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DISCOVERY MANAGEMENT: FURTHER ANALYSIS OF THE CIVIL JUSTICE REFORM ACT EVALUATION DATA

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I. Discovery Management: Background and Framework for Discussion
   A. Introduction .................................................. 614
   B. Overview of the CJRA ......................................... 615
   C. Features of the RAND Evaluation ............................ 616
   D. Outline of This Document .................................... 620
   E. A Brief History of Empirical Research on Discovery and Its Relationship to Litigation Costs and Delay ......................... 621
   F. A Brief History of Discovery Reform ....................... 623
   G. Options for Reform ........................................... 626
   H. Some Obstacles to Reform .................................... 632
   I. A Word About the Future ..................................... 634

II. Description of Discovery Costs and Other Information for Various Types of Cases
   A. Case Closure Point ............................................ 634
   B. How Lawyers Spend Their Time ............................... 635
   C. Case Complexity .............................................. 637
   D. Discovery Difficulty .......................................... 637
   E. Plaintiffs' and Defendants' Attorneys ..................... 638
   F. Hourly and Contingent Fee Attorneys ..................... 638
   G. Size of Law Firm or Legal Department ..................... 639
   H. Size of Monetary Stakes ..................................... 639
   I. Nature of Suit ................................................ 639

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The authors' full report is available from RAND, Santa Monica, California, and contains extensive additional appendix material providing technical details of the analysis (RAND, MR-941-ICJ 1997).
I. Discovery Management: Background and Framework for Discussion

A. Introduction

The Civil Justice Reform Act ("CJRA") of 1990 required each federal district court to develop a plan for civil case management to reduce costs and delay.1 To provide an empirical basis for assessing new procedures adopted under the act, the legislation also provided for an independent evaluation. Ten district courts, denoted "pilot" district courts, were required to adopt plans that incorporated certain case management principles through December 1995. The evaluation focused on the consequences of that pilot program.

The Judicial Conference and the Administrative Office of the U.S. Courts asked RAND's Institute for Civil Justice to evaluate the implementation and the effects of the CJRA in these districts. The RAND reports on that main evaluation were completed in 1996.\(^2\)

After we completed our main CJRA evaluation, the Advisory Committee on Civil Rules of the Judicial Conference of the United States ("Committee") asked the RAND Institute for Civil Justice to conduct further analyses of the CJRA evaluation data to see if additional light could be shed on discovery management, to assist the Committee in its consideration of possible changes in the Federal Rules of Civil Procedure related to discovery. The Committee also asked the Federal Judicial Center to conduct a major new survey of lawyers to gather additional information about discovery.

This document contains RAND's further analyses of the CJRA evaluation data, focusing on discovery management.

**B. Overview of the CJRA**

The CJRA created a pilot program that required ten federal district courts to incorporate certain case management principles into their plans and to consider incorporating certain other case management techniques. The evaluation included ten other districts to permit comparisons; these districts were not required to adopt any of the case management principles or techniques.

The ten pilot districts selected by the Committee on Court Administration and Case Management of the Judicial Conference of the United States were California (S), Delaware and Georgia (N), New York (S), Oklahoma (W), Pennsylvania (E), Tennessee (W), Texas (S), and Utah and Wisconsin (E). The Judicial Conference, with advice from RAND, also selected the following ten comparison districts: Arizona and California (C), Florida (N), Illinois (N), Indiana (N), Kentucky (E), Kentucky (W), Maryland and New York (E), and Pennsylvania (M). Using several methods, we confirmed that the pilot and

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\(^2\)The four reports that comprise that evaluation are:


comparison districts are comparable and adequately represent the range of districts in the United States. Together, the twenty study districts have about one-third of all federal judges and one-third of all federal case filings.

1. The Six Case Management Principles

   The CJRA directs each pilot district to incorporate the following principles into its plan:
   1. Differential case management;
   2. Early judicial management;
   3. Monitoring and control of complex cases;
   4. Encouragement of cost-effective discovery through voluntary exchanges and cooperative discovery devices;
   5. Good-faith efforts to resolve discovery disputes before filing motions; and
   6. Referral of appropriate cases to alternative dispute resolution ("ADR") programs.

Pilot districts must incorporate these principles, while other districts may do so.

2. The Six Case Management Techniques

The CJRA directs each district to consider incorporating the following techniques into its plan, but no district is required to incorporate them:
   1. Joint discovery/case management plan;
   2. Party representation at each pretrial conference by an attorney with authority to bind that party regarding all matters previously identified by the court for discussion at the conference;
   3. Required signature of the attorney and the party on all requests for discovery extensions or trial postponements;
   4. Early neutral evaluation;
   5. Party representatives with authority to bind to be present or available by telephone at settlement conferences; and
   6. Other features that the court considers appropriate.

C. Features of the RAND Evaluation

The main CJRA evaluation is designed to provide a quantitative and qualitative basis for assessing how the case management principles and techniques identified in the CJRA affect litigants' costs (measured in both attorney work hours and money), time to disposition, partici-
pants' satisfaction with the process, views of fairness of the process and judge work time required.

Our main descriptive and statistical evaluation of how the CJRA case management principles affected cost, time to disposition and participants' satisfaction and views on fairness are presented in An Evaluation of Judicial Case Management Under the Civil Justice Reform Act, RAND, MR-802-ICJ, by James S. Kakalik, Terence Dunworth, Laural A. Hill, Daniel McCaffrey, Marian Oshiro, Nicholas M. Pace, and Mary E. Vaiana, 1996 ("main evaluation report").

