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THE 9/11 LITIGATION DATABASE: A RECIPE FOR JUDICIAL MANAGEMENT

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The terrorist attacks on the Twin Towers on September 11, 2001, presented the American legal system with unprecedented challenges regarding whether, and how, to compensate those who suffered harm as a result. Congress stepped in almost immediately to provide a victims' compensation fund that dealt primarily with those who were directly and immediately affected.¹ But many other harms manifested later. In the months that followed as many as 60,000 persons came to the World Trade Center (WTC) to aid in what amounted to around-the-clock rescue, recovery, and debris removal at the WTC site.² Of that number, over 10,000 responders filed tort claims for injuries they claimed to have suffered as a result of exposure to contaminants at the site.³ Aside from workers' compensation and disability insurance, their lawsuits in federal court were their only means by which to seek damages for their injuries.

No one questions that the atmosphere around the WTC site was a toxic cocktail of epic proportions, especially in the earlier months.⁴ Plaintiffs' complaints set forth claims of negligence, violation of safe-place statutes, and failure to disclose the true nature of the relevant risks.⁵ The plaintiff-

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Professors James A. Henderson, Jr. and Aaron D. Twerski have served as special masters to Judge Alvin K. Hellerstein in the 9/11 first responders' litigation since December 12, 2006. As this issue goes to press, they continue to serve in that capacity.

The authors gratefully acknowledge the outstanding research assistance of Shimon Sternhell (Brooklyn 2012) and William Ralph, law clerk to Judge Hellerstein on this project.

1. Air Transportation Safety and System Stabilization Act, Pub. L. No. 107-42, 115 Stat. 230 (2001) (codified as amended at 49 U.S.C. § 40101 (2006)). In December 2010, Congress created a supplemental compensation fund to disburse \$2.775 billion dollars and various health benefits to a broad range of victims, including bystanders. James Zadroga 9/11 Health and Compensation Act of 2010, 76 Fed. Reg. 36,027, 36,028 (proposed June 21, 2011) (to be codified at 28 C.F.R. pt. 4).

2. *In re World Trade Ctr. Disaster Site Litig.*, 456 F. Supp. 2d 520, 525 (S.D.N.Y. 2006); ANTHONY DEPALMA, CITY OF DUST 217 (2010).

3. *In re Sept. 11 Litig.*, 765 F. Supp. 2d 587, 594 (S.D.N.Y. 2011); WTC Captive Ins. Co., v. Liberty Mut. Fire Ins. Co., 537 F. Supp. 2d 619, 621 (S.D.N.Y. 2008).

4. See, e.g., *In re World Trade Ctr. Disaster Site Litig.*, 456 F. Supp. 2d at 526-27.

5. *In re World Trade Ctr. Disaster Site Litig.*, 521 F.3d 169, 173-74 (2d Cir. 2008); *In re World Trade Ctr. Disaster Site Litig.*, 456 F. Supp. 2d at 542.

responders wound up alleging over 380 different injuries arising from their exposures.⁶ They claimed that the City of New York (the City), the Port Authority of New York and New Jersey, four prime contractors and hundreds of subcontractors were liable to them in tort.⁷ Congress assigned all of these responder claims to the United States District Court for the Southern District of New York,⁸ and the cases were ultimately consolidated before Judge Alvin K. Hellerstein, who presided over all of the tort claims arising from the 9/11 attacks.⁹ An article entitled *Managerial Judging: The 9/11 Responders' Tort Litigation*, coauthored by Judge Hellerstein and Special Masters Henderson and Twerski, recently published in the Cornell Law Review, contains a comprehensive analysis of the 9/11 litigation and ultimate settlement.¹⁰ This Article will focus and enlarge on one aspect of that subject, the creation of a program of core discovery and a database to gather and maintain information about all 10,000 claimants. The function of the database was to aid the court and the parties to manage discovery and to choose cases for further and intensive discovery and early trial in order to make it possible for the parties to negotiate a comprehensive settlement of the massive litigation.

I. WHY A DATABASE?

No judge and no set of attorneys can simultaneously litigate 10,000 cases alleging so many different injuries. In large-scale pharmaceutical drug cases, typically the plaintiffs allege that ingesting the drug caused only a limited number of ailments.¹¹ Attorneys choose representative cases

6. *In re World Trade Ctr. Disaster Site Litig.*, 598 F. Supp. 2d 498, 503 (S.D.N.Y. 2009).

