to  
 25 collect the defendants' data?

1 not the construction industry but of construction,  
 2 changes that occur over time, both residential and  
 3 commercial, which is -- and I did not find in  
 4 that -- those indices any substantial difference,  
 5 either up or down, from what had been reported in  
 6 either the Ready-Mix Concrete Association of  
 7 Indiana's Indiana-wide ready-mixed concrete  
 8 production, or in the broader measure of GDP in  
 9 construction for Indiana.

10 Q Ready Mix Concrete Association numbers that you  
 11 just referred to, are they cited in your report?  
 12 A There's a table in the report, yes. I'm not sure  
 13 of the source. I assume -- if I could look at the  
 14 report, I can quickly tell you that source.

15 Q I'll show you what's been marked as Exhibit 164,  
 16 and ask you if that's your report.

17 A It is.  
 18 (Exhibit 164 was marked for identification.)

19 A It's Table 2 in the appendix -- it's referred to in  
 20 the text as well, but it shows the source of this  
 21 is the National Ready Mix Concrete Association,  
 22 which is shown in the table.

23 Q For the whole state of Indiana, if I understand it?  
 24 A Yes.

25 Q The Bureau of Census data for the nine counties

1 that you say you referred to, is that cited  
 2 anywhere in this report?

3 A No, I don't think so. It's more than nine  
 4 counties. The statistical -- the standard  
 5 metropolitan statistical area of Indianapolis is 11  
 6 or 12 counties.

7 Q In a Bureau of Census report of some sort; is that  
 8 right?

9 A The Bureau of the Census reports a lot of  
 10 information online, and there are various sources,  
 11 categories, and --

12 Q Which one did you look at?

13 A The information that's related to SMSAs, standard  
 14 metropolitan statistical areas.

15 Q And what report, with respect to that area, was it  
 16 that -- or group of statistics was it that you were  
 17 relying on?

18 A It was a measure of construction activity in the  
 19 SMSA as a whole over a period of time.

20 Q What period of time was this with respect to, sir?

21 A SMSA?

22 Q Yes. That you looked at.

23 A That I -- actually there's quite a history  
 24 available for a number of the indices on the SMSA,  
 25 but I was focusing mainly from 1999 through 2005.

1 Q According to your investigation, what are the  
 2 variable cost components insofar as manufacturing  
 3 ready-mixed cement?

4 MR. SHEVITZ: You mean concrete.

5 Q Excuse me, ready-mixed concrete.

6 A It's good that we get the right product.

7 Q It's difficult for a poor old man like me.

8 A I understand that completely. I can identify that.

9 Q Yes.

10 A The largest variable cost is cement. The next  
 11 largest variable cost is aggregates, which is a  
 12 combination of sand, different size gravel and  
 13 stone. And usually the next component will be  
 14 labor, that may or may not be a variable cost.  
 15 Some of the labor is fixed, or what economists  
 16 would consider a fixed cost. Energy tends to be an  
 17 important cost, variable cost. And then after  
 18 that, the variable costs become numerous but very  
 19 small in their proportion.

20 Q And did you make any attempt to determine the labor  
 21 and energy costs as you did cement and aggregates?

22 A There are indices available; I didn't report on  
 23 them, but if there is an estimation of damages,  
 24 most likely labor and energy will be incorporated  
 25 along with these two inputs into a variable cost

1 index measured over time. Whether national indices  
 2 are used or if we are able to obtain a more  
 3 complete set of information, the financial  
 4 statements of the defendant suppliers, that will be  
 5 determined subsequently. But the data are  
 6 available.

7 Q In any event, the variable cost information set  
 8 forth in your report, if I understand your  
 9 testimony, has nothing to do with respect to the  
 10 issue of whether there is common proof of any  
 11 impact.

12 A True. It has to do with the feasibility of  
 13 estimating damages.

14 Q Did you conduct an investigation concerning what  
 15 was, or what were geographic markets for  
 16 ready-mixed concrete in the ten-county area?

17 A On a preliminary basis, but I did not define a  
 18 relevant geographic market since whether it's  
 19 necessary in this particular instance will be  
 20 determined by the court of law, and will in any  
 21 event be done at a later stage of this litigation,  
 22 assuming that there is a later stage.

23 Q So it's your testimony that any determination as to  
 24 geographic markets in the ten-county area is not  
 25 relevant to the question of whether there's proof,

1 A Partly. It's not an area of massive development.  
 2 Q Let's move it over to Hamilton County. Do you know  
 3 the difference between Hamilton and Boone?  
 4 A Hamilton tends to be, principally, a residential  
 5 area for Indianapolis.  
 6 Q Well, let's just move this office building over  
 7 there for kicks. The hypothetical, all right?  
 8 15-story. Are you more comfortable with it there?  
 9 A You could put your hypothetical 15-story office  
 10 building anywhere you like.  
 11 Q And the question then becomes, in order to be a  
 12 competitor for that job, does the supplier have a  
 13 sufficient number of plants within a close enough  
 14 proximity to that 15-story project that the  
 15 continuous pour could be done without jeopardizing  
 16 the rest of his business; right?  
 17 A My answer would be probably the same as for  
 18 northwest Boone County. But, again, I would need  
 19 to look at a map and identify the location of  
 20 plants, but as I recall, from memory, there are  
 21 several producers who have that capacity.  
 22 Q What producers are those?  
 23 A As I said before, Builder's, Prairie, and IMI.  
 24 Q And Builder's is non-union; right?  
 25 A I believe so but I don't know that for a fact.

1 than one.  
 2 Q Well, let's assume that there is competition. Is  
 3 your answer still the same? As opposed to a  
 4 conspiracy.  
 5 A I'm not clear about your question.  
 6 Q All right. Assume that with respect to a given  
 7 project, there are two suppliers submitting bids  
 8 whose plants are close enough to economically  
 9 service that project, and then let's assume the  
 10 same project but three competitors submitting bids,  
 11 and assuming all other things are equal, will the  
 12 three bidding competition result in a lower price  
 13 than the two competitors?  
 14 A May or may not.  
 15 Q Depending on what, sir?  
 16 A Depending on how the two competitors price their  
 17 product. Whether there is only two or three or  
 18 four or five, you may -- in the absence of explicit  
 19 coordination, you may arrive at the same price.  
 20 Q Well, is it more likely than not that they may  
 21 arrive at a cheaper price, a lesser price?  
 22 A If there are three rather than two?  
 23 Q Yes.  
 24 A Not necessarily.  
 25 Q And the determining feature being what, in your

1 Q You would agree, though, that the number of  
 2 competitors will -- with respect to any project  
 3 will vary depending on the location of the plants  
 4 relative to the project at issue.  
 5 A Yes. A plant, for example, that is located a  
 6 considerable distance reflected in time is not a  
 7 viable competitor for any job, big or small.  
 8 Q You would agree that the closest plant to a project  
 9 has a competitive advantage over other plants.  
 10 A With or without the alleged cartel?  
 11 Q Without the cartel first.  
 12 A If there is genuine price competition, unilaterally  
 13 arrived at, that may be the case, so that a  
 14 supplier that is near the building site is prepared  
 15 to engage in price competition.  
 16 Q So if you've got, say, two competitors -- strike  
 17 that -- three competitors vying for a project, all  
 18 three having plants relatively the same distance  
 19 from a project, all else being equal, the price is  
 20 going to be lower than if you just have two  
 21 competitors bidding for that project.  
 22 A Not necessarily.  
 23 Q And what exceptions to that?  
 24 A The number of competitors does not determine the  
 25 degree of price competition other than it's more

1 mind, that prevents you from answering that  
 2 question yes?  
 3 A When a single firm is in competition with a single  
 4 other firm, the price outcome can be exactly the  
 5 same as one firm that is in price competition with  
 6 two others.  
 7 There is -- the degree of price competition is  
 8 not necessarily a function of the number of firms  
 9 who are competing, as long as there is price  
 10 competition, and as long as the product that they  
 11 are competing with, as I've stated in my affidavit,  
 12 is an undifferentiated product, interchangeable.  
 13 MR. KELLEY: All right. Take a break.  
 14 THE VIDEOGRAPHER: We're off the record. This  
 15 marks the end of Tape 2. We're off the record at  
 16 3:47.  
 17 (A brief recess was taken.)  
 18 THE VIDEOGRAPHER: We're back on the record.  
 19 This is the start of Tape No. 3, the deposition of  
 20 Dr. Beyer. It is 4:06.  
 21 Q By the way, there's no baseball on tonight.  
 22 A But there is basketball.  
 23 Q Okay.  
 24 A Good basketball.  
 25 Q Having read all these depositions today, I got the

1 idea you always went back and watched baseball.  
 2 A Any sport.  
 3 Q Oh, any sport, okay. I stand corrected. Excuse  
 4 me.  
 5 A Even the Indiana Colts.  
 6 Q You got that wrong, too.  
 7 MR. JONES: Indianapolis.  
 8 THE WITNESS: Oh, Indianapolis? Okay.  
 9 Q Just kind of like Boone County and Hamilton, but  
 10 that's all right. Anyway...  
 11 Going back to your last answer about two  
 12 versus three competitors not always resulting in a  
 13 lower price, the necessary predicate for your  
 14 answer was the assumption or the potential for  
 15 there being a homogeneous product; correct?  
 16 A An undifferentiated product, which may or may not  
 17 be homo- --  
 18 Q An undifferentiated product.  
 19 A It may or may not be homogeneous, but it is  
 20 perceived by both suppliers and purchasers as being  
 21 interchangeable among suppliers.  
 22 Q But assuming it's not homogeneous, your answer  
 23 would be different.  
 24 A Undifferentiated, to me, does not require that the  
 25 products be exactly the same, which is homogeneous,

1 but that they be interchangeable; that a purchaser  
 2 can buy a given product from any number of  
 3 suppliers and be indifferent as to which supplier  
 4 does provide the product.  
 5 Q So I have to use the word undifferentiated --  
 6 correct? -- and then your answer would be  
 7 different.  
 8 A I don't -- I'm not sure --  
 9 MR. SHEVITZ: Why don't you ask the question.  
 10 Q Assuming that these products are differentiated  
 11 products --  
 12 A Undifferentiated.  
 13 Q I'm saying let's assume that, with respect to the  
 14 two versus three competitors, the product we're  
 15 talking about is a differentiated product, not an  
 16 undifferentiated product.  
 17 MR. SHEVITZ: And just so I'm clear for the  
 18 purpose of this hypothetical, have you  
 19 hypothetically -- have you identified the  
 20 hypothetical product or is that --  
 21 MR. KELLEY: No, we haven't.  
 22 MR. SHEVITZ: That's fine.  
 23 MR. KELLEY: I'll do it.  
 24 Q We're going to assume for this purpose that it's a  
 25 differentiated product, and if that were the case,

1 the two versus -- or the three versus two  
 2 competitors would most likely result in a lower  
 3 price -- correct? -- all other things being equal.  
 4 A It may or may not, because a differentiated product  
 5 may have competition on issues other than price.  
 6 Q All right. Did you do any analysis of the  
 7 transactions in order to determine whether there  
 8 were product markets in the ten-county area?  
 9 A Relevant product markets? Clarification. Because  
 10 I don't know what you're talking about if it's not.  
 11 Q If it's not, quote, relevant product markets?  
 12 A Yeah.  
 13 Q Well, let's start thataway.  
 14 A I think I answered that earlier. Other than  
 15 looking at whether there are substitutes to which  
 16 purchasers of ready-mixed concrete can turn, as a  
 17 way of avoiding artificially elevated prices  
 18 assuming that the cartel existed, I did not define  
 19 a relevant product market.  
 20 Q So you did no analysis of the transaction data --  
 21 A No, that's not correct. I did do analysis of the  
 22 transaction data but not for that purpose.  
 23 Q Well, I hadn't finished my question.  
 24 A Oh, I'm sorry. I'm sorry.  
 25 Q You did no analysis of transaction data with

1 respect to the question of product markets.  
 2 A I did not look at all relevant product markets  
 3 other than the availability of substitutes.  
 4 Q So you did no statistical analysis with respect to  
 5 the question of whether there are product markets,  
 6 relevant or otherwise. Is that correct?  
 7 A I don't know what you mean by product markets  
 8 otherwise. Maybe you could be a little bit more  
 9 specific.  
 10 Q Did you do any statistical analysis to determine  
 11 the existence of product markets in the ten-county  
 12 area?  
 13 A To me, as an economist, the only -- other than what  
 14 the complaint says, and which I accepted as true,  
 15 there is a ten-county area called the central  
 16 Indiana area in which this cartel took place, that  
 17 if there is a need to define markets, it is only in  
 18 the antitrust sense that there is a relevant  
 19 product and geographic market, and we've already  
 20 discussed that. You've asked me a number of  
 21 questions and I provided my answers to it.  
 22 Q Did you do any statistical analysis to determine  
 23 the existence of product markets in the ten-county  
 24 area, yes or no?  
 25 A As long as the answer is understood in the context

1 of my prior answers, no.  
 2 Q Did you do any statistical analysis of the  
 3 transactions in any respect?  
 4 A Well, define statistical analysis.  
 5 Q Did you do any analysis of the transaction data in  
 6 any respect?  
 7 A Yes.  
 8 Q In what respect did you do an analysis of the  
 9 transaction data?  
 10 A I identified the sales in dollars and cubic yards  
 11 by supplier by time period, whether it be month or  
 12 years; I examined price behavior; I examined the --  
 13 how much of the product mix for some of the  
 14 suppliers, or the product identifiers related to  
 15 ready-mixed concrete and how many of the product  
 16 identifiers, or product codes, related to other  
 17 than ready-mixed concrete.  
 18 And that was done at the time of my report  
 19 and, again, some of that data, which enabled an  
 20 updating through the additional production of  
 21 electronic transaction data more recently, was  
 22 submitted to you today.  
 23 Q Was any of this analysis, in your judgment,  
 24 relevant to whether there are separate product  
 25 markets with respect to ready-mixed concrete?