1. Data Sources

The evaluation is based on extensive and detailed case-level data from January 1991 through December 1995. Data sources include:

- Court records;
- Records, reports, and surveys of CJRA advisory groups;
- The districts' cost and delay reduction plans;
- Detailed case processing and docket information on a sample of cases;
- Surveys of judicial officers on their activities, time expenditures, and views of CJRA;
- Mail surveys of attorneys and litigants about costs, time, satisfaction, and views of the fairness of the process; and
- Interviews in person with judges, court staff, and lawyers in each of the twenty districts.

We used CJRA advisory group reports, documents and meeting minutes to assess the advisory group process and findings; we used the districts' plans and proposed local rule changes to assess what the district said it would do under CJRA; we used the dockets for a large sample of cases to help us understand what was actually done on cases and when (such as schedule setting, assignment to management tracks, or referral to ADR); we used court records to assess the basic characteristics of the cases and court actions, such as referral to ADR, that were not always on the court docket; we used the judicial surveys on our sample of cases to get judges' views on whether they had changed how they manage cases as a result of CJRA; we used extensive mail surveys of thousands of lawyers and litigants on our sample of cases to get their views on how the case was managed and information on litigation costs, satisfaction and views of fairness; and we used extensive semi-structured interviews with judges, court staff, advisory group members and lawyers to understand better both the implementation of CJRA and case management in the districts before and after CJRA.
In total, more than 10,000 cases were selected for intensive study in the main evaluation report, half of which had closed before CJRA and half of which had been filed in 1992–93, after the CJRA was passed. This current document focuses on the sample of 5222 cases filed in 1992–93 after the CJRA was passed. For those 5222 cases, we received survey responses from 67% of the judges (3280), from 47% of the lawyers (4061 out of 9423 surveyed), and from 13% of the litigants (2264 out of 20,272 surveyed). Because of the low litigant response rate, we were limited in our ability to analyze litigants’ hours spent, satisfaction and views of fairness.

2. Analytic Approach

We use both descriptive tabulations and multivariate statistical techniques to analyze time to disposition, costs and participants’ satisfaction and views of fairness.

We analyze time to disposition, rather than delay, because the latter cannot be defined without reference to some currently unavailable standard of how long civil cases should take to resolve.

We present information on litigation cost in the main evaluation report, measured in both monetary and work hour terms. Our reports provide data on monetary costs to litigants, litigant hours spent and lawyer work hours spent. However, we consider lawyer work hours to be the best available measure of how case management affects litigation costs because it has uniform meaning regardless of attorney fee structure or geographic variations in attorney fee rates and can be used consistently for both in-house lawyers and outside counsel. Consequently, in the statistical analyses we use lawyer work hours as our

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5 Our main evaluation report included information on total judge work minutes on cases. We have not included the judge work minutes in the present analysis of discovery for two reasons: (1) The portion of judge work minutes specific to discovery could not be reliably identified within the total judge work minutes; and (2) more importantly, although most judges cooperated with the study and provided their work minutes on each case, some judges did not, and this could lead to biased statistical results because we strongly suspect that the choice by judges to cooperate with the judge time study was correlated with the judge’s attitude toward and use of case management.

4 Under some fee structures, such as contingent fees, changes in lawyer work hours that may result from changes in court management are not necessarily reflected in the fees charged to clients.

5 Lawyer work hours do not explicitly capture the “out of pocket” costs of litigation such as filing fees, travel, and investigator or expert witness fees, but those costs typically are less than 10% of the total litigation costs. Costs associated with lawyers’ work constitute the vast majority of total transaction costs.
measure of costs. We present information on both total lawyer work hours and lawyer work hours on discovery, and those two measures are highly correlated. We think, however, that the total is a better measure than the lawyer hours spent on discovery because our interviews suggest that some types of discovery management may reduce discovery hours by shifting lawyer work to other types of activity (such as disclosure as a substitute for some discovery, or an ADR session as a substitute for some discovery). In addition, lawyers may differ in whether or not they report a given type of work activity as discovery-related (such as interviewing experts in direct preparation for trial).

We also note that, in addition to the cost of lawyers, the cost of the time litigants and their staff spend can be substantial, and much of that time is spent on discovery. Litigants must prepare for and give depositions, search for documents and screen documents and computerized files for privileged information, for example. This time is not reflected in the lawyer work hours we analyze, although we did ask litigants for the amount of time spent. Because of the low 13% response rate from litigants, however, we are not comfortable that the responses received are representative of all litigants. Hence, we do not analyze litigant time spent on the cases.

We note that we are measuring time and cost objectively by using time to disposition and lawyer work hours. Our main evaluation report, and some other research studies, also asked for lawyers’ subjective opinions about whether time and cost increased or decreased when a particular case management technique was used. It is important to note that the objective and subjective data do not always agree, and we believe that the objective data are more reliable measures of how policy actually affects time to disposition and lawyer work hours. The subjective data are really measuring perceptions, which are different from what the objective data measure. Also, subjective data from surveys in general tend to have a “positivity bias.”

Our assessment of satisfaction and views of fairness is subjective and drawn from the results of our surveys.⁶

In the main evaluation report, we based our assessment of case management policies and procedures on data from general civil litiga-

⁶ Satisfaction and views of fairness were measured by responses to the following questions: How satisfied were you with the court management and procedures for this case for your party or parties? and, How fair do you think the court management and procedures were for this case for your party or parties?
tion cases with issue joined. We also analyzed the subset of these cases that took longer than nine months to disposition. In this further evaluation of the CJRA data focusing on discovery management, we again focus on general civil litigation cases closed after issue is joined. We also focus exclusively on the post-CJRA portion of the data, i.e., those cases filed in 1992-93, because the CJRA made substantial changes in how discovery was managed in some districts. We also focus predominantly in our further analyses on the 1624 cases that took longer than nine months to disposition. About half the general civil cases close after nine months, but they consume about three-fourths of all lawyer work hours, and 80% of lawyer work hours spent on discovery.