7. *In re World Trade Ctr. Disaster Site Litig.*, 456 F. Supp. 2d at 529. The site was divided into four quadrants with a primary contractor assigned to each quadrant. *Id.* The primary contractors were Tully Construction (Zone 1), Bovis Lend Lease (Zone 2), AMEC (Zone 3), and Turner Construction (Zone 4). *Id.* The primary contractors in turn entered into subcontracts with over 140 specialty subcontractors that were needed to provide various services to complete the recovery effort. *Id.*; see also *Overview of the World Trade Center Litigation Settlement Process Agreement, As Amended* [hereinafter *Overview of Settlement Process*], available at <http://www.877wtchero.com/docs/Overview-of-the-World-Trade-Center-Litigation-Settlement-Process-Agreement-As-Amended.pdf> (providing a complete listing of the subcontractor defendants).

8. Air Transportation Safety and System Stabilization Act, Pub. L. No. 107-42, § 408, 115 Stat. 230, 241 (2001) (codified as amended at 49 U.S.C. § 40101 (2006)).

9. Robin J. Effron, *Disaster-Specific Mechanisms for Consolidation*, 82 TUL. L. REV. 2423, 2428 (2008).

10. Alvin K. Hellerstein, James A. Henderson, Jr. & Aaron D. Twerski, *Managerial Judging: The 9/11 Responders' Tort Litigation*, 98 CORNELL L. REV. 127 (2012).

11. See, e.g., *In re Vioxx Prods. Liab. Litig.*, 501 F. Supp. 2d 776, 780 (E.D. La. 2007) (discussing plaintiffs' claims arising from heart attacks suffered after taking Vioxx); Edward F.

for trial and, after some experience with litigation, the parties are able to value the cases based on such metrics as length of exposure and severity of injury.¹² From discovery and the trial results in handfuls of bellwether cases, each side learns the vulnerability of the other on such issues as liability, causation, and size of recovery.¹³ These lessons apply without great difficulty to the larger number of claims remaining in the litigations.¹⁴ No such path was available to Judge Hellerstein in the 9/11 context.¹⁵ The wide range of injuries alleged, including the varying locations and lengths of exposures, the dizzying array of prior medical histories, the differences in the types of protective equipment provided and the efficacy of their use made the task of retrieving and managing information very complex and difficult.¹⁶ Furthermore, Judge Hellerstein, realizing that this was public litigation that touched raw nerves in the American psyche, was intent on assuring that the relevant information was available not only to the court and to the parties but to the general public as well. Information had to be retrieved and presented in ways that allowed all who sought access to it to understand its import. Transparency was more than a slogan. It reflected a deeply held conviction about the management of the cases.¹⁷

As a practical matter, what did all of this mean? At the outset, Judge Hellerstein hoped that more specific pleadings might provide sufficient information to help structure discovery.¹⁸ However, the federal rules governing pleadings aim primarily at providing fair notice of the basic

Sherman, *The MDL Model for Resolving Complex Litigation if a Class Action is not Possible*, 82 TUL. L. REV. 2205, 2207 (2008) (noting that plaintiffs claimed that Vioxx caused strokes and heart attacks).

12. Eldon E. Fallon et al., *Bellwether Trials in Multidistrict Litigation*, 82 TUL. L. REV. 2323, 2324, 2332 (2008).

13. *See id.* at 2337.

14. *See id.*

15. *In re World Trade Ctr. Disaster Site Litig.*, 598 F. Supp. 2d 498, 500 (S.D.N.Y. 2009) (noting that “[t]here were few precedents, perhaps none,” to guide Judge Hellerstein in managing the September 11th litigation).

16. *Id.*

17. Judge Hellerstein’s paper at a seminar at Columbia Law School, led and organized by Senior U.S. District Judge Jack B. Weinstein, focused on this topic. *See* Alvin K. Hellerstein, *Democratization of Mass Tort Litigation: Presiding Over Mass Tort Litigation to Enhance Participation and Control by the People Whose Claims are Being Asserted*, 45 COLUM. J.L. & SOC. PROBS. 473 (2012). For an outgrowth of this paper, see Alvin K. Hellerstein, *Democratization of Mass Tort Litigation: Judicial Management to Enhance Claimants’ Participation and Control*, THE BRIEF: TORT TRIAL & INSURANCE PRACTICE SECTION, Summer 2012, at 16.