1 substitutes, did you come to any understanding as  
 2 to whether concrete block and prestressed or  
 3 prefabricated concrete were gaining share over  
 4 ready-mixed concrete in any part of the country or  
 5 in the country as a whole?  
 6 A I did not see data that would indicate that.  
 7 Q Did you see any writings that would indicate that?  
 8 A Only in the sense that those who came to the  
 9 conclusion that ready-mixed concrete had no good  
 10 economic substitutes concluded that there were some  
 11 end uses where there may be substitutes, but these  
 12 end uses do not constitute a systematic  
 13 substitution for ready-mixed concrete. Therefore,  
 14 substitutes are not a threat to the industry.  
 15 Q "Threat to the industry"? Is that -- is that the  
 16 same thing as saying there's a substitute?  
 17 A No.  
 18 Q Thank you. Let's talk a little bit about  
 19 residential housing.  
 20 A I want to just follow up on that. There can be  
 21 many potential substitutes for any product for some  
 22 end uses; but, collectively, they have little  
 23 economic significance. The question is do they --  
 24 do these substitutes of particular end uses  
 25 constitute a potential change in the market share

1 A As I -- no, because I did not examine the question  
 2 of relevant antitrust markets except for the  
 3 substitution question.  
 4 Q And did you do any investigation or analysis of any  
 5 data in order to determine whether there were or  
 6 were not any substitutes for ready-mixed concrete  
 7 in the ten-county area?  
 8 A Yes. I looked at purchasers, suppliers, and  
 9 third-party analysts such as the ready-mixed  
 10 associations and others, Federal Trade Commission,  
 11 who had a number of cases, or had one in particular  
 12 that was in Arizona involving ready-mixed concrete.  
 13 And the conclusion by, from what I saw, the  
 14 consensus of all of these different perspectives on  
 15 the market is that there are no ready substitutes,  
 16 good economic substitutes for ready-mixed concrete.  
 17 Q You have not done a statistical analysis in that  
 18 respect, have you?  
 19 A In the central Indiana area?  
 20 Q Yes.  
 21 A No.  
 22 Q In any other area?  
 23 A No.  
 24 Q In your readings and all of these places that you  
 25 just testified that you went to about this issue of

1 for ready-mixed concrete of sufficient magnitude  
 2 that the pricing, hence the threat on ready-mixed  
 3 concrete, will be affected. And the collective  
 4 answer is, at least during the class period, in or  
 5 around that time period, no.  
 6 MR. KELLEY: I move to strike your whole  
 7 answer as being unresponsive and argumentative.  
 8 Q Did you examine, with respect to the ten-county  
 9 area, the nature and extent of the use of concrete  
 10 block in the residential housing construction  
 11 industry?  
 12 A Neither purchasers of ready-mixed concrete nor  
 13 suppliers of ready-mixed concrete, to my -- at  
 14 least in the materials that I reviewed, saw  
 15 concrete block as a substitution that they were  
 16 concerned about. Hence it was, as I just mentioned  
 17 in the answer that you struck and called  
 18 argumentative, to say that --  
 19 MR. KELLEY: I'm getting ready to strike this  
 20 one, too, so you might as well save your breath.  
 21 It's all nonresponsive. I move to strike  
 22 everything you said after my question as  
 23 unresponsive.  
 24 Q I'm going to ask you again.  
 25 MR. SHEVITZ: Why don't you go ahead and



1 Q Are you refusing to give me a yes or no answer. Is  
2 that right?  
3 A Well, you can take the answer I gave, strike it,  
4 whatever you wish, but that's the answer.  
5 Q Are you refusing --  
6 A And I gave it earlier.  
7 Q Are you refusing to give me a yes or no answer to  
8 my question?  
9 MR. SHEVITZ: Kind of like your client used to  
10 do? He's answered the question. You've asked it  
11 repeatedly. As you instructed your clients in the  
12 earlier depositions, just because you ask the  
13 question different times doesn't mean you have to  
14 get different answers.  
15 MR. KELLEY: I like that one.  
16 MR. SHEVITZ: Came from a wise old man.  
17 Q So you're not going to give me a yes or no answer.  
18 A Repeat the question. I don't -- I've forgotten it.  
19 Q Is it your opinion that the central Indiana area,  
20 the ten-county area, is a single relevant  
21 geographic market, yes or no?  
22 A I can't answer that yet because I haven't studied  
23 it.  
24 Q Thank you.  
25 A Which I think I already said many times.

1 competition and the proximity of supplier A is  
2 likely to be -- there is likely to be more price  
3 competition because the supplier has more profit,  
4 if you will, to reflect in his price.  
5 With a --  
6 Q So -- excuse me. I don't mean to interrupt. Go  
7 ahead.  
8 A With a cartel, with the alleged cartel, that price  
9 difference is not going to be reflected.  
10 Q So in the eyes of the consumer, the contractor for  
11 this project, is there differentiation --  
12 A What I was --  
13 Q Excuse me. Let me finish.  
14 -- is there differentiation between the plant  
15 one mile from the project and the plant ten miles  
16 from the project?  
17 A From what I have seen among the purchasers, and  
18 admittedly, this is a population of seven  
19 purchasers, the answer is no. Because they always  
20 looked, and they said they did, except what you  
21 read from Mr. Salazar, but there are other parts of  
22 his deposition that are relevant also.  
23 Q So you think you've got a good sampling of seven on  
24 which to base your opinion, is that it?  
25 MR. SHEVITZ: Would you let him finish his

1 Q Are suppliers of concrete differentiated from each  
2 other?  
3 A In the central Indiana area?  
4 Q Excuse me. Yes. Thank you. Much better question.  
5 A No.  
6 Q Have you heard of spatial differentiation?  
7 A I understand those two words. I've not seen them  
8 together in this particular context.  
9 Q It's not terms that an economist might use.  
10 A I've not seen them. I can infer what they might  
11 mean in the context of the ready-mixed concrete  
12 industry.  
13 Q From the standpoint of contractors buying from  
14 ready-mix suppliers, you would agree that a plant  
15 one mile from a project is differentiated from a  
16 plant that's 15 miles from that project.  
17 A With or without --  
18 Q In the --  
19 A With or without a cartel?  
20 Q In the eyes of the supplier, either way.  
21 A In the eyes of the supplier or the purchaser?  
22 Q Excuse me. In the eyes of the purchaser.  
23 A With or without a cartel?  
24 Q Either way.  
25 A Well, without the alleged cartel, if there is price

1 answer.  
2 MR. KELLEY: Yes. Excuse me.  
3 THE WITNESS: Thank you.  
4 MR. KELLEY: Surely. Proceed.  
5 A Purchasers received price bids from more than two  
6 suppliers.  
7 Q So -- are you through or should I give you a moment  
8 to get untangled?  
9 A I am. I'm just trying to figure out these  
10 different wires going where.  
11 Q So is your answer yes or no as to the question of  
12 is there differentiation between a plant one mile  
13 from a project and a plant ten miles from a project  
14 insofar as the purchaser of this concrete is  
15 concerned?  
16 MR. SHEVITZ: And I'll just interpose the same  
17 objection, which he's not required to submit a yes  
18 or no answer just to appease the questioner.  
19 You've asked him for his opinion and he'll answer  
20 accordingly.  
21 A With the alleged cartel, it may have no bearing.  
22 Without the alleged cartel, it is likely to have a  
23 bearing.  
24 Q So there will be --  
25 A In the form of price competition.

Transcript of the Testimony of  
**JOHN C. BEYER, Ph.D. - VOLUME 2**

Date: March 28, 2008

In Re: Ready-Mixed Concrete Antitrust Litigation  
v.

1 defendants. We also have Ed Steegmann on the phone  
 2 and Paul Johnson of Bates White on the phone.  
 3 MS. CELLA: Abby Cella for the IMI defendants.  
 4 MR. KELLEY: Dan Kelley, IMI defendants.  
 5 MR. SHEVITZ: Is there anyone else on the  
 6 phone besides those two?  
 7 MR. MIXDORF: Why don't you guys say something  
 8 just to confirm that you're the only two on the  
 9 phone.  
 10 MR. STEEGMANN: I'm here. Ed Steegmann for  
 11 IMI.  
 12 MR. JOHNSON: And this is Paul Johnson from  
 13 Bates White.  
 14 MR. SHEVITZ: Is there anyone else on the  
 15 phone besides those two?  
 16 MR. JOHNSON: No, not from my end.  
 17 MR. STEEGMANN: Not here.  
 18 MR. SHEVITZ: Thanks.  
 19 JOHN C. BEYER, Ph.D.,  
 20 having been previously sworn to tell the truth, the  
 21 whole truth, and nothing but the truth took the stand  
 22 and testified as follows:  
 23 EXAMINATION (Continued)  
 24 BY MR. KELLEY:  
 25 Q The witness is reminded he's still under oath.

1 would be delivered in that time frame.  
 2 Q Do the buyer's expectations as to his purchase of  
 3 ready-mix entail items of service to be provided by  
 4 the seller?  
 5 A There may be, but usually the -- at least from the  
 6 electronic transaction data, the purchaser pays  
 7 extra for those services.  
 8 Q Does he pay extra for, or does the buyer pay extra  
 9 for timely delivery?  
 10 A No. That is an ex- --  
 11 Q Does the buyer --  
 12 A Excuse me. It is expected on the part of  
 13 purchasers and on suppliers that the cement that  
 14 they deliver can -- is still wet cement, can be  
 15 poured and formed.  
 16 Q Do different buyers pay extra for continuous pour  
 17 jobs?  
 18 A The only form of information that I have that would  
 19 reveal anything about a premium on continuous pour  
 20 would be the electronic transaction data, and I  
 21 have not seen anything from those data that would  
 22 indicate there is a premium.  
 23 Q Do buyers have expectations concerning the purchase  
 24 of ready-mixed concrete for a continuous pour job  
 25 related to a continuous pour that might be

1 A I understand that.  
 2 Q Thank you.  
 3 With respect to ready-mixed concrete in the  
 4 ten-county area, would you describe for me your  
 5 understanding of what is being bought and what is  
 6 being purchased on the sale of ready-mixed  
 7 concrete.  
 8 A What is being bought and sold is ready-mixed  
 9 concrete in various forms that is purchased for use  
 10 as it is delivered to particular sites where the  
 11 concrete is to be poured.  
 12 Q So is the purchaser buying the ready-mix delivered  
 13 to the job site and discharged at the job site?  
 14 A Yes.  
 15 MR. SHEVITZ: Object as to form.  
 16 Q Is there any expectation in the purchase that you  
 17 determined, in the normal purchase, as to time of  
 18 delivery?  
 19 A Yes, there is.  
 20 Q And what was your understanding of that? Or what  
 21 is your understanding of that?  
 22 A Individual purchasers would identify the period of  
 23 time in which they were to pour cement and would  
 24 notify their -- the firm that had received the sale  
 25 of that, and the wet concrete would -- ideally

1 different from another job?  
 2 A Yes, in the sense that it is a continuous pour.  
 3 Q And more service is required in order to have a  
 4 continuous pour; correct?  
 5 A I'm not sure that is the case.  
 6 Q And that additional service includes additional  
 7 trucks and the timing of the trucks; correct?  
 8 A Purchasers pay for ready-mixed concrete delivered  
 9 to the site, so whether it is a simple driveway or  
 10 a continuous pour operation, the purchaser is  
 11 paying for the ready-mixed concrete to be delivered  
 12 in a form that can pour and be formed at the work  
 13 site.  
 14 Q So the purchaser of ready-mixed concrete that is  
 15 ordering it, buying it for a continuous pour job,  
 16 that is say up to 200 yards an hour, is or is not  
 17 purchasing something different than my buying  
 18 ready-mix for my driveway?  
 19 MR. SHEVITZ: Object to form.  
 20 A I -- from -- there is a difference --  
 21 Q Thank you.  
 22 A -- which is the quantity that is being purchased  
 23 and the expectation on the part of the purchaser  
 24 that the ready-mixed concrete is delivered to the  
 25 work site in a manner that is -- meets that