In this further evaluation of discovery and its management, our methods of statistical analysis are the same as in the main evaluation report, with three major exceptions: (1) we explicitly evaluate combinations of various management policies (such as early management used in combination with discovery plans and early scheduling of a trial date, versus early management used without discovery plans and without early scheduling of a trial date); (2) we explicitly and separately analyze the data for various categories of cases or lawyers (such as high-complexity cases only, high-stakes cases only, contingent fee lawyers only, or tort cases only); and (3) in addition to our analysis of total lawyer work hours, we also explicitly analyze lawyer work hours on discovery.

D. Outline of This Document

This document is intended for policymakers and policy-users and focuses on descriptive information about discovery, and on discovery management policy evaluation.

The discussion is organized as follows. In the remainder of section I we provide more background and a framework for the discovery

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7 In practice, federal district courts split the civil caseload into two categories—those types of cases that usually receive minimal or no management, and those general civil litigation cases to which the district's standard case management policies and procedures apply (and which are of primary concern for evaluation of CJRA case management principles and techniques). Minimal management is usually applied to prisoner cases (other than death penalty cases), administrative reviews of Social Security cases, bankruptcy appeals, foreclosure, forfeiture and penalty, and debt recovery cases.

8 Issue is considered joined after the defendants have answered the complaint in accordance with Rule 12(a) or as mandated otherwise by the court. See Administrative Office of the U.S. Courts, Guide to Judiciary Policies and Procedures, Volume XI, Statistics Manual 15 (1995).
discussion in the rest of this document. In section II we provide de-
scriptive information about discovery and other aspects of categories
of cases defined by level of complexity, level of discovery difficulty,
plaintiff or defendant side of the case, contingent or hourly fee lawyer,
size of the law organization in which the lawyer worked, case stakes,
tort or contract or other nature of suit categories, or the top 25% most
costly cases among general civil litigation that has time to disposition
over 270 days after filing. Section III contains our evaluation of various
discovery management policies, and section IV summarizes our policy
findings.

E. A Brief History of Empirical Research on Discovery and Its
Relationship to Litigation Costs and Delay

Despite the widespread belief that discovery is to blame for much
of the delay and costliness of civil case processing, there have been few
empirical data available on the magnitude of discovery, patterns of use
across case types, or direct or indirect costs associated with discovery
or various different discovery management policies. Nor has there
been much effort in the past to measure the effect of adopting differ-
ent discovery reforms or discovery management policies on time to
disposition or costs.

In one of the most extensive previous studies, researchers at the
Federal Judicial Center ("FJC") selected 3000 civil cases terminated in
1975 from six federal district courts and examined the extent and
pattern of discovery in those cases. The FJC researchers found substan-
tial variation in discovery among cases. Half had no discovery at all;
among the remainder, 20% averaged 1.7 requests per case; 60% aver-
aged 5 requests per case; and the remaining 20% averaged 17 requests
per case. The FJC concluded that:

[D]iscovery abuse, to the extent it exists, does not permeate
the vast majority of federal filings. In half the filings, there is
no discovery—abusive or otherwise. In the remaining half of
the filings, abuse—to the extent that it exists—must be found
in the quality of the discovery requests, not in the quantity,
since fewer than 5% of the filings involved more than ten
requests.⁹

⁹Paul R. Connolly et al., Federal Judicial Ctr., Judicial Controls and the Civil
The FJC found that the amount of discovery likely in a case could be predicted based on knowing “[t]he subject matter of a case, the number of parties, the presence of counterclaims or cross claims, and, to a lesser extent, the amount in controversy . . .” They also found significant differences across courts.

In the same study, the FJC also investigated the effects of limiting elapsed time for discovery on time to disposition and amount of discovery activity. They found that restricting the amount of time for discovery reduced the overall time to disposition, but actually increased the amount of discovery, perhaps because attorneys had less time to consider carefully their discovery options.

In a subsequent empirical study of about 1600 cases in federal and state courts, the Civil Litigation Research Project ("CLRP") also found that “relatively little discovery occurs in the ordinary lawsuit. We found no evidence of discovery in over half our cases. Rarely did the records reveal more than five separate discovery events.” That same study found that on average about 17% of lawyer time is devoted to discovery.

More recently, in a study of California’s Trial Court Delay Reduction Act, the National Center for State Courts ("NCSC") found that courts that adopted procedures for managing pretrial activities, including discovery, achieved significant reductions in case disposition times.

In the early 1990s, the NCSC conducted an empirical study of discovery in about 2000 court cases in five state trial courts. Their findings affirmed those of the earlier FJC and CLRP studies. The NCSC found that 42% of general civil litigation cases did not have recorded discovery, and that 37% of those with discovery had three or fewer pieces of discovery.

Other empirical studies concerning discovery have measured subjective attitudes, rather than objective case data. A 1986 study of attorneys’ attitudes in twelve federal districts that had adopted local rules limiting the number of interrogatories and requests for admissions found that a majority approved of these rules. Support for such limits did not vary by type of practice (size of firm, case specialization,

10 Id. at iv.
12 See id. at 91 tbl. 3.
plaintiff versus defendant) or by degree of litigation experience. A study of federal and state judges conducted by Louis Harris and Associates in 1987 found that 45% of federal judges surveyed, and 34% of state judges, cited "abuse of the discovery process" as among the most serious causes of civil case delay in their courts. One-third of the federal and state judges said that there were "a lot of problems" with the discovery process in their jurisdictions. When asked what approaches might best solve these problems, federal judges called for changes in the informal practices of the bar and greater exercise of judicial discretion, rather than further changes in the rules. State judges' opinions on solutions were divided among the three options (changing informal practices, greater use of judicial discretion and rule changes).