18. *See In re World Trade Ctr. Disaster Site Litig.*, No. 21 MC 100, 2006 WL 3858393, at *1 (S.D.N.Y. Dec. 28, 2006) (order granting motion for leave to amend plaintiffs’ master complaint); Transcript of Status Conference at 24–25, *In re World Trade Ctr. Disaster Site Litig.*, No. 21 MC 102 (S.D.N.Y. Nov. 16, 2007).

nature of the claims being asserted rather than imposing legal structure on those claims.¹⁹ Thus, federal civil pleading requirements are relatively lax and, in the 9/11 litigation, did not help to provide the court with sufficient information even to begin to think about settlement.²⁰ Working in conjunction with the Special Masters (co-authors Henderson and Twerski), Judge Hellerstein developed core discovery questions that all parties were obligated to answer.²¹ The core discovery order asked for information on such items as the specific work performed by each plaintiff, the availability and use of personal protective equipment, and the nature and severity of the injuries allegedly suffered by each plaintiff.²² Although the answers to these questions provided information about a number of issues, it was not possible, informally and intuitively, to correlate information from 10,000-plus plaintiffs and hundreds of defendants.²³ It became clear that the only way that anyone could get their arms around the factual complexities of this case was to construct an electronically searchable database.²⁴

A. *The Severity Chart*

From the outset Judge Hellerstein made it clear to the Special Masters and the parties that his priority was to see to it that those most seriously harmed would receive the highest awards.²⁵ This desire had to be tempered by the realities of tort law. To the extent that some plaintiffs could not causally relate their injuries to exposures at the WTC site, recoveries would have to be adjusted downward to reflect the weak causal links. Nonetheless, severity of injury rather than nuances regarding causation became the watchword for recovery. Implementing that commitment proved to be no easy task.

Designing a Severity Chart correlating major types of injury with levels of relative severity was difficult for several reasons. Out of the 380 different injuries alleged, it was necessary to choose those that were

19. See FED. R. CIV. P. 8; *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 570 (2007) (noting that a complaint requires “only enough facts to state a claim to relief that is plausible on its face”).

20. See Transcript of Status Conference at 15, *In re World Trade Ctr. Disaster Site Litig.*, No. 21 MC 100 (S.D.N.Y. Nov. 16, 2007).

21. See *In re World Trade Ctr. Disaster Site Litig.*, 598 F. Supp. 2d 498, 501 (S.D.N.Y. 2009); Clarifying Order Regulating Discovery, No. 21 MC 100 (S.D.N.Y. Nov. 27, 2007).

22. Clarifying Order Regulating Discovery, No. 21 MC 100 (S.D.N.Y. Nov. 27, 2007).

23. *In re World Trade Ctr. Disaster Site Litig.*, No. 21 MC 100, 2008 WL 793578, at *1 (S.D.N.Y. Mar. 24, 2008) (order appointing technical advisor).

24. See *id.*

25. *In re World Trade Ctr. Disaster Site Litig.*, 598 F. Supp. 2d at 503.

sufficiently important to be included on a Severity Chart of manageable length.²⁶ Second, objective criteria for evaluating the relative severity of injury had to be identified. Third, an injury rated as relatively severe for one ailment might be far less severe than an ostensibly lower rating for a different ailment.

Aware of the scientific literature that had been published following the 9/11 disaster²⁷ and mindful of the answers previously given to core discovery questions, the court and the Masters concluded that a variety of different respiratory diseases were the most frequent and plausible illnesses reflected in plaintiffs' complaints.²⁸ In addition, large numbers of plaintiffs complained of rhinosininitis and gastroesophageal reflux (GERD).²⁹ As for objective criteria by which to evaluate the severity of injury, fortunately the American Medical Association and the American Thoracic Society publish helpful severity ratings. These ratings are relied upon in a variety of nontort compensation contexts³⁰ for all of the diseases included in the Severity Chart.

Working out cross-injury comparisons proved to be especially difficult. Ultimately, counsel came up with their own evaluations for injuries within each category. Because Judge Hellerstein desired that consensus be reached and made clear that he would rely on the rankings once established, negotiating the Severity Chart with counsel was no easy matter. Defense counsel expressed concern that the "objective" diagnostic tests relied on to determine the presence of disease were subject to great variation, depending not only on the integrity and expertise of those administering the tests but also on the pre-test conduct of the plaintiffs. For example, results from breathing tests designed to measure lung capacity could vary significantly depending on whether the plaintiff smoked immediately, or shortly, before the test. Medical records were often silent on such matters. Was it sufficient to test for GERD by endoscopy or was a more reliable, albeit more costly, MRI required? Was it necessary to have a confirming diagnosis by a physician interpreting the

26. Transcript of Status Conference at 6–8, *In re World Trade Ctr. Disaster Site Litig.*, No. 21 MC 100 (S.D.N.Y. Sept. 16, 2008).