1 industries, and I assume that it occurs in  
 2 ready-mixed concrete as well.  
 3 Q Did you investigate the nature and extent of the  
 4 influence of the relationship in the purchase and  
 5 sale of ready-mixed concrete in the ten-county  
 6 area?  
 7 A Yes.  
 8 Q And how did you do that?  
 9 A Through a review of the transaction database.  
 10 Q Other than that?  
 11 A Well, that's -- that's a rich source because it  
 12 identifies a --  
 13 Q I'm just asking were there things in addition to  
 14 that. I'm not arguing whether it was or wasn't  
 15 sufficient. I just want to know were there things  
 16 other than the database that you examined with  
 17 respect to this relationship.  
 18 A That was the particular source of data.  
 19 Q Nothing else then?  
 20 A Empirical. From my reading of the seven  
 21 purchasers.  
 22 Q The seven out of 5000?  
 23 MR. SHEVITZ: Object as to form.  
 24 MR. KELLEY: I'll withdraw the question.  
 25 Q You agree there are approximately 5000 or more

1 ready-mix, were they?  
 2 A They were not. They --  
 3 Q So -- let me go on. I want to establish how many  
 4 of these purchasers it was from whom you gained  
 5 your knowledge. So we have seven plaintiffs that  
 6 you gained your knowledge from about this  
 7 relationship. Correct?  
 8 A And the universe of the purchasers through the  
 9 electronic transaction databases.  
 10 Q And none of whom you interviewed.  
 11 A No, so that's correct.  
 12 Q So we've got seven out of 2000. And I read in your  
 13 report the word "perception" repeatedly, about how  
 14 a buyer perceives a product in terms of branding;  
 15 right?  
 16 MR. SHEVITZ: I'm not sure I understand -- I  
 17 don't understand your question.  
 18 Q The buyers' perceptions are important in this case,  
 19 are they not?  
 20 A The buyers' perceptions are one set of information  
 21 that determine issues about -- that I've addressed  
 22 in this report.  
 23 Q Concerning quality, service, relationship -- of  
 24 course, you didn't address the issue of  
 25 relationship; but quality, service, and other

1 purchasers during this class period of ready-mixed  
 2 concrete in the ten-county area?  
 3 A I don't know the number.  
 4 Q So you didn't examine how many purchasers you found  
 5 in the database?  
 6 A No, I didn't calculate.  
 7 Q You have no estimation of how many purchasers there  
 8 are of ready-mixed concrete?  
 9 A There are several thousand.  
 10 Q Okay. Well, that's good enough for my purposes.  
 11 So you've interviewed or seen the deposition of  
 12 seven out of several thousand purchasers.  
 13 MR. SHEVITZ: Object as to form. There  
 14 weren't depositions of the other thousand  
 15 purchasers.  
 16 MR. KELLEY: Excuse me. I'll withdraw the  
 17 question.  
 18 Q So you have seen and read seven depositions of  
 19 purchasers and interviewed three of those  
 20 purchasers.  
 21 A And reviewed the 302s. And the perceptions and the  
 22 comments by suppliers during their interviews  
 23 provided, to me, considerable insight into the  
 24 nature of the marketplace for ready-mixed concrete.  
 25 Q But none of those 302s were of purchasers of the

1 expectations of a buyer; right?  
 2 A Let me -- I disagree with your comments that you  
 3 entered -- interject in there. I did examine  
 4 relationships based on the electronic transaction  
 5 database --  
 6 Q What did you do?  
 7 A -- and the perceptions of purchasers, but also of  
 8 suppliers in the marketplace.  
 9 Q And what did you learn about relationships from  
 10 that database?  
 11 MR. SHEVITZ: Dan, please.  
 12 MR. KELLEY: I'm sorry. You weren't finished?  
 13 MR. SHEVITZ: I've been quiet.  
 14 MR. KELLEY: Excuse me.  
 15 MR. SHEVITZ: I think you knew he wasn't  
 16 finished, he was still talking.  
 17 MR. KELLEY: Oh, I'm sorry.  
 18 THE WITNESS: I was in the middle of a  
 19 sentence --  
 20 MR. KELLEY: I apologize.  
 21 THE WITNESS: -- and I can't -- forget where I  
 22 was.  
 23 MR. SHEVITZ: Then let's go back and ask that  
 24 the court reporter review where you were before  
 25 Mr. Kelley interrupted you, please.

- 1 Q Yeah. Okay, 5 bucks; right?  
 2 A Five bucks, yeah.  
 3 Q Yeah. You don't consider, in the ready-mixed  
 4 industry, that to be substantial?  
 5 A Well, what these -- and this is true with whether  
 6 it's presented as an index or as a price, is that  
 7 we're not able to hold constant the customer mix  
 8 and the quantity being purchased.  
 9 Q Okay. Let me show you what has been marked as  
 10 Exhibit 172 and ask you to look at that, please.  
 11 MR. SHEVITZ: Same objection on my part.  
 12 Q And once again, you would agree that, would you  
 13 not, that Prairie's price is lower than IMI's at  
 14 all times and lower than Builder's at all times;  
 15 correct?  
 16 A If this -- if the underlying data that have been  
 17 used have been used correctly, and I haven't seen  
 18 that so I can't tell; and I would say that whoever  
 19 prepared this did not take into account the volume  
 20 of purchases and the customer mix.  
 21 Q Other than the absence of a price premium, did you  
 22 use Figures 8, 9, 10, and 11 in your report for any  
 23 other purpose?  
 24 A Well, I would include -- yes.  
 25 Q And what purpose was that, sir?

- 1 A And that includes Figure 7.  
 2 Q Excuse me, Figure 7.  
 3 A That, in fact, there -- even with the small volumes  
 4 involved, and not holding customer mix and volumes  
 5 constant, which we're not able to do, that there  
 6 is -- appears to me to be a structure in prices  
 7 that -- over time, so that what -- if the cartel --  
 8 if the allegations of the cartel are true, then it  
 9 would affect all prices of ready-mixed cement  
 10 because they all behave similarly.  
 11 Economic considerations lead me to that  
 12 conclusion even without this price analysis because  
 13 it's the same technology, same inputs, and  
 14 interchangeable product, and the alleged defendants  
 15 have market power which means that the purchasers  
 16 could not avoid any artificially elevated prices.  
 17 Q So you used these to determine whether there was  
 18 price structure; right?  
 19 MR. SHEVITZ: Object as to form.  
 20 A As I've described in my report, yes.  
 21 Q Did you use the concept -- strike that -- a price  
 22 structure to test the conclusions you drew in the  
 23 investigation?  
 24 MR. SHEVITZ: Object as to form.  
 25 Q You know, the reading of the complaint, the

- 1 depositions, so on. ASTM and all the rest.  
 2 A I say this in my report and let me say it again.  
 3 The analysis of prices confirms -- is a  
 4 confirmatory analysis that -- of the investigation,  
 5 as you've called it, that leads to conclusions of  
 6 an undifferentiated product, interchangeability and  
 7 so forth.  
 8 Q Is that the same thing as the scientific method of  
 9 hypothesis, etc., investigate and trying to test or  
 10 confirm?  
 11 MR. SHEVITZ: Object as to form.  
 12 A It is, but we're having to work -- I'm having to  
 13 work with contemporaneous business records of the  
 14 defendants, which serve different purposes, and  
 15 therefore the availability of information to test  
 16 the hypotheses are subject to limitations. And I  
 17 express what those limitations are in the report.  
 18 Q Limitation of the records, is that what you're  
 19 saying?  
 20 A Of the electronic transaction database.  
 21 Q Yeah. That's in a footnote somewhere; right?  
 22 A I don't recall. It probably isn't a big footnote,  
 23 if it is a footnote.  
 24 Q All right. Well, usually you put that in all your  
 25 reports in a footnote. Do you recall that?

- 1 MR. SHEVITZ: Is there a question?  
 2 Q You generally put that caveat in a footnote in  
 3 these 18 reports that I read. It's pretty much of  
 4 a habit. You don't recall that?  
 5 MR. SHEVITZ: Object to form. Lack of  
 6 foundation.  
 7 A It's not a habit. It's simply dealing with the  
 8 reality that the use of these historical business  
 9 records, the information that is reported is  
 10 intended to serve the purposes of the particular  
 11 firms. And sometimes there are limitations in the  
 12 kind of information that is recorded. That's fine.  
 13 Just have to deal with it and recognize it.  
 14 Q And that's the same caveat you put in all those  
 15 other reports, isn't it?  
 16 MR. SHEVITZ: Object as to form. Lack of  
 17 foundation.  
 18 A I'm not sure that it is, but I -- you know, one  
 19 thing I don't do is go back and review all these  
 20 reports.  
 21 You've -- you've -- I have to say -- I  
 22 shouldn't say this; you have probably -- you are a  
 23 unique person in this world. Somebody who --  
 24 MR. SHEVITZ: In so many respects.  
 25 A In so many respects, yes. But just in terms of

1 having read all these boring reports and  
 2 depositions, nobody has ever done that. I haven't  
 3 done it.  
 4 Q No other attorney has ever asked you to provide all  
 5 these for him?  
 6 A No.  
 7 Q Oh. Actually, it went fairly fast after the first  
 8 one. It was quite repetitive.  
 9 MR. SHEVITZ: Why don't you wait for the next  
 10 question.  
 11 Q Like this footnote we're talking about.  
 12 A Really?  
 13 Q In any event --  
 14 THE VIDEOGRAPHER: Excuse me. I have about  
 15 five minutes left.  
 16 Q With respect to Exhibit 165, Exhibit 166, and  
 17 Exhibit 167, could you explain to me how these  
 18 exhibits -- well, let's just start with  
 19 Exhibit 165. How does Exhibit 165 exhibit price  
 20 structure, as you said?  
 21 A Over a sustained period of time --  
 22 Q Pricing -- excuse me, is it pricing structure or  
 23 price structure?  
 24 A Price -- the relationship of prices to each other,  
 25 so it's a price structure.

1 of what is a good, or satisfactory, correlation  
 2 coefficient.  
 3 Q So your answer to my question is no, you did no  
 4 calculation.  
 5 MR. SHEVITZ: Once again --  
 6 A I don't believe that was your question.  
 7 Q My question is, so there is some calculation -- is  
 8 there some calculation you did to inform yourself  
 9 as to this? The answer to that question is no;  
 10 right? You didn't do a calculation.  
 11 MR. SHEVITZ: Object as to form. As we've  
 12 discussed earlier, the question doesn't have to be  
 13 a yes or no answer, it may not lend itself to a yes  
 14 or no answer, the witness does not have to appease  
 15 you by giving you the answer you're looking for.  
 16 He's answered your question.  
 17 MR. KELLEY: Not at all. Excuse me.  
 18 Q I'll ask you again. Did you do a calculation to  
 19 inform yourself as to whether there was price  
 20 structure exhibited on Exhibit 165?  
 21 MR. SHEVITZ: Asked and answered.  
 22 But you can go ahead.  
 23 A If you want a yes or no answer, as long as it is  
 24 understood that my prior answer is an integral part  
 25 of this, no, I did not do a calculation.

1 Q As opposed to pricing structure. I've read your  
 2 term "pricing structure" and I've never seen it in  
 3 a report as, quote, price structure. And I'm  
 4 wondering if there's a difference.  
 5 A No.  
 6 Q Okay. Thank you. Excuse me. Go ahead.  
 7 MR. SHEVITZ: I think I've lost the question,  
 8 unfortunately.  
 9 Q Tell me about Exhibit 165 and how Exhibit 165  
 10 informed you that it shows pricing structure.  
 11 A Given the recognition that the volumes of  
 12 ready-mixed concrete that is being sold every month  
 13 by each supplier is a relatively small quantity and  
 14 therefore can be affected or influenced by changes  
 15 in composition of customers and volume,  
 16 nonetheless, over a sustained period of time,  
 17 beginning in September 1999 and at least through  
 18 some point in 2004, prices moved in a similar  
 19 manner over that five- or six-year period, as for  
 20 this product and these particular customers.  
 21 Q And is there some calculation that you did to  
 22 inform yourself as to this?  
 23 A It is a visual observation. The only statistical  
 24 test, which is the use of correlation coefficients,  
 25 in the end depends upon a subjective interpretation

1 Q You can't calculate in your eyes, can you?  
 2 A But it is a -- visual observation is a standard  
 3 procedure in econometrics and price series, and I  
 4 can point you to a number of textbooks where that  
 5 is pointed -- is identified.  
 6 Q What about cointegration?  
 7 MR. SHEVITZ: Is there a question?  
 8 Q Cointegration.  
 9 A Never heard that term.  
 10 Q Have you done that ever with respect to testing --  
 11 A Do you mean --  
 12 MR. SHEVITZ: Let me object as to form and,  
 13 also, I'm not even sure it's a question. At least  
 14 not -- maybe after you put it all together, add it  
 15 up to a question.  
 16 MR. KELLEY: No, no.  
 17 (A discussion was held off the record.)  
 18 MR. KELLEY: If I ask too many questions about  
 19 it, I'll get lost like he's going to get lost.  
 20 But, anyway...  
 21 THE WITNESS: I don't get lost.  
 22 MR. KELLEY: Oh, okay.  
 23 Q How about cointegration?  
 24 MR. SHEVITZ: What's your question?  
 25 Q Have you heard the term "cointegration"?