In 1997, the FJC conducted a major new survey of lawyers to gather additional information about discovery, and those results are also in this issue.

While the majority of the civil cases have either no discovery or limited discovery, a great deal of attention is paid to perceived discovery problems in the literature and by judges and lawyers. These findings are consistent with one another when we understand that the perceived discovery problems can be substantial for the minority of the cases in which they occur.

F. A Brief History of Discovery Reform

The modern history of discovery practice began with the adoption of the Federal Rules of Civil Procedure ("Rules") in 1938. A key element of the philosophy behind those Rules was "notice" pleading with facts of cases to be developed through discovery. The new Rules expanded the scope of discovery and relaxed prior limitations on the amount and timing of discovery. Although the Rules are often cited as

15 See John Shapard & Carroll Seron, Federal Judicial Ctr., Attorneys' Views of Local Rules Limiting Interrogatories v (1986). Based on the attorneys' self-reports of their use of interrogatories in recent cases, the researchers also concluded that in most cases, activity was not actually constrained by the rules, both because the limitations were set high enough so as not to limit effectively the average case and because a significant fraction of attorneys either ignored the rules or received formal waivers from the court. See id.


17 See id. at 39.

18 See id. at 40.


20 For a fuller discussion of this period, see Stephen N. Subrin, Fishing Expeditions Allowed: Historical Background of the 1938 Federal Discovery Rules, 39 B.C. L. Rev. 691 (1998).
laying the basis for contemporary judicial control over the litigation process,21 in practice they appear to have placed control over the discovery process predominantly in the attorneys' hands. Indeed, amendments in 1946 and 1970 further relaxed limitations on attorneys' discovery activities.22

By the mid-1970s, however, confidence in attorneys' abilities to manage discovery efficiently had begun to erode.23 After the 1976 National Conference on the Causes of Popular Dissatisfaction with the Administration of Justice (convened by Chief Justice Warren Burger and known as the Pound Conference), and the issuance of a report on discovery abuse by an American Bar Association ("ABA") Special Committee that was established as a follow-up to the conference,24 support mounted for increasing judicial control over discovery. When dissension within the bar diluted the force and scope of amendments to the Rules that were adopted in 1980, a second set of stronger amendments was adopted in 1983. The new amendments prohibited redundant discovery, required that discovery be proportional to the magnitude of the case and mandated court sanctions for violation of the Rules. They also explicitly provided for judicial discussion of discovery plans at pretrial conferences and for the judge's issuance of an order scheduling discovery and other pretrial events.25 In the following years, many federal jurisdictions adopted local court rules limiting the amount and timing of discovery.

Notwithstanding these rule changes, concern about discovery abuse continued through the 1980s and contributed to the passage of the CJRA of 1990. That Act, a product of a task force set up by Senator Joseph Biden to consider options for reducing delay and costs associated with civil case processing,26 required each federal district court to submit a plan for improving civil case management. The Act encouraged courts to consider changes in discovery, including limitations on

21 See Connolly et al., supra note 9, at 10.
25 See id. at 782-93.
timing and amount of discovery and special programs to assist attorneys in better planning discovery activities.

In December 1993, partially in response to the CJRA, a number of changes to the Rules were made. Those changes included a requirement that parties meet and prepare a proposed discovery plan before a scheduling conference is held or a scheduling order is due, a requirement for disclosure of certain basic relevant information without waiting for a discovery request, discretionary sanctions for Rule 11 violations rather than mandatory sanctions, and a limitation on the number of depositions and interrogatories. Districts were allowed to opt out of some of these changes, in part to enable them to continue their CJRA mandated cost and delay reduction plans unchanged.

By the late 1970s, many state court systems were experimenting with limitations on discovery activity. In a survey conducted in 1981, the RAND Institute for Civil Justice found that twenty-nine states and twenty-three of the nation’s largest metropolitan trial courts had adopted one or more measures to expedite pretrial discovery, including using mail and telephone to expedite pretrial motions processing, requiring attorneys to attempt to settle their discovery disputes before requesting judicial intervention, assigning parajudicial personnel to hear discovery motions, limiting the number of interrogatories, limiting the time allowed for discovery, holding conferences to schedule discovery and authorizing sanctions for frivolous discovery motions.27

For example, California, which had eliminated prior restrictions on discovery in 1957, reinstated some limitations in the Civil Discovery Act of 1986 ("CDA").28 The CDA restricts the number of special interrogatories to thirty-five, the number of requests for admission to thirty-five, and the number of depositions of any one witness to one. The CDA defines discovery abuse and authorizes sanctions, including monetary fines, for such abuse.29 In addition, under the Trial Court Delay Reduction Act of 1986, some California courts experimented with schedules for case disposition that mandated completion of discovery by a specified number of days after case filing, and in other courts, discovery schedules tailored to the specifics of individual cases were set at judicial status conferences.30

30 See Fair Justice, supra note 13, at III-3-4.
G. Options for Reform

As a result of continuing concern about discovery abuse, many federal and state courts now have in place some sort of limitations on the extent, timing, or manner of discovery. Some federal district courts adopted new procedures for managing discovery as part of their required plans for reducing civil case delay and expense under the CJRA. In addition, the Judicial Conference Advisory Committee on the Federal Rules is currently holding exploratory discussions to consider the development of proposals for additional modifications to the Rules.