27. See, e.g., G. Moscato & M.R. Yacoub, *World Trade Center Disaster: Short- and Medium-Term Health Outcome*, 67 *MONALDI ARCHIVE FOR CHEST DISEASE* 154 (2007); Jonathan M. Samet et al., *The Legacy of World Trade Center Dust*, 356 *NEW ENG. J. MED.* 2233 (2007).

28. *In re World Trade Ctr. Disaster Site Litig.*, 598 F. Supp. 2d at 531–33. The illnesses listed on the Severity Chart were COPD, emphysema, interstitial lung disease, asthma, RADS, laryngitis, pharyngitis, chronic rhinosininitis, GERD, Barrett's esophagus, gastritis, esophagitis, and GI stricture. *Id.*

29. *Id.* at 532–33.

30. *Id.* at 503.

test results?³¹ Answers to these and a number of other questions had to be negotiated. When agreement could not be reached, Judge Hellerstein decided the issue after considering the positions of the parties and the recommendations of the Special Masters.

B. Constructing the Database

As noted earlier, the 9/11 responders' litigation differed significantly from traditional mass tort litigation arising out of injuries caused by prescription drugs.³² Although cases were sampled in both types of litigation, the methodologies and purposes of sampling differed substantially. In the 9/11 litigation, the database program enabled the court and counsel to acquire information on all 10,000 cases, not just a sampled few, and allowed the court to participate fully and to manage the sampling process. By creating a sufficiently reliable and comprehensive database that was inclusive of all parties and accessible to all attorneys, the profiles for each individual plaintiff would provide substantial information on a host of issues that might be helpful in valuing cases and enabling a more intelligent sampling process to identify cases that would merit further and more intensive proceedings and trials.³³

More importantly, the ability to perform Boolean searches covering thousands of plaintiff files allowed the Special Masters to determine interrelationships between and among responses. For example, not only could the age distributions of plaintiffs, the frequencies and severities of each type of disease, and the variety and frequency among plaintiffs' pre-existing medical conditions be determined; but it was possible to identify correlations between the ages of plaintiffs and the severities of injuries suffered and whether the length of the plaintiffs' exposure to the WTC site increased the severity of injury. Thus, by adding or subtracting from the criteria reflected in the various fields one could discern which factors strongly correlated with the severity of injury and which factors had a lesser impact, or no impact at all.

To aid in choosing and modifying the software necessary to accomplish these objectives and to enter and maintain the data, the Special Masters hired computer specialists who also assisted in designing and executing

31. For Judge Hellerstein and the Special Masters' consideration of this question, see Transcript of Status Conference, *In re World Trade Ctr. Disaster Site Litig.*, No. 21 MC 100 (S.D.N.Y. Sept. 16, 2008).

32. *See In re World Trade Ctr. Disaster Site Litig.*, 598 F. Supp. 2d at 500.

33. *Id.* at 502, 507–22; *In re World Trade Ctr. Disaster Site Litig.*, No. 21 MC 100, 2008 WL 793578, at *1 (S.D.N.Y. Mar. 24, 2008) (order appointing technical advisor).

the relevant searches.³⁴ These approaches to the data provided critical information at important stages of the litigation. First, and most important, it became clear fairly early that less than 25 percent of the claimants had suffered serious injury and that almost a third suffered no injury at all.³⁵ Moreover, many of those who claimed to have suffered injuries that could generally be categorized as serious would likely wind up at the lower end of the severity scale.³⁶

A particular difficulty arose with regard to cancer cases. Because of the long latency periods between exposure and the onset of cancer, there was a lack of evidence linking exposure to the WTC toxics to the cancers suffered by the plaintiffs.³⁷ This later became a gut-wrenching problem, given that the cancer sufferers and their families and survivors were convinced that their cancers resulted from WTC work.³⁸ Even now, after further study, the evidence remains problematic regarding whether specific cancers can be tied to the toxic substances ambient in the WTC work site, or even if there were increases in cancers by those exposed to those substances at the work site.³⁹

In any event, within two years from the start of the computer-assisted phase of discovery, it was possible to conclude with some confidence that the one billion dollars that FEMA had set aside for defense against and payment of tort claims against the City and its contractors, together with

34. *In re* World Trade Ctr. Disaster Site Litig., 2008 WL 793578, at *1 (No. 21 MC 100). With the aid the Timothy Opsitnick, the Special Masters hired Technology Concepts and Design, Inc. to build and operate the electronic database. *Id.*

35. Memorandum from James A. Henderson, Jr. & Aaron D. Twerski, Special Masters, to Judge Alvin K. Hellerstein (Sept. 24, 2009) (docketed in 21 MC 100, June 23, 2010) [hereinafter Memo from Special Masters (Sept. 24)].