1 A I have not.  
 2 Q Pardon?  
 3 A I have not.  
 4 Q So you wouldn't know how to do a cointegration  
 5 test.  
 6 THE VIDEOGRAPHER: Are you --  
 7 MR. KELLEY: What?  
 8 THE VIDEOGRAPHER: Tape.  
 9 MR. KELLEY: Oh. Everybody's -- you know, I  
 10 thought you were trying to tell me something, too.  
 11 MS. SHAPIRO: He is.  
 12 MR. KELLEY: I'm kidding. Yeah, he is.  
 13 MR. SHEVITZ: And Dan, when he tells you,  
 14 probably the most important thing, you have to  
 15 listen to him.  
 16 MR. KELLEY: Yes, shut down, please.  
 17 THE VIDEOGRAPHER: This is the end of Tape 1  
 18 of the deposition of Dr. Beyer. We're off the  
 19 record at 10:54.  
 20 (A brief recess was taken.)  
 21 THE VIDEOGRAPHER: We are back on the record.  
 22 This is the start of Tape No. 2 of the deposition  
 23 of Dr. Beyer. It is 11:04.  
 24 Q Back to Exhibit 166, Exhibit 167, Exhibit 168,  
 25 which are 9, 10, and 11 from your report, in terms

1 of pricing structure, did you examine those three  
 2 exhibits and come to the same conclusion you  
 3 testified about with respect to Exhibit 165, or  
 4 Figure 8?  
 5 A Yes.  
 6 MR. SHEVITZ: Object as to form.  
 7 A I did, yes.  
 8 Q And again, this is a visual thing on your behalf.  
 9 A Visual observation.  
 10 Q Visual observation. Is there a protocol to this  
 11 visual observation?  
 12 A It is identified and specified in most of the good  
 13 econometrics textbooks that it is one of the first  
 14 steps that is done when there is a time series  
 15 involved.  
 16 Q But it's certainly not the last step, is it?  
 17 MR. SHEVITZ: Object as to form.  
 18 A As I said in one of my prior answers, the only  
 19 other statistical application that I'm aware of is  
 20 a correlation -- calculation of the correlation  
 21 coefficient, but since there is no objective test  
 22 to tell the researcher whether the resulting  
 23 correlation coefficient is acceptable or not, that  
 24 is a subjective judgment. It doesn't enhance, does  
 25 not enhance an understanding about the

1 relationship.  
 2 Q So your visual inspection is not governed by any  
 3 protocol that anyone else could repeat.  
 4 MR. SHEVITZ: Object as to form.  
 5 Mischaracterizes the testimony.  
 6 A That's correct.  
 7 Q So it's subjective also, as you would accuse  
 8 correlation of.  
 9 A Well, in the end, it is a subjective analysis.  
 10 Q Is this -- well, strike that.  
 11 As I look upon Exhibit 166, Exhibit 167, and  
 12 Exhibit 168, I can find substantial periods of time  
 13 where prices of various suppliers are moving  
 14 directly opposite each other.  
 15 A That's true. What you describe as substantial  
 16 periods of time, however, may differ depending on  
 17 other observers.  
 18 Q I see, okay. I can understand that. The mind is  
 19 not the eye, as it were.  
 20 A Is that a question?  
 21 MR. SHEVITZ: I was going to say --  
 22 Q Do you agree with that?  
 23 A I didn't understand it.  
 24 Q All right. You have closely examined Figure 8, 9,  
 25 10, and 11 in your report?

1 A Yes.  
 2 Q So it wouldn't surprise you that many of these  
 3 lines with respect to each other show -- what's the  
 4 term? -- negative correlation?  
 5 MR. SHEVITZ: What's your question, Dan? Are  
 6 you asking him to define a term?  
 7 MR. KELLEY: No. Question mark. Do you want  
 8 me to do that again?  
 9 MR. SHEVITZ: Yeah. I didn't understand the  
 10 question.  
 11 MR. KELLEY: Okay. I'll read it again.  
 12 A You stated something and put a question mark.  
 13 Q Yes. So it wouldn't surprise you that many of  
 14 these lines with respect to each other show --  
 15 what's the term? -- negative correlation, question  
 16 mark.  
 17 MR. SHEVITZ: Do you want a definition of  
 18 negative correlation?  
 19 MR. KELLEY: No. He understands what I want.  
 20 A Are you referring to a specific -- a defined period  
 21 within -- defined number of months within this  
 22 whole period?  
 23 Q No, I'm just referring to how you economists would  
 24 do a correlation between these lines and the fact  
 25 that the correlation probably shows, just from a

1 calculation of the total damages that might result.  
 2 The only other method, which I set aside, was  
 3 looking at a comparable industry that was not  
 4 subject to the cartel. I set that aside because I  
 5 was not confident that a comparable industry could  
 6 readily be identified and measures identified for  
 7 it.  
 8 Q Have you actually conducted any analysis to  
 9 determine the appropriate temporal or geographic  
 10 benchmarks that you just referred to?  
 11 A Yes.  
 12 Q What analysis have you done?  
 13 A The temporal benchmark is described in considerable  
 14 detail in my report. I examined availability of  
 15 information that would be necessary in order to  
 16 estimate an overcharge, if any, due to the alleged  
 17 cartel, using a temporal benchmark.  
 18 I did not do the same form of analysis for the  
 19 geographic benchmark in part because, as I would  
 20 still say, it is feasible but more demanding in  
 21 terms of information, and therefore I have not  
 22 identified the various avenues by which the  
 23 information, the data, would be collected for  
 24 examining a comparable geographic benchmark.  
 25 Q Am I correct that you've identified two possible

1 cartel period as the comparable benchmark.  
 2 Q Do you intend to continue to accept the definition  
 3 of class period as the definition of the cartel  
 4 period that you'll test?  
 5 A That's a good question. And I think at this point  
 6 the discovery and the analytical work that has been  
 7 done is not far enough along to answer that  
 8 question.  
 9 Q So you don't know what period you'll test?  
 10 A Well, I would test -- obviously, if I were  
 11 entrusted with the task, I would test the alleged  
 12 cartel period as it currently is specified, or the  
 13 class period. It may turn out that the impact  
 14 period, the period on -- in which the cartel has an  
 15 effect on prices, is different than the period  
 16 alleged, and that can -- that is an empirical  
 17 analysis.  
 18 Q By period alleged, do you mean the class period?  
 19 A Yes.  
 20 Q Have you done any test to determine whether or not  
 21 that's the case?  
 22 A No.  
 23 Q Didn't you also suggest in your report that you  
 24 could use a second analytic approach for conducting  
 25 such a temporal comparison, cartel period, post

1 analytic approaches or techniques that you might  
 2 use for conducting this comparison of the temporal  
 3 benchmark, as you've termed it? One being  
 4 regression analysis; the other one being a direct  
 5 comparison of the prices during the benchmark  
 6 periods?  
 7 A Yes.  
 8 Q And am I correct that what you just said is that  
 9 the benchmark that you've settled on using is a  
 10 temporal benchmark that would compare prices during  
 11 the cartel period versus the post cartel period?  
 12 Is that correct?  
 13 A Based on my knowledge at this point, there  
 14 appeared -- and let me just explain briefly. There  
 15 appeared to be in the 302 summaries references to  
 16 communications, explicit communications about  
 17 prices prior to the alleged cartel period.  
 18 Now, I'm not certain how far back that goes,  
 19 but enough to raise a question in my mind as to  
 20 whether or not a benchmark prior to the alleged  
 21 cartel would be free of explicit coordination.  
 22 So if that continues to be the case, with the  
 23 knowledge that is there, assuming that this goes to  
 24 the next stage and assuming that I am asked to do  
 25 this work, then I would probably rely upon the post

1 cartel period, as we've defined it, based upon the  
 2 actual transactional data?  
 3 A Either -- either --  
 4 Q Versus a regression analysis.  
 5 A I'm sorry?  
 6 Q Versus a regression analysis. Aren't those the two  
 7 techniques that you had identified?  
 8 A One would be a direct comparison of prices --  
 9 Q Right. That's what I asked you.  
 10 A -- without looking at it, the behavior of costs or  
 11 demand, and the multiple regression analysis would  
 12 be a formal statistical way to take into account  
 13 changes in demand, changes in cost, or any other  
 14 economic factors that appear to have a major  
 15 influence on price formation for ready-mixed  
 16 concrete.  
 17 Q Am I correct that you concluded that the multiple  
 18 regression analysis is the way to go in this case?  
 19 A Yes, because I -- yes.  
 20 Q Did you -- you also talked about looking at the  
 21 profit margins of suppliers, in your report, as  
 22 another way to test damages in this case. Correct?  
 23 A Could you point me to the particular page and  
 24 paragraph.  
 25 Q I believe paragraph 26. It's -- Exhibit 164 is



1 your report.  
 2 A Yes. Within that, what page or paragraph are you  
 3 referring to?  
 4 Q We'll come back to that. We'll find the page  
 5 number. I don't know the page number off the top  
 6 of my head. We'll come back to that question.  
 7 Would you agree with me that in order for the  
 8 temporal benchmark approach to conducting your  
 9 analysis to be successful in this case, that you  
 10 have to be able to identify a period of time free  
 11 of the alleged -- any alleged effect with respect  
 12 to cartel-like behavior? In other words --  
 13 A May I --  
 14 Q -- for your test to work, you have to be able to  
 15 identify the period where there is no effect from  
 16 the cartel on prices. Correct?  
 17 A Or relatively less compared to the cartel period.  
 18 But may I ask you what you mean by a successful  
 19 application?  
 20 Q Well, what would you consider a successful  
 21 application of the regression analysis using a  
 22 temporal benchmark in this case?  
 23 A A successful -- from my perspective, a successful  
 24 application of a multiregression -- multiple  
 25 regression model would be defined as one in which

1 Q Have you made any decisions as to what -- how  
 2 you're going to develop your formula for the  
 3 regression analysis in this case?  
 4 A By formula, do you mean specification of --  
 5 Q I mean specification of the variables.  
 6 A Beyond the general format that I've described in my  
 7 report, no.  
 8 Q So you've made no decision with respect to the  
 9 specific demand factors that you're going to use in  
 10 your formula. Is that correct?  
 11 A There are demand variables that are explained in my  
 12 report. Whether they -- if I or someone else does  
 13 the estimation of damages, whether they remain as  
 14 the particular demand variables is yet to be  
 15 determined.  
 16 Q Okay. So as we sit here today, you cannot tell us  
 17 what demand variables should be in the regression  
 18 formula to be used in determining classwide damages  
 19 in this case; is that correct?  
 20 A No, that is not the case. I identify and discuss  
 21 at some length in my report demand variables, and  
 22 which of those and how it's -- how the data is to  
 23 be collected for them is yet to be determined.  
 24 Q Okay. So the answer to my question is yes, you do  
 25 not know specifically what demand variables are

1 the variables are specified according to economic  
 2 theory and the characteristics of the industry, and  
 3 where there are sufficient data by which the  
 4 multiple regression analysis can be applied.  
 5 There are then statistical qualities of that  
 6 regression analysis, and those qualities become the  
 7 measure of successful application.  
 8 Q Let's go through what you just said. You would  
 9 agree that whether regression analysis is the best  
 10 or most suitable approach in a case depends on the  
 11 particular specification of the variables that you  
 12 defined in your analysis, wouldn't you? You agree  
 13 with that statement.  
 14 A I would say that it depends upon the independent  
 15 variables, the ones that are intended to explain  
 16 changes in, in this case, price of ready-mixed  
 17 concrete, are consistent with sound economic theory  
 18 and consistent with the ready-mixed concrete  
 19 industry.  
 20 Q So the particular definition of the independent or  
 21 explanatory variables is critical to the success of  
 22 your test; correct?  
 23 A Critical? Maybe not. It depends considerably upon  
 24 all of the steps that are involved, but  
 25 influential, yes.