The major options for reform can be grouped into seven categories: (1) adopting standardized rules limiting the scope, amount, or timing of discovery activity; (2) mandating early disclosure of key information; (3) imposing monetary or other sanctions for violation of court-enunciated practice standards; (4) assisting attorneys in more efficient management of discovery; (5) cost and fee shifting; (6) closer management of attorneys by clients; and (7) shifting responsibility for conducting discovery to judges, as is common in some European systems. Below we discuss each of these in turn.

1. Standardized Rules Limiting the Scope, Amount, or Timing of Discovery

As indicated by the discussion above, the most frequent response to concern about discovery abuse has been the adoption of rules limiting the amount or timing of discovery activity. Limitations on timing appear to have the desired effect of reducing total time to disposition, but severe restrictions on the elapsed time for pretrial activities are frequently met with opposition from the bar. Moreover, limitations on elapsed time for discovery do not reduce necessarily the magnitude of discovery activity and therefore may have little effect on discovery costs. Whether imposing limitations on the amount of discovery (e.g., number of interrogatories, number of requests for admission, number or length of depositions, or volume and nature of document requests) has the desired effect of limiting the overall magnitude of discovery activity is unclear. It may be that, to satisfy attorney concerns about the need for extensive discovery in some cases, courts set these limits so high as to have little effect on most cases. Our interviews

51 In its report to the Legislature on the Trial Court Delay Reduction Act, the Judicial Council noted: "Despite bar involvement in planning the programs in all counties and despite the support of a majority of lawyers for judicial control of the pace of litigation, there is substantial discontent among lawyers with the program's operation." Id. at II-4.
suggest that attorneys sometimes can evade these standards, either by simply ignoring them, by obtaining judicial waivers, or by switching to some other formal or informal method of discovery. Numerical limitations also raise the question of how to define a single interrogatory, deposition, or other request.

Courts may have more success in implementing numerical and time limits when these are coordinated with differentiated case management ("DCM") plans, if those plans are fully implemented. Incorporating numerical limits on discovery activity into DCM plans may also permit courts to specify more modest amounts of activity for ordinary cases, while preserving higher limits for more complex cases.

A relatively new approach to limiting discovery activity is "phased discovery," in which attorneys, on their own or with the court's assistance, develop plans for sequencing discovery.32 Sequencing may be by subject matter, party, or type of evidence, and may be prescribed by a broadly applicable rule or on a case-by-case basis. Phased discovery may be linked to specific case milestones—for example, attorneys may be permitted to conduct only a modest amount of discovery before an early neutral evaluation or an early status conference is conducted. The goal is to focus parties on those aspects of discovery that are most helpful to evaluating the case as early in the litigation process as possible, thereby contributing to settlement before high litigation costs are incurred.

The discussion above focuses on attempting to control discovery without changing the general scope of allowable discovery. However, the scope of discovery itself is another major area for potential reform to limit whatever discovery problems may exist. As recently as 1970, the scope of discovery was expanded by rule change. Subsequent rule changes have not narrowed the general scope of discovery, but the American College of Trial Lawyers is currently recommending the amendment of discovery Rule 26(b)(1) to narrow the scope and breadth of civil discovery by changing the language from "any matter, not privileged, which is relevant to the subject matter involved in the pending action, whether it relates to the claim or defense of the party seeking discovery or to the claim or defense of any other party" to new language: "any matter, not privileged which is relevant to the claim or defense of the party seeking discovery or to the claim or defense of any other party."
defense of the party seeking discovery or to the claim or defense of any other party . . . .\[33\]

2. Mandatory Early Disclosure

CJRA brought about substantial change in early disclosure of information without a formal discovery request. Only one district required it before CJRA;\[34\] after CJRA, all pilot and comparison districts in the RAND evaluation adopted one of five approaches providing either voluntary or mandatory exchange of information by lawyers, sometimes only for specified types of cases. Three pilot and two comparison districts adopted the voluntary exchange model, which encourages lawyers to cooperate in exchanging information. Three pilot districts and one comparison district followed a mandatory exchange model for a limited subset of cases and a voluntary model on other cases. Two pilot districts and one comparison district required lawyers mandatorily to disclose certain information, including anything bearing significantly on their sides’ claims or defenses. Two other pilot districts and one other comparison district have similar mandatory requirements, but they apply it to all information bearing significantly on both sides’ claims or defenses.

After our sample cases were selected, four pilot districts switched from their initial early disclosure procedures to follow the December 1993 revised Rule 26(a)(1), which requires the mandatory exchange of information relevant to disputed facts alleged with particularity in the pleadings, plus information on damages and insurance. Six comparison districts also are following the revised Rule 26(a)(1). The ten other pilot and comparison districts have decided to “opt out” and are not following the revised Rule 26(a)(1). Some districts opted out to retain their pilot program disclosure rules, some of which were more stringent in their disclosure requirements than the revised Rule 26(a)(1). Because our sample cases were selected well before the revised Rule 26(a)(1) went into effect, we could not use our data to evaluate that revised rule.

\[33\] AMERICAN COLLEGE OF TRIAL LAWYERS, MONOGRAPH OF THE COMMITTEE ON FEDERAL RULES OF CIVIL PROCEDURE 1 (1997). This proposal was presented to the Judicial Conference Advisory Committee on Civil Rules by the American College of Trial Lawyers, Irvine, CA, at a January 16, 1997 Advisory Committee meeting.

\[34\] At least one other district required attorneys to confer before the first pretrial conference to attempt to agree on a scheduling order.
3. Sanctions

Increasingly, proposals for restrictions on discovery are accompanied by calls for monetary or preclusionary sanctions against those who violate the standards. The 1983 amendments to the Federal Rules explicitly authorized sanctions, including attorney fees, for discovery abuse, as did California's Civil Discovery Act of 1986. Empirical research on sanctions suggests that courts and individual judges vary considerably in their use of sanctions. But courts may be becoming more willing to impose sanctions as caseload pressure increases.