36. *Id.*

37. Transcript of Status Conference at 17, *In re* World Trade Ctr. Disaster Site Litig., No. 21 MC 100 (S.D.N.Y. Jan. 21, 2010); *see also* Transcript of Status Conference at 59, *In re* World Trade Ctr. Disaster Site Litig., No. 21 MC 100 (S.D.N.Y. Mar. 19, 2010); *Experts Say Science Lacking on 9/11-Cancer Link*, COLUMBIA DAILY TRIBUNE, June 23, 2012, at B6; David B. Caruso & Michael Stobbe, *9/11 Cancer Link Lacks Scientific Evidence, Experts Say*, HUFFINGTON POST (June 20, 2012, 5:43 AM), http://www.huffingtonpost.com/2012/06/20/911-cancer-link-lacks-sci_n_1611666.html.

38. *See, e.g.*, Tom Leonard, *Donna Summer said toxic dust from 9/11 gave her fatal lung cancer*, MAIL ONLINE, (May 20, 2012, 5:39 AM), <http://www.dailymail.co.uk/news/article-2146629/Donna-Summer-said-cancer-caused-dust-9-11.html>; Andrew Siff, *9/11 Dust Raised Cancer Risk: Study*, NBC NEW YORK (September, 6 2011, 6:33 PM), <http://www.nbcnewyork.com/news/local/Cancer-Deaths-September-11-Studies-128923278.html>.

39. *See, e.g.*, Anemona Hartocollis, *Sept. 11 Health Fund Given Clearance to Cover Cancer*, N.Y. TIMES (June 8, 2012), <http://www.nytimes.com/2012/06/09/nyregion/ruling-to-allow-9-11-health-fund-to-cover-cancers.html?pagewanted=all>; *Science lacking on 9/11 and cancer, experts say*, USA TODAY (June 21, 2012, 1:08 PM), <http://www.usatoday.com/news/health/story/2012-06-21/sept11-cancer-wtc/55737174/1>.

accumulated interest, would allow for a reasonable settlement of the thousands of cases before the court.⁴⁰

The database was also useful in choosing which plaintiffs should be scheduled for early discovery and trial.⁴¹ Setting firm trial dates was of great importance in influencing the parties to settle.⁴² Using the database, the Special Masters were able to suggest to Judge Hellerstein a rational mix of cases for the first trials.⁴³ Taking into account many of the factors set forth above, Judge Hellerstein was able to choose plaintiffs along the age spectrum that reflected the goals that he had set: advancing the cases of those who appeared to be most severely injured by their work at the WTC site, as well as cases chosen by the parties as best suited to advance the claims, or defenses, they respectively advocated.⁴⁴ Given the difficulty in identifying truly representative cases in such a varied plaintiff population, it became more practical to select cases for early trial that gave the parties some sense of their relative jeopardy should the cases go forward.

II. CRITIQUING THE DATABASE

Before undertaking a critique of the database used by both the court and (presumably) the parties in the 9/11 litigation, a partial disclaimer, of sorts, is in order. The Special Masters and Judge Hellerstein did not sit down by themselves and conjure the 368 fields of inquiry in the database. At all times the court and the Masters were sensitive to the fact that the parties should have the primary role in identifying the relevant questions. The Special Masters spent countless hours assisting in the negotiations regarding the make-up of the database fields.⁴⁵ When the parties were at loggerheads, the Special Masters recommended or cajoled them into more sensible positions. For the most part the parties acceded to the Special Masters' recommendations, expecting that Judge Hellerstein would agree

40. Consolidated Appropriations Resolution, Pub. L. No. 108-7, 117 Stat. 11, 517-18 (2003). On March 11, 2010, the parties reached their initial settlement. Mireya Navarro, *Federal Judge Orders More Talks on 9/11 Deal*, N.Y. TIMES, Mar. 20, 2010, at A12.

41. See *In re World Trade Ctr. Disaster Site Litig.*, 598 F. Supp. 2d 498, 503-05 (S.D.N.Y. 2009); *In re World Trade Ctr. Disaster Site Litig.*, No. 21 MC 100, 2008 WL 793578, at *1 (S.D.N.Y. Mar. 24, 2008) (order appointing technical advisor).