1 going to go into the formula for the regression  
 2 analysis you have stated is the most feasible  
 3 approach for assessing damages in this case.  
 4 Correct?  
 5 MR. SHEVITZ: Objection. Asked and answered.  
 6 A I would not agree with your question.  
 7 Q Okay. Then tell me what they are -- tell me what  
 8 those demand variables are that will be in the  
 9 formula.  
 10 A I haven't finalized what they are, but I've  
 11 described what -- the nature of the demand  
 12 variables that would be utilized.  
 13 Q Tell me which demand variables you expect to  
 14 include in the formula.  
 15 A That is something that will be done at a later  
 16 stage. And I hasten to add that which --  
 17 Q Can you tell me --  
 18 A No. May I finish?  
 19 Q Sorry. Go ahead, yes.  
 20 A That the particular demand variables that, or  
 21 variable that is or are used is also a function of  
 22 the availability of data on a sufficiently accurate  
 23 basis to be used in the multiple regression model,  
 24 so there is an interaction between availability of  
 25 data and conceptually particular measures.

1 Q Have you identified any demand variable that will  
 2 be included in the regression analysis that you  
 3 believe should be done to assess damages on a  
 4 classwide basis in this case?  
 5 A I have.  
 6 Q Which ones?  
 7 A And I've explained it in the report.  
 8 Q Okay. Could you tell me what those are.  
 9 A I believe that one of the variables, maybe the  
 10 variable but that's yet to be determined, concerns  
 11 the demand of -- reflected in housing in the  
 12 ten-county area of central Indiana.  
 13 Q Other than the demand for housing, have you  
 14 identified any other specific demand factors that  
 15 you will use?  
 16 A I think there is a reference -- and this, again, is  
 17 a question of availability of data -- about gross  
 18 domestic product represented in the construction  
 19 center -- sector. Whether that data is available  
 20 for the ten-county area and on a sufficiently  
 21 timely basis, meaning monthly as opposed to  
 22 annually, is something that can only be determined  
 23 at a later point in time.  
 24 Q So is it fair to say that whether you include any  
 25 specific demand variable in your regression formula

1 A -- sneezing.  
 2 MS. WOODS: She can read it back.  
 3 (The requested material was read back by the  
 4 reporter.)  
 5 A As I understand your question about variability,  
 6 the data will be what the data are, and whether  
 7 there's a great deal of variability from period to  
 8 period or not, that's simply what the data  
 9 reflects.  
 10 Q Well, I thought you told me a moment ago that  
 11 whether or not you can actually use a specific  
 12 factor, whether it's a demand factor or a supply  
 13 factor, any factor, any variable in your regression  
 14 analysis, depends on the available data. Did you  
 15 not say that?  
 16 A Yes.  
 17 Q Okay.  
 18 A If I want to do a monthly -- for example, estimate  
 19 the regression through monthly data and for a  
 20 particular variable there are not monthly data  
 21 available, then that particular variable cannot be  
 22 included in the model.  
 23 Q Okay. What supply variables have you identified  
 24 for use in your regression model?  
 25 A Again, in my report, I identified that the changes

1 for this case depends largely on whether there is  
 2 suitable available data to specify that variable?  
 3 Do you agree with that?  
 4 A No, and I describe that in my report. For example,  
 5 there are available, though it requires specific  
 6 collection activities from the Bureau of Census of  
 7 the U.S. Department of Commerce, on housing permits  
 8 by month, by county, which is a measure of demand.  
 9 And I put -- I mention that in my report.  
 10 Q Okay. You didn't answer my question.  
 11 MS. WOODS: Would you read the question back,  
 12 please. I move to strike the answer as  
 13 nonresponsive.  
 14 (The requested material was read back by the  
 15 reporter.)  
 16 MR. SHEVITZ: Could you read the first  
 17 sentence of his response.  
 18 (The requested material was read back by the  
 19 reporter.)  
 20 MR. SHEVITZ: Okay.  
 21 Q To what extent does the variability of data affect  
 22 what demand factors you will specify in your  
 23 regression formula?  
 24 A I'm sorry, Mr. Kelley was --  
 25 MR. KELLEY: Sneezing.

1 in the costs of production, variable costs of  
 2 production, is the principal change in supply. And  
 3 that's the one that I would focus on.  
 4 Q Okay. Anything else?  
 5 A There may be, but at this stage that is the one  
 6 that I've identified.  
 7 Q So you don't know of any others at this stage; is  
 8 that correct?  
 9 A That's correct.  
 10 Q Now, you've mentioned a couple of times yesterday  
 11 during your testimony and I believe some this  
 12 morning as well that you've had some difficulty  
 13 with the data that have been available to you.  
 14 Correct?  
 15 MR. SHEVITZ: Objection. Object as to form  
 16 and to the extent it mischaracterizes the prior  
 17 testimony.  
 18 A Are you referring to the electronic transaction  
 19 data?  
 20 Q Yes, I am.  
 21 A I have no difficulty with them in terms of what  
 22 they report on a given month. I'm able to  
 23 calculate from those data a weighted average price  
 24 by product, by supplier for a given month.  
 25 Q So you have sufficient electronic data with which

1 to conduct a regression analysis at this point with  
 2 respect to those factors relative to those items  
 3 you just listed?  
 4 MR. SHEVITZ: Object as to form.  
 5 A That still has to be reviewed, but my preliminary  
 6 judgment is that additional transaction data for  
 7 months in the remainder of 2005, for some suppliers  
 8 who have not provided that, defendant suppliers,  
 9 and 2006 would probably be required.  
 10 Q Have you experienced any difficulties in the  
 11 electronic transaction database with respect to  
 12 comparability of data from supplier to supplier?  
 13 MR. SHEVITZ: Object to form.  
 14 A After the questions and answers which occurred  
 15 early, prior to the preparation of this report,  
 16 there may be some still ongoing with American and  
 17 Builder's, because we received that data fairly  
 18 recently. But with those exceptions which have  
 19 been, by and large, answered, no.  
 20 Q Do you know when the Builder's transactional  
 21 database was provided to plaintiffs' counsel?  
 22 A There was an initial set of electronic transaction  
 23 data that was provided in, I think, sometime in  
 24 2006 or early 2007. There was a subsequent set of  
 25 data provided, subsequent to my report, which was

1 late 2007, early 2008, but I don't -- that is  
 2 dependent -- is based on my memory.  
 3 Q Do you know what information was provided by  
 4 Builder's to plaintiffs' counsel in late 2007 or  
 5 early 2008?  
 6 A I believe it was explained to me as a more complete  
 7 dataset for essentially the same period.  
 8 Q If there are differences in the electronic database  
 9 with respect to a particular transaction, let's say  
 10 there's a difference between the delivery ticket  
 11 and the invoice, how will you reconcile those  
 12 differences?  
 13 MR. SHEVITZ: Object as to form. Calls for  
 14 speculation. Lack of foundation.  
 15 A I am relying upon the electronic transaction  
 16 database, which is a historical record of each  
 17 supplier's transactions. If there are differences  
 18 and you wish to point them out at some point, then  
 19 I will take -- between the ticket that's delivered  
 20 to the purchaser and the recording of that  
 21 transaction subsequently by the supplier, I'll take  
 22 that difference into account.  
 23 Q How will you do that?  
 24 MR. SHEVITZ: Object. The same objection. I  
 25 mean, you're asking him about a speculative

1 problem, and he's saying he would address it, and  
 2 now you're asking him how he would address a  
 3 problem that hasn't been presented to him yet?  
 4 Q Do you understand the question? If there's a  
 5 difference between the invoice and the delivery  
 6 ticket with respect to the amount of concrete  
 7 delivered in a particular transaction, which are  
 8 you going to rely on?  
 9 A I thought I just answered that question. Let me  
 10 state it again. I will rely upon the electronic  
 11 transaction data as being an accurate  
 12 representation of the quantity of cement and the  
 13 value of the cement represented by the dollars that  
 14 the invoice shows.  
 15 And if it turns out that there is a  
 16 discrepancy between the supplier's historical  
 17 records and the ticket, then -- and it can be  
 18 demonstrated that the ticket is a more accurate  
 19 representation of the quantity and dollars  
 20 involved, I would -- I would take that into  
 21 account.  
 22 Q Do you intend to include the place of delivery as  
 23 one of the variables to be included in your  
 24 analysis?  
 25 A Presently, no.

1 Q So the place where the concrete was delivered is  
 2 not going to be included in your regression  
 3 analysis; correct?  
 4 A Based -- well, I don't know for a fact, but  
 5 presently, no.  
 6 Q You've proposed what you term to be a, quote, fixed  
 7 effects model; correct?  
 8 A I may use it. I didn't say I would.  
 9 Q Tell us what you mean by that term.  
 10 A A fixed effects model, which is described in most  
 11 econometric books, is a segment of the regression  
 12 model which takes into account customer  
 13 identification, supplier identification, and  
 14 potentially product identification, and therefore  
 15 is incorporated -- those variables are specifically  
 16 incorporated in the analysis.  
 17 Q Do you intend to run separate regressions by  
 18 product?  
 19 A I haven't thought -- if I'm selected, I will  
 20 obviously address that question. If a fixed  
 21 effects model is used, probably not, because fixed  
 22 effects model would be able to take into account  
 23 price formation for the particular product type,  
 24 but that is something that is yet to be determined.  
 25 Q Have you given any consideration as to how you're

1 going to identify products in this fixed effects  
 2 model that you would propose is the most suitable  
 3 approach for assessing damages on a classwide basis  
 4 in this case?  
 5 MR. SHEVITZ: Object to form.  
 6 THE WITNESS: Could I have it -- there was  
 7 sort of -- I lost the last part of that question.  
 8 (The requested material was read back by the  
 9 reporter.)  
 10 A My first judgment would be -- and it may not be the  
 11 final one, but my first judgment would be to take  
 12 the products as they are identified by the  
 13 historical records of the defendants in their  
 14 electronic transaction base.  
 15 Q So, in other words, are you telling me that you're  
 16 going to use the product codes that the individual  
 17 suppliers use in their databases to identify the  
 18 products?  
 19 A That would be one method by which it could be done.  
 20 Q Would there be others?  
 21 A I've used others where there is direct  
 22 comparability of products and there are a  
 23 manageable number of them, I have combined those  
 24 products.  
 25 Q Would you propose to do that in this case?

1 A I haven't thought that through.  
 2 Q Okay. What is a --  
 3 A Because I'm not estimating damages at this point.  
 4 Q What is a manageable number of products?  
 5 A It depends on the industry. I can give you one  
 6 example. In the linerboard case, or corrugated --  
 7 Q What I'd like, if I may interrupt, I'd like to know  
 8 what you think is a manageable number of products  
 9 with respect to ready-mixed concrete.  
 10 A I don't know. I haven't -- I haven't looked at  
 11 that specifically, and it doesn't have to be done  
 12 that way. It can be done by identifying each  
 13 separate product code as a product.  
 14 Q You also mentioned that you would consider the  
 15 direct comparability of various suppliers'  
 16 products. How will you do that? How would you  
 17 propose to do that?  
 18 THE WITNESS: I didn't hear the first part.  
 19 Could you either have it read back --  
 20 MS. WOODS: She can read it back.  
 21 (The requested material was read back by the  
 22 reporter.)  
 23 A I'm not sure that I mentioned that, or maybe I  
 24 mentioned it in a way that we -- you and I --  
 25 Q I'll read back your answer. You said -- your

1 answer to my prior question was -- I asked you  
 2 about methodology, and you said you had used  
 3 others, meaning other methods, and you stated  
 4 "where there is direct comparability of products  
 5 and there are a manageable number of them, I have  
 6 combined those products." And I asked you what you  
 7 meant by direct comparability. Can you explain  
 8 what you mean?  
 9 MR. SHEVITZ: Did you mean that with reference  
 10 to his other cases that he was referring to in the  
 11 past?  
 12 MS. WOODS: Whatever his answer is referring  
 13 to. He used the phrase. I'm asking him what his  
 14 phrase meant.  
 15 MR. SHEVITZ: Okay.  
 16 MS. WOODS: That's all the question is.  
 17 MR. SHEVITZ: And I just want to put it in  
 18 context.  
 19 A I can only answer your question by giving an  
 20 illustration.  
 21 Q All right.  
 22 A And it's not about ready-mixed concrete.  
 23 Q All right.  
 24 A In the linerboard case, which was really about  
 25 corrugated containers in the end, there were

1 probably, for some of the suppliers, between 1500  
 2 and 2000 separate product codes, but the containers  
 3 produced fell into about 15 different categories.  
 4 With the identification of those categories, I  
 5 was able to bring the 1500 to 2000 products down to  
 6 15 across suppliers. That's a function of the  
 7 technology and the way corrugated containers are  
 8 made. So there's no op priori answer, but this is  
 9 an example that I've used in the past.  
 10 Q And have you made any determination as to whether  
 11 such an approach would be appropriate or suitable  
 12 with respect to ready-mixed concrete?  
 13 A As of this date, I haven't.  
 14 Q Have you ever used a fixed effects model in a  
 15 price-fixing case before?  
 16 A Yes.  
 17 Q Which?  
 18 A You should know the answer to this better than I do  
 19 because you have all my recent reports and  
 20 depositions. The linerboard case is one that --  
 21 that I just described to you.  
 22 Q Can you recall any others?  
 23 A Polyester staple fibers. OSB, oriented strand  
 24 board. Carbon black, in a modified form, but still  
 25 was a fixed effects model. There have been several

- 1 MR. SHEVITZ: Lack of foundation.  
 2 A They are the same ones. What I'm describing is a  
 3 general approach to the application of multiple  
 4 regression analysis, whether it be of the  
 5 ready-mixed concrete industry in the central  
 6 Indiana area or trying to measure corn yields on  
 7 farms in Indiana or trying to look at health  
 8 outcomes and explain what makes one area better  
 9 than another.  
 10 These are all areas in which multiple  
 11 regression analysis is applied, and the same set of  
 12 considerations also apply.  
 13 Q Do you agree that failure to include a major  
 14 explanatory variable that's correlated with a  
 15 dependent variable may actually cause an included  
 16 independent variable to be credited with an effect  
 17 that is actually caused by the excluded variable?  
 18 MR. SHEVITZ: Object as to form.  
 19 A I can't help but observe that that question was  
 20 written for you by somebody.  
 21 Q Actually it was not.  
 22 A Oh, then I apologize. I apologize.  
 23 Q Can you answer the question?  
 24 A The answer is, it may or it may not.  
 25 Q So you don't know.