4. Providing Assistance with Discovery Planning

Courts also are increasingly becoming involved in assisting attorneys in planning discovery. The 1983 amendments to Rule 16 provided for the inclusion of key discovery events in the judge's scheduling order to be issued after the pretrial conference. In federal courts, magistrate judges and special masters have assisted attorneys in managing discovery in complex litigation. Most federal district courts require that attorneys make a good-faith effort to resolve discovery disputes before filing motions. And the 1993 Rules' amendments required that the parties meet and prepare a proposed discovery plan before a scheduling conference is held or a scheduling order is due, although individual districts could exempt some or all types of cases from this requirement.

One relatively new alternative dispute resolution mechanism that may have the added benefit of assisting attorneys in developing discovery plans is mandatory early neutral evaluation ("ENE"). First adopted in the Northern District of California, ENE was conceived by the bench and bar at least in part to help attorneys identify the issues that are central to their disputes, so that they could focus their pretrial efforts on these issues. Under the Northern District's plan, an attorney volunteer ("neutral evaluator") meets with the attorneys and their clients early in the litigation process to discuss the case. The neutral evaluator then delivers his or her assessment of the case to each side, and this ENE can include advice on discovery planning. We do not have suf-

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ficient data on cases that received ENE to evaluate its potential effect on discovery.

It is important to note that court efforts to assist attorneys in developing more efficient discovery plans are not cost free. Unless increased judicial management time directed toward the pretrial process translates into substantial savings at later pretrial or trial stages, the net effect on court budgets could be an increase in costs borne by taxpayers. If this were the case, public policymakers would have to decide whether these increased costs are justified by cost savings and other benefits to individual and corporate litigants. Alternatively, turning to attorney volunteers to assist in discovery management, as is contemplated in most ENE programs, imposes an additional burden on the bar.

5. Cost and Fee Shifting

Under the “American Rule,” each side bears the costs of its own litigation, including both the costs of initiating discovery of information in its opponent’s possession and the costs of responding to an opponent’s requests for information. Under certain circumstances, for public policy reasons, legislatures have provided for “one-way” cost shifting, permitting prevailing plaintiffs to recover legal fees from defendants. Federal and state discovery rules have also provided for limited shifting of discovery costs, in cases where the court finds that a motion was frivolous or intended for an improper purpose, such as to delay unnecessarily the proceedings or harass the opposing party. Federal Rule 11 states that the court “may” impose sanctions on inappropriate behavior, by ordering the offending party to pay some or all of the reasonable expenses incurred by the other side as a result of this behavior, including attorney fees.

Although some of the options outlined above have proved controversial, all involve modifications in existing court rules or procedures. Two other options for reform require more extensive rethinking of the civil litigation process: one, by rethinking, and perhaps restructuring, the lawyer-client relationship; the other, by redefining the role of the judge.

6. Closer Management of Attorneys by Parties

In response to rising legal costs, many large corporations have begun restructuring their relationships with legal service providers. Eighty percent of Fortune 1000 corporations surveyed by Louis Harris and Associates (“Louis Harris”) said that they have brought more of
their legal work in-house in recent years.\textsuperscript{36} Bringing work in-house provides an opportunity for corporations to examine more closely the costs and benefits of litigation strategies, including discovery. Almost all of the corporate legal officers surveyed by Louis Harris (95\%) said they involve in-house counsel in planning strategy on major matters, and 60\% said that they require litigation budgets, including resources allocated for discovery, to be submitted for major work. Almost all of these corporations (98\%) now require their outside counsel to submit detailed bills.\textsuperscript{37} These changes in policies concerning corporate client/outside counsel relationships have the potential to heighten corporate parties' attention to the costs (and benefits) of alternative discovery strategies. It may be more difficult for smaller corporations, however, with fewer resources for managing their legal services, to implement such policies.

Some critics of discovery allege that certain attorneys engage in excessive discovery to run up their bills. Because corporate attorneys typically are paid on an hours and expenses basis, it is often said that they have an incentive to "keep their meters running." Some corporations are experimenting with alternative billing practices intended to change these incentives. For example, some corporate legal officers are requesting that outside counsel charge flat rates for certain cases or for certain litigation activities ("menu billing"). Others are agreeing to fees with contingency factors—sometimes called "premium billing".\textsuperscript{38} Because these alternative fee arrangements reduce dependence on hourly billing, they should reduce the incentives of attorneys to engage in discovery as a means of fee enhancement.

7. Judicial Discovery

The American civil litigation system relies on an adversarial process to investigate (discover) and present the facts that are relevant to resolving a dispute. Each side is assumed to have the incentives to bring out those facts that would support its case. In principle, if the parties have equal resources and equally skilled representatives, these incentives should assure that all of the relevant facts are presented to the fact finder. By excluding the judge from the investigatory process, the American system also assures that final judgment on the case will be

\textsuperscript{36} See Deborah R. Hensler, Talking to Each Other or Talking Past Each Other? Corporate Legal Officers' and Outside Counsels' Views on Strategies for Controlling Legal Costs, Paper Presented at the 1992 American Bar Association Annual Meeting, at 7.

\textsuperscript{37} See id. at 15.

\textsuperscript{38} See id. at 11-14.
withheld until all of the appropriate facts have been developed. The increasing adoption of a "managerial judging" style, including increased involvement in managing discovery, has affected the judge's role as a purely neutral umpire. But the American system continues to rely on the parties' attorneys to develop the facts of the case.