42. See *In re World Trade Ctr. Disaster Site Litig.*, 598 F. Supp. 2d at 522-30.

43. Memorandum from Special Masters to Judge Alvin K. Hellerstein (Apr. 7, 2009) (on file with authors) [hereinafter Memo from Special Masters (Apr. 7)].

44. See Order Identifying Cases for Trial, No. 21 MC 100 (S.D.N.Y. Apr. 10, 2009).

45. See *In re World Trade Ctr. Disaster Site Litig.*, 598 F. Supp. 2d at 522; Order Regarding Database Objections, No. 21 MC 100 (S.D.N.Y. Jan. 5, 2009).

with the Special Masters' positions. When the plaintiffs and defense liaison counsel agreed that a question should be included, the Special Masters were reluctant to recommend that the judge reject the question. Based on hindsight, we may have been too deferential. Arguably, the Masters should have known that some of the database fields would likely be unhelpful to the resolution of the litigation, or be better handled in a subsequent phase involving intensive depositions of the plaintiffs whose claims had been selected for further proceedings. Given the large number of plaintiffs, every unneeded question propounded meant potentially 10,000 unneeded responses, adding to burdens and expenses and potentially prolonging discovery.

Now for some examples of what we believe to have been unnecessary questions posed to the plaintiffs in the database. Some of the excess may be explained by the fact that the questions eliciting answers that were integrated into the database were intended to replace the discovery function of interrogatories, and the parties wished to use the core discovery program to prepare for the more intensive depositions that were likely to follow. Consider the following in assessing how much information was enough:

(1) Work background questions. A number of fields in the database went into considerable detail regarding the plaintiffs' work experience. For example, were they trained for the tasks they were to perform at the WTC site?⁴⁶ By whom and when did such training take place?⁴⁷ If their employment had been terminated, what were the reasons for termination?⁴⁸ More important questions concerning the terms of employment were contained in another section that asked when employees began working on the site,⁴⁹ when they ceased working,⁵⁰ and what was the total number of hours worked.⁵¹ The questions regarding how the plaintiffs were trained for their work elicited vague responses due to the passage of time and were ultimately unhelpful.

(2) Availability and Use of Respiratory Equipment. Information with regard to the availability of respiratory equipment and how and under what conditions the equipment was used was valuable. It was widely believed that items of personal protection equipment were not readily available to

46. *In re World Trade Ctr. Disaster Site Litig.*, 598 F. Supp. 2d at 506–07.

47. *Id.* at 506.

48. *Id.*

49. *Id.* at 508.

50. *Id.*

51. *Id.*

all who needed them and that the air filter canisters necessary to render them effective often were not replaced.⁵² To the extent that there was truth to these allegations, failure to provide the necessary equipment may well have violated provisions of the New York Labor law.⁵³ The database included 58 questions, propounded to both plaintiffs and defendants, seeking information regarding who provided the respiratory equipment, the dates when they were provided, who trained the responders as to use of the equipment, and when such training took place.⁵⁴ In retrospect, far fewer questions would have served the purpose. Questions inquiring into the dates and times a responder received a respirator were not of great significance. Furthermore, given that these questions were to be answered by plaintiffs at least seven years after their work at the WTC site ended, it was unlikely that their answers would be accurate.

III. LESSONS TO BE LEARNED FROM THE 9/11 DATABASE

A. *Controlling the Size of the Database*

The size of a litigation database depends heavily on the objectives the court and the parties want it to serve. If the objective is merely to choose representative cases for early discovery and trial, it is not necessary to create an elaborate database. If the primary objective is to encourage settlement, more information is necessary. If the settlement negotiations depend on complex categorizations of work histories and injuries, then still more information will have to be collected. And even more questions may be necessary if the database is intended to facilitate later discovery. Once the decision was made by Judge Hellerstein that a database was to be constructed, the parties proposed the inclusion of approximately 1,200 fields.⁵⁵ Such an expanded database might have served as a vehicle for more extensive discovery. The Special Masters chose to trim the database substantially from what the parties proposed.⁵⁶ Indeed, as observed earlier, it could have been shorter still. Nonetheless, the database may have ended up near optimal size given the wide range of injuries, the varied nature of the exposures, and the many other variables that had to be taken into account.

52. *In re World Trade Ctr. Disaster Site Litig.*, 456 F. Supp. 2d 520, 533 n.7 (S.D.N.Y. 2006).

53. *Id.* at 537–38.

54. *In re World Trade Ctr. Disaster Site Litig.*, 598 F. Supp. 2d at 508–09.