- 1 A It is a function of the analysis.  
 2 Q But it is possible for that to happen; correct?  
 3 A Oh, it's possible, in the sense that everything is  
 4 possible, yes.  
 5 Q So we come back to the point that you've made a  
 6 couple of times and I've made a couple of times  
 7 that the success of the multiple regression  
 8 analysis to determine damages in a case such as  
 9 this really depends on specification of the model;  
 10 correct?  
 11 A Well, it depends more on the specification. It  
 12 also depends on the data, and it depends on the  
 13 output that can be tested against objective means,  
 14 objective tests, that are used in econometrics.  
 15 Q You're familiar, I'm sure, with the interplay among  
 16 variables that can be both linear and nonlinear in  
 17 regression analysis; correct?  
 18 MR. SHEVITZ: Object as to form.  
 19 A Potentially, yes.  
 20 Q Okay. Have you made any determinations or reached  
 21 any conclusions with respect to the need to account  
 22 for nonlinearity in a regression analysis for  
 23 ready-mixed concrete?  
 24 A That is something that would be determined later,  
 25 though at this point my investigation of the

- 1 ready-mixed concrete industry and the demand and  
 2 costs suggests that there are no nonlinear  
 3 relationships.  
 4 Q Okay. Do you expect to find any sort of feedback  
 5 loop between your dependent variable, the price,  
 6 and any of the explanatory variables that you would  
 7 propose to use in this case?  
 8 MR. SHEVITZ: Object to form. Lack of  
 9 foundation. Calls for speculation.  
 10 Go ahead.  
 11 A If the model is well specified, there should be no  
 12 feedback effects. The independent variables should  
 13 be exogenous, or independent, of the price.  
 14 Q Now, generally, multiple regression analysis is  
 15 used to reject a null hypothesis, that there's no  
 16 impact; in this case, we would say there's no  
 17 impact from the defendants' alleged cartel behavior  
 18 on prices of ready-mixed concrete; correct?  
 19 MR. SHEVITZ: Object to form.  
 20 A If that were the null hypothesis, it could be  
 21 satisfied, and then you would have to -- be able to  
 22 interpret the various statistics, what I've  
 23 described as a multiple regression output,  
 24 accordingly.  
 25 Q Is that what you propose to do here?

- 1 MR. SHEVITZ: Object to form.  
 2 A That is usually the way it is done.  
 3 Q What I've described is sometimes referred to as a  
 4 one-tailed test; correct?  
 5 A I did not interpret it that way. It can be done as  
 6 a one-tailed test, but quite often, and what we  
 7 would be looking at here, is probably a two-tailed,  
 8 or imposing the threshold of statistical  
 9 significance of a two-tailed test.  
 10 Q Is that what you would propose to use here, would  
 11 be a two-tailed test?  
 12 A I probably would unless I had reason to the  
 13 contrary. There have been a few cases where, in  
 14 the nature of the multiple regression analysis, the  
 15 test has been one tail.  
 16 Q And what would be the alternative hypothesis you  
 17 would propose for your two-tailed test?  
 18 MR. SHEVITZ: Calls for speculation.  
 19 A It is -- it is the level of significance that is  
 20 imposed by a two-tailed test. A one-tailed test,  
 21 if it were to apply, could be 90 percent, for  
 22 example; passes a test that is generally accepted  
 23 within the social sciences as being a suitable  
 24 test. A two-tailed test is more rigorous. It is  
 25 95 percent. That's really --

- 1 Q Which do you propose to use?  
 2 MR. SHEVITZ: Same objection.  
 3 A Unless -- I just answered that question. Unless  
 4 there is something that is -- that I don't know at  
 5 present, it is to use the two-tailed test, to the  
 6 95 percent, as a means of testing the statistical  
 7 significance of each independent variable.  
 8 Q You would agree that if you're able to reject the  
 9 95 -- reject with 95 percent competence levels a  
 10 null hypothesis that cartel behavior affected price  
 11 in this case, that that still does not establish  
 12 legal liability.  
 13 MR. SHEVITZ: Object to form. Calls for  
 14 speculation. Calls for a legal conclusion.  
 15 A In measuring the damages, which is what we've been  
 16 talking about and what I've discussed in my report,  
 17 I am taking as given the alleged cartel, as it is  
 18 identified in the complaint.  
 19 I'm not intending that, and I don't think  
 20 other economists, if they're involved, would intend  
 21 to use the regression results and interpret them as  
 22 a means of expressing opinions about the presence  
 23 or absence of the cartel.  
 24 Q So the answer is yes; correct?  
 25 MR. SHEVITZ: Objection. Asked and answered.

- 1 You don't have to give a yes or no answer to  
 2 please the questioner.  
 3 A You would have to repeat the question again.  
 4 Q She can read it back if you need to hear it again.  
 5 A Yes.  
 6 (The requested material was read back by the  
 7 reporter.)  
 8 MR. SHEVITZ: Same objection.  
 9 A If it's under- -- if my answer is understood in the  
 10 context of the previous answer, yes.  
 11 Q Now, would you agree with me that the results of  
 12 any particular regression analysis would be  
 13 sensitive to even a slight variation in the  
 14 specification of the independent variables?  
 15 MR. SHEVITZ: Lack of foundation. Calls for  
 16 speculation.  
 17 A I don't know how to answer that. A slight  
 18 difference.  
 19 Q One variable, two variables.  
 20 A With the addition of one variable, if you consider  
 21 that slight, may make a tremendous difference in  
 22 the outcome.  
 23 Q And isn't the same true, isn't it true that the  
 24 results of a regression analysis can also be  
 25 sensitive to differences in measurement of those

- 1 variables? In other words, differences in the  
 2 data.  
 3 MR. SHEVITZ: Same objection.  
 4 A For the same -- same variable? For example, if --  
 5 if housing permits are used as a demand variable  
 6 for the ready-mixed concrete, are you asking the  
 7 question, if two different researchers measure that  
 8 variable and get different --  
 9 Q In a different way. That can have an effect on the  
 10 outcome; correct?  
 11 A It could and it couldn't. It may not. Depends on  
 12 how large the difference is.  
 13 Q Now, do you propose to do a regression analysis in  
 14 this case? Or let me ask you this a different way.  
 15 Strike that.  
 16 Do you think that the most suitable regression  
 17 analysis for assessing damages on a classwide basis  
 18 in this case would be one that used the entire  
 19 population of transactional data, or used some  
 20 subset?  
 21 MR. SHEVITZ: Same objections.  
 22 A Define -- tell me what you have in mind about the  
 23 entire transaction.  
 24 Q In other words, are you going to use all the  
 25 transactional data that has been supplied to you by

- 1 the defendants in this case or are you going to do  
 2 some sampling of the transactional data to --  
 3 MR. SHEVITZ: Again, calls for speculation.  
 4 Go ahead.  
 5 A Because of the ease of working with the data once  
 6 it is in electronic form, the data will be used in  
 7 their entirety for the relevant periods.  
 8 However, just to make sure that it's clear, it  
 9 is unlikely that I would include data prior to the  
 10 alleged class period because -- even though it is  
 11 available for some but not all of the suppliers;  
 12 because, as I've said earlier, that may be affected  
 13 by statements that there was explicit coordination  
 14 of prices in that prior time period.  
 15 Q Are you concerned at all in conducting the type of  
 16 regression analysis that you've proposed for this  
 17 case about how to control for outliers in the data?  
 18 In other words, aberrant data points?  
 19 MR. SHEVITZ: Object to form. Calls for  
 20 speculation.  
 21 A One of the standard procedures that I and Nathan  
 22 Associates use is to remove outliers through a  
 23 standard approach. Usually it is three standard  
 24 deviations from the mean over which the -- the mean  
 25 of the period that it is used, and therefore

1 outliers are removed. I don't -- if somebody else  
 2 is doing this analysis, I don't know. But what --  
 3 Q Is that what you would propose to do in this case  
 4 if you were doing the analysis --  
 5 MR. SHEVITZ: Same objection.  
 6 Q -- is remove three data points that are more than  
 7 three standard deviations from the mean?  
 8 A I haven't thought about that, but that is likely to  
 9 be the approach.  
 10 Q Have you given any consideration as to what effect  
 11 that will have in terms of the number of data  
 12 points that might be removed from the database?  
 13 MR. SHEVITZ: Same objection.  
 14 A I haven't done that so I don't know.  
 15 Q Now, when Mr. Kelley asked you questions about your  
 16 Figures 8, 9, 10, and 11, you had some discussion  
 17 about the use of rolling averages or moving  
 18 averages; correct? Remember that?  
 19 A Yes.  
 20 Q And you suggested that you use rolling averages  
 21 because you're not able to hold constant customer  
 22 mix and the quantity of ready-mixed concrete being  
 23 purchased; correct?  
 24 A That's correct.  
 25 Q Why do you believe that it's necessary to hold

1 there is price structure, a structure to prices,  
 2 no. In the regression analysis, that information  
 3 will be reflected in the analysis itself. So it's  
 4 not masking it; it's taking that information and  
 5 making an explicit recognition of it.  
 6 Q Do you intend to use rolling average prices as your  
 7 dependent variable in the regression analysis?  
 8 MR. SHEVITZ: Calls for speculation. Lack of  
 9 foundation.  
 10 Q Or would you recommend using that?  
 11 MR. SHEVITZ: Same objection.  
 12 A I would not.  
 13 Q Now, one of the other reasons you said that you  
 14 used three-month moving averages is because there  
 15 was a small universe of sales or a small universe  
 16 of transactions; correct?  
 17 A Yes.  
 18 Q Is that the case with respect to ready-mixed  
 19 concrete?  
 20 MR. SHEVITZ: Object to form.  
 21 A When you look at a given supplier and a given  
 22 customer, for example, for one month, the amount of  
 23 observations, the transactions that are involved,  
 24 may be nonexistent, very small, or very large.  
 25 Q Well, I guess I'm asking you, do you know that to

1 those two factors constant?  
 2 A Because the changes of customer mix from one month  
 3 to the next, or the quantity at which ready-mixed  
 4 cement is sold may have a considerable influence on  
 5 the observed price but not reflect what the  
 6 underlying price is.  
 7 So, for example, we'll use an illustration.  
 8 If for your client, in one month, the bulk of the  
 9 customers are large purchasers, the price for a  
 10 given type of ready-mixed concrete is going to be  
 11 lower; but if in the next month, if the number of  
 12 customers is half who buy at that lower price, and  
 13 there are more customers who are smaller buying at  
 14 a higher price, the observed average price will be  
 15 higher.  
 16 That does not reflect the underlying changes  
 17 in the price of cement. It reflects a change in  
 18 the composition of the customers, or of the  
 19 quantities being sold.  
 20 Q By using that approach and trying to control for  
 21 the customer mix in this way, aren't you masking  
 22 the fact that there may be significant differences  
 23 in the customer bases of different suppliers?  
 24 MR. SHEVITZ: Object to form.  
 25 A For the comparison of price structure, whether