Under European "inquisitorial" systems, the role of the judge in developing the facts of the case is far greater; indeed, the judge may be wholly responsible for deciding what issues are central to the dispute, at what stage of the process to hear these issues and what evidence should be brought to bear. For example, under the German system, there is no sharp demarcation between pretrial proceedings and trial: the judge hears the issues in the order that he or she feels is most likely to assist in resolving the case. The parties' representatives identify witnesses to appear before the judge, but apparently do not engage in any extensive pretrial questioning of these witnesses. Nor do they engage in any extensive investigation of the facts, beyond the information they obtain from their clients.\textsuperscript{39}

Shifting the conduct of discovery to judges in the United States would require a radical restructuring of the virtues of the adversarial process; it would also require a rethinking of court organization. But as an alternative to patchwork reforms of discovery that inexorably draw the judge deeper into the investigatory process, perhaps without sufficient evaluation of the larger consequences for civil case disposition, it may be appropriate to undertake such a systematic rethinking.

H. Some Obstacles to Reform

One of the obstacles to effective discovery reform has been the failure of reformers to identify carefully the problem they are seeking to remedy and the sources of that problem. For example, is the problem that there is too much discovery overall, or too much in some specific types of cases? If it is the latter, in what types of cases is discovery problematic? Answering these questions is important because it is difficult to set overall limits on the quantity of discovery that are both effective for large numbers of cases and do not impair equity in particular subsets of cases.

Is the problem that discovery prolongs litigation, or that it costs too much? If both are of concern, which matters more? Answering this question is important because some mechanisms for limiting the

elapsed time for discovery may actually increase the amount of discovery.

With regard to costs, is the problem that, regardless of its merits, discovery costs too much, or that the costs are disproportionate to the merits in too many cases? Discovery might cost too much because lawyers' hourly fees are too high, because lawyers bill too many hours for discovery activities that could be done more efficiently in less time, or because lawyers engage in more discovery than is necessary. Court rules may affect the latter, but court rules alone will not reduce lawyer fees and lawyer hours.

Are the costs that are problematic the direct costs of the litigation (e.g., legal fees) or the indirect burdens on parties (e.g., employee time spent responding to discovery)? Or are these costs of equal concern? Limiting burdens on the parties may require somewhat different strategies than are required to limit direct litigation costs (such as limiting party burdens by focusing more on ways to make document discovery more efficient, and focusing more on reducing the amount of time parties need to spend on identifying which information is privileged).

Not only has there been insufficient attention given to the nature of the problems that need to be "fixed," there has also been insufficient attention given to the source of the problems. Understanding the source of the problems is important because without such an understanding reformers run the risk that the "fixes" they choose will be ineffective. For example, if the absence of sanctions invites excessive discovery and judges have incentives not to impose sanctions, one cannot fix this problem simply by writing more sanctions into the Rules. Instead one needs to invest in understanding why judges do not use the sanctioning power they already have. If attorneys engage in excessive discovery because they obtain lucrative fees from this practice, it might be more effective for clients to institute controls on fees—for example, through alternative fee arrangements—than to include new restrictions on the amount of discovery into the Rules.

Alternatively, if attorneys engage in overly aggressive discovery because they believe that is what their clients expect of them, perhaps those clients need to be educated as to the relationship between what they expect of their counsel and litigation costs. If the local legal culture sometimes includes the use of overly aggressive discovery for strategic purposes of imposing costs and delay on opposing parties, which may sometimes drive inappropriate settlements or be a problem for poorer parties, perhaps the local judiciary needs to become involved more actively in managing discovery and signaling displeasure with inappropriate discovery behavior by lawyers and parties.
I. A Word About the Future

Although we do not know of any major empirical research on the correlation between the information technology explosion and discovery, it seems reasonable to assume that the character and magnitude of discovery is shaped in part by the availability of information technologies. All of us have observed the proliferation of paper and contacts that have flowed from the availability of paper—copiers, faxes and electronic communication. New computer technologies also facilitate the storage and retrieval of information, which can now be accessed from multiple databases with relatively few keystrokes. The implications for discovery are truly mind-boggling. At the same time, many courts, strapped for financial resources, are still struggling to move into the computer age. Any consideration of discovery reforms must include an assessment of how new information technologies are likely to affect lawyers, clients, and the courts.

II. Description of Discovery Costs and Other Information for Various Types of Cases

Discovery is a major factor influencing both the length and the cost of litigation. Our main evaluation report contains information about general civil cases in the aggregate and about litigation costs measured in terms of total lawyer work hours, but there has been considerable interest expressed in having more detailed information about various types of cases and about how total lawyer work hours are broken down between discovery and other types of activities. This section addresses those interests.

The data come from our sample of cases filed in 1992-93, after the CJRA was enacted, and include closed general civil cases for which we had at least one lawyer providing information. We provide various types of information on each category of case, including time to disposition, lawyer satisfaction with judicial case management, lawyer views on the fairness of judicial case management, total lawyer work hours per litigant, percentage of cases with zero discovery lawyer work hours, lawyer work hours on discovery per litigant, the fraction of total lawyer work hours devoted to discovery matters and the number of discovery motions filed.

The various types of cases on which we provide information here are categorized separately by:

- Case closure point: before issue joined, after issue joined and closed in 270 days or less after filing, or after issue joined and closed over 270 days after filing.
Case complexity: high, medium, or low (highest subjective rating by any lawyer or judge on the case).
Discovery difficulty: high, medium, or low (highest subjective rating by any lawyer or judge on the case).
Type of attorney: represented plaintiff or defendant.
Type of private attorney fee: hourly or contingent (other types of fee structures are not included here).
Number of lawyers in firm or legal department of the organization: more than five, or less.
Monetary stakes: over $500,000, or less.
Nature of suit: tort, contract, or other.
Category of total lawyer work hours: bottom 75%, top 25%, or top 10%.