55. Telephone conversation between the Special Masters and the parties' attorneys.

56. *See In re World Trade Ctr. Disaster Site Litig.*, 834 F. Supp. 2d 184, 186 (S.D.N.Y. 2011).

B. The Nature of the Questions to be Asked

The purpose of the database in the 9/11 litigation was to provide easily retrievable, correlatable information.⁵⁷ Whenever possible, the database avoided questions that called for a narrative response because textual narratives cannot be easily retrieved or correlated with other information. Instead, wherever feasible, the Special Masters formulated questions to elicit a yes-no response.⁵⁸ Where that was not possible, multiple-choice responses were the best alternative.⁵⁹ Another problem with narratives is that they tend not to be verifiable. The ability to objectively verify database answers is of great importance to the usefulness of the database. Given the large number of responses, it was important that the attorneys who sought to challenge the veracity of the answers could do so quickly.

One of the strengths of the 9/11 database was that it called for specific answers regarding results from diagnostic medical tests.⁶⁰ The tests relied upon were widely recognized as valid by prestigious medical authorities.⁶¹ The results from these tests, when ranked on the Severity Chart, provided invaluable information that presented a general picture of the scope and intensity of the injuries suffered by the general plaintiff population.⁶²

IV. THE JUDGE'S AFTERWORD

Neither the parties nor the court can manage 10,000 cases arising from a mass tort. Some method had to be devised to sample a manageable number, somehow thought to be reflective of the whole. Traditionally, sampling has been left to the attorneys, with the court selecting evenly from the proffered sample and favoring those for intensive discovery and trial.

I did not wish to follow that model. In the 9/11 cases, over 90 percent of the plaintiffs were represented by a single set of lawyers. I came to the view, after considerable and unsuccessful efforts to order the attorneys to particularize their clients' claims, that they could not, or would not, choose among their clients. I considered also that it would be unfair to select some

57. *In re World Trade Ctr. Disaster Site Litig.*, No. 21 MC 100, 2008 WL 793578, at *1 (S.D.N.Y. Mar. 24, 2008) (order appointing technical advisor).

58. *See In re World Trade Ctr. Disaster Site Litig.* 598 F. Supp. 2d at 502.

59. The answers to certain questions were limited to a list of permissible answers called a pick-list. *Id.*

60. *See id.* at 503.

61. *Id.*

62. Memo from Special Masters (Sept. 24), *supra* note 35.

cases for early proceedings and subject others that perhaps were needier and more pressing to long delays. And, without critical information about all the cases, I doubted that representative cases could be selected rationally, and felt concern that the outcome in a few cases could influence comprehensive settlements to unfair procedures and unfair recoveries.

I determined, with the Special Masters, to develop a core discovery program that would allow all the cases to advance, efficiently and as rapidly as possible, to a point where a rational sample could be selected. That core discovery program had to have certain features:

1. Each plaintiff had to swear to his answers, just as if they were responses to interrogatories.
2. The lawyers had to have a stake in developing the database, to promote their cooperation and to reduce challenges.
3. Claims of injury had to be based on quantitative medically-approved tests. Subjective diagnoses, although not precluded, were to be answered separately.
4. The questions had to elicit answers in a form that was susceptible to computer coding.
5. The database that would be formed was to be independently maintained, with costs to be shared by counsel, and was to be accessible to all counsel and to the court and special masters.
6. Answers by the parties had to be served in case sequence, to assure that all cases were accounted for and that all plaintiffs were willing and able to proceed further. Failures to respond would be punished by dismissals for failure to prosecute.
7. Cases for further and more intensive discovery and trial would be selected at pre-set intervals, as data for groups of 2,000 cases in index number sequence were processed and made accessible.
8. The requirement of sworn answers by each responding plaintiff, and counsel's awareness that a certain number of plaintiffs would have their answers tested in depositions, assured the integrity and reliability of the process (to the extent that there could be such assurance). Subjecting the sampled plaintiffs to depositions would be expected to assure the reliability and integrity of their answers and, by extension, provide a measure for assessing the credibility of all plaintiffs' responses collected in the database.

The questions, the overall process, and the integration of the process into a firm schedule leading inexorably to trials of the sampled cases are described in a published opinion.⁶³ I have no question that the discipline imparted by the program, the information gleaned from the database, and, most importantly, the evaluations expressed in the initial report of the Special Masters⁶⁴ led to the comprehensive settlement of the cases, ratified by over 99 percent of the plaintiffs opting into the settlement.