1 be a fact in this case, or is that just an  
 2 assumption that you're making?  
 3 A I know that to be a fact because it's reflected  
 4 through an analysis of the transaction database.  
 5 Q Where does that analysis appear in your report?  
 6 A It doesn't, except by my stating that it is so. A  
 7 small customer isn't going to be purchasing  
 8 necessarily from the same supplier every month.  
 9 Q Now, the second part of your estimation of damages,  
 10 after you've done the regression analysis and  
 11 you've come up with some overcharge price, is to  
 12 apply that to classwide sales; correct? That's the  
 13 second part of what you propose to do.  
 14 A Yes.  
 15 Q What data are you going to use for classwide sales?  
 16 A The defendants' sales, which are based off of the  
 17 electronic transaction base.  
 18 Q Are you going to use yards sold?  
 19 MR. SHEVITZ: Calls for speculation.  
 20 A Yes, because the electronic database reflects  
 21 transactions that have occurred.  
 22 The electronic -- let me just be clear. The  
 23 electronic transaction database is simply a  
 24 recording of what has actually taken place by  
 25 paper; invoices that go from your client, for

1 agreement on prices, it may -- the supplier who is  
 2 in the position may well be protected by the  
 3 agreement on prices and thus not lose market share.  
 4 Q What type of an agreement on prices would provide  
 5 such protection?  
 6 A Rates of change in prices, not to compete on  
 7 certain accounts. I'm speaking generally, not just  
 8 with ready-mix.  
 9 Q That's what I'm asking you, generally, yes.  
 10 A Whenever price competition is limited or completely  
 11 replaced, the ability of purchasers to identify  
 12 firms with the lowest price and have the benefits  
 13 of a lower price insulates the firm with the higher  
 14 prices from losing customers.  
 15 Q As an economist, you would agree that one of the  
 16 fundamentals of economic theory is that firms try  
 17 to maximize their profits; correct?  
 18 A That is one of the basic assumptions behind the set  
 19 of theorems that economists use.  
 20 Q Right. In fact, you assume as a part of your basic  
 21 set of assumptions as an economist that firms act  
 22 rationally to maximize their profit. Right?  
 23 A Yes.  
 24 Q If there were a cartel or an agreement to fix  
 25 prices at a super competitive level, wouldn't a

1 of your report, would you expect to use financial  
 2 statement information from the defendants?  
 3 A If I were to use defendants' profit margins, it  
 4 would be based on financial statements, because  
 5 that's the only information that is available; and  
 6 it would probably be on what is known and generally  
 7 accepted as the gross profit margin.  
 8 Q Have you done any analysis of the defendants'  
 9 financial statements with regard to your statement  
 10 at the top of page 27 of your report?  
 11 A I have not done the analysis. I've looked at the  
 12 financial statements that I have in my possession.  
 13 Q You're not an accountant; right?  
 14 A No. On the other hand, economists, applied  
 15 economists, use accounting statements as a  
 16 fundamental part of their analysis.  
 17 Q Do you have any particular training or expertise in  
 18 evaluating financial statements?  
 19 A The part of the -- yes.  
 20 Q What is that?  
 21 A Which is 30 years of experience.  
 22 Q As an economist.  
 23 A As an economist.  
 24 Q Anything other than that?  
 25 A I also teach the use of financial statements in

1 firm that lowered its price in order to capture  
 2 greater market share be acting rationally from an  
 3 economic point of view to maximize its profit?  
 4 A Based just on words, I don't think you can reach a  
 5 conclusion. This is a quantitative analysis, so  
 6 ultimately the question is, is the profit of that  
 7 firm, that has lowered its prices, better than the  
 8 profit it would have realized if it had remained at  
 9 cartel-determined prices.  
 10 Q And that's something that could be measured  
 11 empirically; correct?  
 12 A I've seen that it has been in other industries.  
 13 Whether it can be in this industry, I don't know.  
 14 Q Okay. Now, I asked you earlier this morning about  
 15 your proposed alternative of looking at firms'  
 16 profit margins to calculate damages, and I was  
 17 unable to cite you a page. It's on page 27 in  
 18 paragraph 58 of your report, and you state, "While  
 19 computing damages using pricing information is more  
 20 direct, analysis of defendants' profit margins may  
 21 also be informative." Correct? Did I read that  
 22 correctly? The top of page 27.  
 23 A You did read that correct.  
 24 Q Now, in order to do the alternative analysis that  
 25 you propose in that sentence at the top of page 27

1 economic analysis.  
 2 Q Do you teach a separate course on that?  
 3 A Yes.  
 4 Q When is the last time you taught that course?  
 5 A Six or seven years ago.  
 6 Q At American University?  
 7 A Yes.  
 8 Q Now, if I'm not mistaken, the proposal in your  
 9 report for calculating classwide damages is that  
 10 you would calculate an overcharge, and you would  
 11 apply that to all the sales transactions of  
 12 ready-mixed concrete in the central Indiana area as  
 13 it's defined in the second amended complaint, and  
 14 you would come up with a product of those two  
 15 multipliers, and that's the damage amount.  
 16 Correct?  
 17 A If the period, impact period were coterminous with  
 18 the period that is currently defined in the amended  
 19 complaint, yes.  
 20 Q All right. And do you expect that you will be able  
 21 to come up with a single overcharge number that can  
 22 be applied to the sales transactions to calculate  
 23 damages in this case?  
 24 A I anticipate that the answer is yes, but I have not  
 25 done the analysis to determine whether that will,



1 in fact, be the case.  
 2 Q Using that approach, how are you going to  
 3 distinguish between those purchases that were, in  
 4 fact, affected by the cartel behavior from those  
 5 that were not?  
 6 MR. SHEVITZ: Object to form. Lack of  
 7 foundation.  
 8 A Well, you have introduced in your question the  
 9 hypothetical that is not part of my analysis for  
 10 class, common proof of impact, and approaches to  
 11 damages.  
 12 Q And that assumption is that all purchases have been  
 13 affected by the cartel. Correct?  
 14 A I don't make that assumption. I arrive at that  
 15 conclusion based on my analysis.  
 16 Q But if, in fact, there are specific purchases that  
 17 were not affected by the cartel, how would your  
 18 damages model distinguish those?  
 19 MR. SHEVITZ: Object to form. Lack of  
 20 foundation. Calls for speculation.  
 21 A Again, unless I have some framework, I can't  
 22 describe what I would do with it. Now you're --  
 23 you're asking me a question that comes out of the  
 24 blue. Which products? When? It depends on what  
 25 is specified.

1 result meets the standard statistical criteria for  
 2 a robust and a well-defined model. Correct?  
 3 MR. SHEVITZ: Let me just object again for  
 4 lack of foundation. Incomplete hypothetical.  
 5 Give it your best shot.  
 6 Q Have I misstated your theory of --  
 7 A You're cutting it and dicing it in ways that may  
 8 not appear, to me, to be the same, but essentially  
 9 the process is --  
 10 THE VIDEOGRAPHER: Excuse me, we have to go  
 11 off the record.  
 12 (A discussion was held off the record.)  
 13 THE VIDEOGRAPHER: We are back on the record.  
 14 It's 1:44.  
 15 Q Let me see if I can simplify. What I was trying to  
 16 do was summarize what you told me would be a  
 17 well-specified fixed effects multiple regression  
 18 model, which is the model that you propose as the  
 19 most suitable way of assessing damages for the  
 20 class in this case. And you told me that the model  
 21 had to be consistent with economic theory, number  
 22 one; correct?  
 23 A Yes.  
 24 Q And that you had to have well-specified variables  
 25 consistent with the industry as number two.

1 Q Okay. And as we've talked about it, whether the  
 2 fixed effects regression model that you've proposed  
 3 as the best way to calculate classwide damages in  
 4 this case is a suitable way of calculating those  
 5 damages or is an appropriate methodology depends  
 6 on, as you said, a model that specified consistent  
 7 with economic theory and well-specified variables  
 8 that are consistent with the industry  
 9 characteristics and that uses data that is  
 10 reasonably accurate. Correct? Have I stated your  
 11 testimony correctly?  
 12 A There's another dimension to that, which is -- and  
 13 it's important -- an important one, and that is if  
 14 the statistical properties of the multiple  
 15 regression model, which applies when the model has  
 16 been applied to the data, satisfy accepted criteria  
 17 within the econometric solution.  
 18 Q That's the second step. I was just talking about  
 19 specifying the model. Once you've specified the  
 20 model using the three factors that you've described  
 21 that I just summarized -- consistent economic  
 22 theory, well-defined variables consistent with the  
 23 industry, and reasonably accurate data -- you come  
 24 up with a result; and then the second step is what  
 25 you just described, which is making sure that the

1 Correct?  
 2 A Yes.  
 3 Q And third, that the data had to be reasonably  
 4 accurate.  
 5 A That the data measure what it's intended to  
 6 measure.  
 7 Q Okay. And then you added a fourth factor just now  
 8 in your testimony in saying that once you run the  
 9 regression model specified using those three  
 10 criteria that we just described, that you have to  
 11 make sure that it meets standard econometric and  
 12 statistical measures for what I would call the  
 13 robustness or the appropriateness of the test.  
 14 Correct?  
 15 A Yes.  
 16 Q Okay.  
 17 A Let me offer one comment, though. The multiple  
 18 regression analysis may or may not include the  
 19 fixed effects dimension of the model. And your  
 20 question was -- put the two together.  
 21 Q All right.  
 22 A Very minor -- small -- small change.  
 23 Q Am I getting it correct that you're proposing a  
 24 fixed effects model here?  
 25 A I mentioned in my report, and I said it again in

1 response to one of your questions earlier, that a  
 2 fixed effects component to the multiple regression  
 3 analysis is possible, but whether it is -- it will  
 4 be used is yet to be determined.  
 5 Q Okay. Are you making a recommendation as to  
 6 whether or not it should be used in this case?  
 7 A At this point, no.  
 8 Q Now, you've not run any regression so far; correct?  
 9 A That is correct.  
 10 Q And no one at Nathan Associates has run any  
 11 regression so far; correct?  
 12 A Not to my knowledge.  
 13 Q Okay. They haven't done them at your request or  
 14 your direction.  
 15 A That's correct.  
 16 Q And you've not seen any such regressions; correct?  
 17 A No.  
 18 Q And you don't know of any other economists or  
 19 expert, on behalf of the plaintiff class, that's  
 20 run any such regressions, do you?  
 21 A No, I don't.  
 22 Q As you sit here today, are you confident that  
 23 your -- the model that you describe in your report  
 24 is one that is consistent with economic theory?  
 25 A Let's put it this way. I believe, and I am

1 confident in that, that a model can be specified  
 2 that is consistent with economic theory.  
 3 Q Okay. And are you also confident that the data  
 4 accuracy and measurement issues that we've  
 5 discussed can be satisfied in this case?  
 6 A Provided that the defendant suppliers cooperate and  
 7 provide additional transaction data.  
 8 Q Okay. And what additional transaction data would  
 9 that be?  
 10 MR. SHEVITZ: Asked and answered.  
 11 Go ahead.  
 12 A As I mentioned before, it would be -- and it varies  
 13 by supplier, by defendant. It would be transaction  
 14 data that begins where the current submissions end  
 15 off; for some that is in 2005, and others it's  
 16 2006, and probably, if it were readily available,  
 17 run through 2006. The more months the better. So  
 18 if it goes into 2007, that would be better.  
 19 Q And that data is for the supply side of the  
 20 equation; correct?  
 21 MR. SHEVITZ: Object to form.  
 22 Q The supply variables or factors that you intend to  
 23 specify.  
 24 A No. It could be. But I'm thinking of it mainly to  
 25 have a measure of the dependent variable. What are

1 the prices that have been -- the interaction  
 2 between the suppliers and the purchasers for  
 3 ready-mixed concrete.  
 4 Q But you've also told me, though, am I correct, that  
 5 you do not know what specific supply or demand  
 6 factors should be included in the model.  
 7 A Well, I don't think that's correct. I think I've  
 8 indicated that, on the supply side, that I would,  
 9 if I were doing it, incorporate the variable costs  
 10 that are incurred for producing a cubic yard of  
 11 cement; and on the demand side, more work yet needs  
 12 to be done, but some of that has been -- the  
 13 feasibility of the data being available has been  
 14 explored for some of those and it's expressed in my  
 15 report.  
 16 Q Yesterday we talked about it's feasible to find  
 17 certain publicly available data with respect to  
 18 certain factors that could be included in a model,  
 19 but you have not yet specified either the demand  
 20 factors or the supply factors that you would  
 21 include in the model. Correct?  
 22 A Well, we're talking here with differences that have  
 23 no -- not much economic meaning to me. The  
 24 variable costs of production are almost certainly  
 25 to be included in a regression model for

1 ready-mixed concrete, as will one or more  
 2 representations of changes in demand.  
 3 In fact, we know what the changes in demand  
 4 are for ready-mixed concrete; that is a quantity of  
 5 concrete that has actually been sold, but that  
 6 cannot be used in a multiple regression analysis  
 7 because the quantity is partly a function of and  
 8 influences the price, the dependent variable.  
 9 So some external variable representing demand,  
 10 or variables, must be selected. One that I have  
 11 explored, but I'm not certain will be used, is  
 12 building permits in the ten-county area.  
 13 Q Look at paragraph 64 on page 28 of your report  
 14 where you set forth the formula that you propose  
 15 would be the most appropriate approach to  
 16 calculating damages in this case.  
 17 MR. SHEVITZ: Object as to form.  
 18 Mischaracterizes the language in the affidavit.  
 19 Q As you sit here today, can you tell me what supply  
 20 factors will be specified in your model?  
 21 A I've just described one, and whether there's a need  
 22 for more will be a function of further  
 23 investigation, either by myself or somebody else.  
 24 Q Okay. So other than what you've just described,  
 25 you don't know what other factors should be

1 specified in this model; correct?  
 2 A Or if there should be.  
 3 MS. WOODS: That's all I have.  
 4 MR. BURNS: Before we get started, what's the  
 5 time?  
 6 Do you know how much time you're going to use?  
 7 THE VIDEOGRAPHER: Twelve minutes.  
 8 MR. HARRIS: I'll need about 12 minutes. No,  
 9 I think about 20 minutes.  
 10 MR. SHEVITZ: I mean, if that would take us  
 11 about ten minutes over, that's --  
 12 MR. HURLEY: I've got --  
 13 MR. SHEVITZ: Oh, I'm sorry.  
 14 MR. HURLEY: -- five minutes, if that's okay?  
 15 If we can agree to that framework.  
 16 MR. SHEVITZ: I think so. We can do 25 more  
 17 minutes, if that's okay with everybody.  
 18 MR. KELLEY: We can have an auction.  
 19 THE WITNESS: My understanding is you don't  
 20 carry money.  
 21 MR. KELLEY: That's true.  
 22 THE WITNESS: So you don't count.  
 23 MR. KELLEY: I just carry green stuff.  
 24 THE WITNESS: We're off the record; right?  
 25 THE VIDEOGRAPHER: No.