This exercise, merging judicial management and control of the litigation processes with the autonomy of each side's attorneys in prosecuting and defending their cases, I believe, created a process that was fair, efficient, and economical. The initial costs—sharing the time and expenses of the Special Masters and developing a comprehensive database—could be high but, I believed, would be economical in the long run, and much less expensive than normal discovery processes. Bringing the whole mass of cases to a point where they could be subsumed in a comprehensive settlement, much earlier than otherwise would be possible, with recovery fairly spread over cases of varying severity and merit, fixed and distributed in a fair and transparent process, provided extraordinary benefits to the litigants and to the judicial system. The database made all of this possible.

V. CONCLUSION

Notwithstanding its imperfections, we believe that the 9/11 database served the court well. It generated a large amount of searchable and correlatable information within a short time frame. It allowed the court rationally to choose appropriate representative plaintiffs for early discovery and trial.⁶⁵ Judge Hellerstein was able to set firm trial dates for a large number of sampled plaintiffs (thus exerting pressure on the parties to settle or else face the uncertainties of trial), one following immediately after the other until values could be established and resolutions reached.⁶⁶ The court made the memoranda authored by the Special Masters based on the database available on its website, thus allowing the plaintiffs and the

63. *In re World Trade Ctr. Disaster Site Litig.*, 598 F. Supp. 2d 498 (S.D.N.Y. 2009).

64. Memo from Special Masters (Sept. 24), *supra* note 35.

65. Memo from Special Masters (Apr. 7), *supra* note 43; *see also* Order Identifying Cases for Trial, No. 21 MC 100 (S.D.N.Y. Apr. 10, 2009).

66. *See In re World Trade Ctr. Disaster Site Litig.*, 598 F. Supp. 2d at 503–05.

media to get a good glimpse at the scope of the entire litigation.⁶⁷ On the one hand, the fact that fewer than one-quarter of the plaintiffs had suffered arguably severe injuries and that a third had suffered no discernible injuries at all⁶⁸ helped everyone to understand that, for a majority of plaintiffs, there would be no pot of gold at the end of the rainbow. On the other hand, the database pressured the parties to settle the cases involving serious injury on equitable terms. Judge Hellerstein rejected the first settlement package presented by the parties and encouraged the parties to increase the compensation to the plaintiffs.⁶⁹ Ultimately, over \$100 million was added to the settlement, \$50 million from an additional contribution by the Captive Insurance Company, and approximately \$50 million by the reduction of attorney fees to plaintiffs' counsel.⁷⁰ Additional benefits came from forgiveness of liens, by the City and a large number of compensation and disability insurance carriers. And even more sums were paid in settlements by the Port Authority and various contractors and insurers who were not embraced by the settlements with the City. In no small part, Judge Hellerstein was able to insist on these increases and facilitated the additional settlements because he was in possession of the information provided by the database. The final outcome should give encouragement to those in the future who may contemplate using a database to help resolve complex litigation.⁷¹

67. See U. S. DISTRICT COURT FOR THE SOUTHERN DISTRICT OF NEW YORK, <http://www.nysd.uscourts.gov/sept11> (last visited Aug. 10, 2012) (The majority of Judge Hellerstein's orders and opinions were posted on the court's website.).

68. Memo from Special Masters (Sept. 24), *supra* note 35.

69. Transcript of Status Conference at 54, *In re World Trade Ctr. Disaster Site Litig.*, No. 21 MC 100 (S.D.N.Y. Mar. 19, 2010) ("In my judgment, this settlement is not enough."); Navarro, *supra* note 40.

70. Order Acknowledging, and Setting Hearing on, Modified and Improved Agreement of Settlement, Nos. 21 MC 100, 21 MC 102, 21 MC 103 (S.D.N.Y. June 10, 2010); DEPALMA, *supra* note 2, at 325. The settlement package ultimately approved by Judge Hellerstein provided between \$625 million and \$712.5 million to the plaintiffs, depending on certain contingencies. *Overview Settlement Process*, *supra* note 6. Part of this package valued bonus and contingent payments, based on the ratio of settling plaintiffs to total existing plaintiffs, and to the number of post-settlement plaintiffs. *In re World Trade Ctr. Disaster Site Litig.*, 834 F. Supp. 2d 184, 196 (S.D.N.Y. 2011); *In re World Trade Ctr. Disaster Site Litig.*, 879 F. Supp. 2d 396 (S.D.N.Y. 2012). Appeals by the defendants to the Second Circuit Court of Appeals were argued April 11, 2013.

71. Subject to constraints of confidentiality and protective orders, the database remains available to those interested in studying it. All requests to retrieve information must be addressed to the Special Masters.