1 Q Could you please turn to Figure 1, the Indiana map.  
 2 Do you have that?  
 3 A Not yet but I will. Yes.  
 4 Q And you see the class area is highlighted?  
 5 A Yes.  
 6 Q Could a ready-mix plant in Monroe County, down in  
 7 the southern part of the class area, serve a  
 8 customer in Madison County?  
 9 A Unlikely. It possibly could, but whether the  
 10 plants in Monroe County would consider that a  
 11 viable, from their point of view, a viable business  
 12 opportunity would have to be determined.  
 13 Q Well, based upon what you've read in the record, do  
 14 you think they would consider it a viable business  
 15 opportunity?  
 16 A Probably not.  
 17 Q Okay. Same way, plant in Madison County serving  
 18 Monroe County?  
 19 A Yes.  
 20 Q Okay. Would a plant in Monroe County serve Hancock  
 21 County?  
 22 A Again, probably not.  
 23 Q Okay. Would a plant in Hancock County serve Monroe  
 24 County?  
 25 A Same answer.

1 THE WITNESS: Oh.  
 2 MR. SHEVITZ: That's all right. He's  
 3 accurately reflecting some facts that took place  
 4 earlier in the litigation.  
 5 MS. STEINER: And those are on the record,  
 6 too?  
 7 MR. SHEVITZ: Which are also on the record.  
 8 Everybody okay with that approach, 25 more  
 9 minutes? Yes from Builder's? Okay.  
 10 MR. KELLEY: Well, subject to your late return  
 11 to the subpoena and everything else that he's done,  
 12 but I'll do that some other day.  
 13 MR. SHEVITZ: All right, then. I'm not  
 14 agreeing that you get --  
 15 MR. KELLEY: I understand that.  
 16 MR. SHEVITZ: -- your time based on that. We  
 17 had that discussion earlier, but that makes sense.  
 18 MR. HARRIS: Let's go on. I'll turn my  
 19 BlackBerry off now. All right.  
 20 EXAMINATION  
 21 BY MR. HARRIS:  
 22 Q Dr. Beyer.  
 23 A Yes.  
 24 Q Do you have your report in front of you?  
 25 A I do.

1 Q Okay. How about a plant in Monroe County serving  
 2 Hamilton County?  
 3 A Unlikely.  
 4 Q Okay. Plant in Hamilton County serving Monroe  
 5 County?  
 6 A Same answer.  
 7 Q Okay. Plant in Monroe County serving Boone County?  
 8 A Unlikely.  
 9 Q Plant in Boone County serving Monroe County?  
 10 A Unlikely.  
 11 Q Thank you.  
 12 Am I correct, sir, that you have assumed in  
 13 this case, based upon the second amended complaint,  
 14 that the defendants conspired to fix prices they  
 15 charge to customers?  
 16 A Whatever it states in the complaint, I've assumed  
 17 to be true.  
 18 Q Well, the complaint states a lot of things. I'm  
 19 trying to get exactly what you assumed, and I think  
 20 it's true but let me ask you. Have you assumed  
 21 that, based upon the second amended complaint, that  
 22 the defendants conspired to fix prices they charge  
 23 customers?  
 24 A Yes.  
 25 Q But am I right that you have made no assumption as

1 to which customers they agreed to fix prices to?  
 2 Am I right?  
 3 MR. SHEVITZ: Object to the form. It assumes  
 4 some hypotheticals that are not in the record.  
 5 Q Am I right?  
 6 A I --  
 7 Q I believe you testified to that yesterday. But am  
 8 I right that you have made no assumption as to  
 9 which customer -- which of their customers the  
 10 defendants conspired to fix prices to.  
 11 A That's correct. I've made no independent analysis  
 12 of that.  
 13 Q And no assumption.  
 14 A The assumption I've made --  
 15 MR. SHEVITZ: Same objection.  
 16 A -- is the one that is -- of the cartel that is  
 17 described in the amended complaint.  
 18 Q Right. But I believe the amended complaint doesn't  
 19 say which customers, but I want to know what you've  
 20 assumed. And the question is, have you assumed  
 21 that they, for example, conspired to fix prices as  
 22 to all their customers? a subset of their  
 23 customers? Have you made an assumption as to which  
 24 customers they conspired to fix prices to?  
 25 MR. SHEVITZ: Same objection. Asked and

1 A That's correct.  
 2 Q Okay. Am I right that you have made no assumption  
 3 as to whether and as to what extent the  
 4 conspirators, in fact, did what they agreed to do  
 5 as far as price fix?  
 6 A That can only be determined in a subsequent stage  
 7 of the litigation, if there is such a stage, when  
 8 damages are estimated.  
 9 Q So I believe I'm right, but I want to be sure. Am  
 10 I right that you have made no assumption as to  
 11 whether and to what extent the conspirators, in  
 12 fact, did what they agreed to do as far as a price  
 13 fix?  
 14 A That's correct.  
 15 Q Okay. And you haven't investigated whether, in  
 16 fact, they did what they agreed to do. Is that  
 17 accurate?  
 18 A The effectiveness of the cartel is not part of my  
 19 analysis at this stage of the litigation.  
 20 Q So I believe it's a yes answer but let me ask you,  
 21 did you investigate whether the conspirators, in  
 22 fact, did what they agreed to do?  
 23 A No.  
 24 Q I believe you testified to this yesterday. Am I  
 25 right that you have made no assumption and

1 answered.  
 2 You can go ahead.  
 3 Q What's the answer?  
 4 A The answer is, I've taken the amended complaint as  
 5 true and I have concluded -- I have concluded based  
 6 on my analysis; I've not assumed it -- that all  
 7 purchasers would be impacted --  
 8 Q I understand.  
 9 A -- by the presence of a cartel.  
 10 Q Have you made an assumption as to when the  
 11 defendants conspired to fix prices, as to whether  
 12 they said, Let's fix prices to all our customers or  
 13 let's fix prices as to this subset of our  
 14 customers? Have you made any assumption as to  
 15 whether they agreed to fix prices to all their  
 16 customers? some of their customers? Have you made  
 17 any assumption?  
 18 MR. SHEVITZ: Same objection and asked and  
 19 answered again.  
 20 A No.  
 21 Q Okay. No assumption. And I believe you just said  
 22 that you have not made an investigation as to which  
 23 customers they agreed to fix prices as to. Is that  
 24 true?  
 25 MR. SHEVITZ: Same objections as before.

1 conducted no investigation as to whether any member  
 2 of the conspiracy withdrew from the conspiracy  
 3 during the class period? Is that right?  
 4 A Yes, that's correct.  
 5 Q Dr. Beyer, is it your opinion that if the  
 6 assumptions you've made about the conspiracy are  
 7 correct, all class members were, in fact, injured  
 8 by the conspiracy?  
 9 A The fact of injury as to -- in contrast to the  
 10 conditionality that all would be affected, if the  
 11 conspiracy were true, is to be analyzed at a  
 12 subsequent stage of the litigation.  
 13 Q So let me -- do you have an opinion as to  
 14 whether -- if all of your assumptions that you've  
 15 made about the conspiracy are correct, do you have  
 16 an opinion as to whether all class members were, in  
 17 fact, injured by the conspiracy?  
 18 A I don't.  
 19 Q Okay. I believe you testified that you believe  
 20 that impact in this case can be established by  
 21 common proof. Is that correct?  
 22 A Yes.  
 23 Q Okay. And that's because of your conclusion that  
 24 there's pricing structure in this industry. Is  
 25 that correct?

1 I omitted to ask you, have you done any empirical  
 2 analysis with respect to any of the transaction  
 3 data in this case relative to any of the price  
 4 announcements?  
 5 A No.  
 6 Q And so you haven't done any analysis to determine  
 7 if there were, in fact, any increases in prices  
 8 following the price announcements?  
 9 A As of this date, no.  
 10 MR. KELLEY: Just a couple.  
 11 EXAMINATION  
 12 BY MR. KELLEY:  
 13 Q Mr. Beyer, when did you get to town?  
 14 A Let's see, basketball nights, I can define it --  
 15 Tuesday night.  
 16 Q When did you send to Mr. Shevitz and Mr. Levin the  
 17 documents that were the return to our supplemental  
 18 subpoena?  
 19 A Wednesday morning I gave most of the documents to  
 20 him, and others came by e-mail that morning, or  
 21 were already here.  
 22 MR. KELLEY: No further questions.  
 23 THE VIDEOGRAPHER: That completes Volume II of  
 24 the deposition of Dr. John Beyer, Tape 3 of 3.  
 25 We're off the record at 2:09.

1 STATE OF INDIANA  
 2 COUNTY OF MARION  
 3  
 4 I, Patrice E. Morrison, a Notary Public in and  
 5 for said county and state, do hereby certify that the  
 6 deponent herein was by me first duly sworn to tell the  
 7 truth, the whole truth, and nothing but the truth in  
 8 the aforementioned matter;  
 9 That the foregoing deposition was taken on  
 10 behalf of the Defendants; that said deposition was  
 11 taken at the time and place heretofore mentioned  
 12 between 9:21 a.m. and 4:56 p.m. and 9:08 a.m. and  
 13 2:09 p.m. respectively;  
 14 That said deposition was taken down in  
 15 stenograph notes and afterwards reduced to typewriting  
 16 under my direction; and that the typewritten  
 17 transcript is a true record of the testimony given by  
 18 said deponent;  
 19 And thereafter presented to said witness for  
 20 signature; that this certificate does not purport to  
 21 acknowledge or verify the signature hereto of the  
 22 deponent.  
 23 I do further certify that I am a disinterested  
 24 person in this cause of action; that I am not a  
 25 relative of the attorneys for any of the parties.

1 UNITED STATES DISTRICT COURT  
 2 SOUTHERN DISTRICT OF INDIANA  
 3 INDIANAPOLIS DIVISION  
 4  
 5 IN RE READY-MIXED CONCRETE ) 1:05-cv-979-SEB-JMS  
 6 ANTI-TRUST LITIGATION )  
 7 )  
 8 THIS DOCUMENT RELATES TO )  
 9 ALL ACTIONS )  
 10 )  
 11 Job No. 41455  
 12  
 13 I, JOHN BEYER, PH.D., state that I have read  
 14 the foregoing transcript of the testimony given by me  
 15 at my deposition on March 27 and 28, 2008, and that  
 16 said transcript constitutes a true and correct record  
 17 of the testimony given by me at said deposition except  
 18 as I have so indicated on the errata sheets provided  
 19 herein.  
 20  
 21 \_\_\_\_\_  
 22 JOHN BEYER, Ph.D.  
 23  
 24 STEWART RICHARDSON & ASSOCIATES  
 25 Registered Professional Reporters  
 One Indiana Square, Suite 2425  
 Indianapolis, IN 46204  
 (317)237-3773

1 IN WITNESS WHEREOF, I have hereunto set my  
 2 hand and affixed my notarial seal this \_\_\_\_\_ day of  
 3 March, 2008.  
 4  
 5  
 6  
 7  
 8  
 9 \_\_\_\_\_  
 10 Patrice E. Morrison, Notary Public  
 11  
 12 My commission expires:  
 13 September 28, 2009  
 14  
 15 Job No. 41455  
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