We present information on medians (half the cases have less than the median, and half have more than the median) as the best available measure of a "typical" case. We also present information on the average total lawyer work hours and the average discovery lawyer work hours as the best available measure of the expected cost of the average case. We caution, however, that litigation in general is composed of many cases without great costs, and a small fraction of cases with very high costs. This high cost tail of the distribution of cases can contain a few very big cases that strongly affect the average, but not the median. Consequently, when comparing different types of cases the median is a more stable measure, and too much emphasis should not be placed on interpreting differences in the averages between subcategories of cases.

A. Case Closure Point

In Table 2.1 we present information by case closure point. Note that about a fourth of the general civil cases close before issue is joined, about another fourth close after issue is joined and within 270 days after filing, and nearly half close after issue is joined and more than 270 days after filing.

About three-fourths of the cases that close before issue is joined have no lawyer work hours spent on discovery and 37% of those with

40 For general civil cases from the CjRA 1992-93 sample with issue joined that closed with time to disposition over 270 days and had lawyer work hours reported, the top 25% had total lawyer work hours per litigant of more than 188.

41 For general civil cases from the CjRA 1992-93 sample with issue joined that closed with time to disposition over 270 days and had lawyer work hours reported, the top 25% had total lawyer work hours per litigant of more than 450.
issue joined that close within 270 days after filing have no lawyer work hours on discovery. Only 15% of those that close at least 270 days after filing, however, have no discovery costs. The median time lawyers spend on discovery per litigant for cases with issue joined and closed within 270 days after filing is only three hours, whereas the median is twenty hours for those cases that close more than 270 days after filing.

Overall, lawyer work hours per litigant on discovery are zero for 38% of general civil cases and low for the majority of cases. The nearly half of the cases that close more than 270 days after filing consume about three-quarters of all lawyer work time, and about 80% of all lawyer work time on discovery. Since we are most concerned with discovery management policies in this document, we will focus the remainder of the document on these general civil cases that close at least 270 days after filing and consume the vast majority of lawyer work time on discovery.\(^\text{42}\)

Discovery is not a pervasive litigation cost problem for the majority of cases. The empirical data show that any problems that may exist with discovery are concentrated in a minority of the cases, and the evidence indicates that discovery costs can be very high in some cases. Subjective information from our interviews with lawyers also suggests that the median or typical case is not "the problem." It is the minority of the cases with high discovery costs that generate the anecdotal "parade of horribles" that dominates much of the debate over discovery rules and discovery case management. These findings suggest that policymakers should consider focusing discovery rule changes and discovery management on the types of cases likely to have high discovery costs, and the discovery practices that are likely to generate those high costs. More attention and research is clearly needed on how to identify those

42 Policies that significantly reduce time to disposition in long cases (cases with time to disposition greater than 270 days) might not affect time to disposition for the entire population of cases in the same way. Hence, our analyses on only cases with time to disposition greater than 270 days might not generalize to the entire population of cases. However, we feel that because the courts and others are most concerned with reducing delay in long cases, exploring the effects of case management policy on long cases is appropriate even if these effects might differ somewhat for cases that close in less than 270 days.

Furthermore, additional analyses we conducted demonstrate that the policies of early management are associated with shorter time to disposition across the entire population of cases, not only for cases that lasted over 270 days. In our main evaluation report, we compared the percentage of a district's cases receiving early management to the percentage lasting over 270 days and found that more early management was associated with fewer cases lasting over 270 days. In addition, we explored survival curves, see generally Rupert C. Miller, Jr., Survival Analysis (1981), and found that they also suggest that early management policies will have effects on the entire population. Combining all this evidence, we feel that policies with large effects on the long cases are also likely to have effects on the entire population of cases.
high discovery cost cases early in their life, and how best to manage discovery on those cases.

B. How Lawyers Spend Their Time

In Table 2.2 we present information on how lawyers spend their work hours on general civil cases that close at least 270 days after filing. The average lawyer work hours per litigant is 232 hours, of which an average of 36%, or 83 hours, is spent on discovery, including discovery motions. In Table 2.1 we saw that the median percentage discovery hours of total lawyer work hours is 25%. So, whether we consider average or median percentages, discovery is about one-fourth to one-third of total lawyer work hours per litigant. Discovery accounted for less than half the lawyer work hours in all the subsets of general civil cases that we examined.

C. Case Complexity

In Table 2.3 we present information on differences among cases that are of high, medium, or low complexity, based on the highest subjective complexity rating by any lawyer or the judge on the case. Note that high complexity cases consume about four times as many lawyer work hours as low complexity cases, but that the median percentage of total lawyer work time that is devoted to discovery is about the same.

We conducted multivariate statistical analyses that included case complexity as a factor in predicting time to disposition, total lawyer work hours, lawyer work hours on discovery, lawyer satisfaction, and lawyer views of fairness. Higher complexity cases take significantly longer to close and require significantly more lawyer work hours than lower complexity cases, but there is not a significant difference in lawyer satisfaction or views on fairness of judicial case management for cases of different complexity.

D. Discovery Difficulty

In Table 2.4 we present information on differences among cases that are of high, medium, or low discovery difficulty, based on the highest subjective rating by any lawyer or the judge on the case.44


44 Lawyers and judges were asked, "[w]hen this litigation began, how would you have rated
Not surprisingly, high discovery difficulty cases consume about three times as many total lawyer work hours and five times as many lawyer work hours on discovery as low discovery difficulty cases consume. The median percentage of total lawyer work time that is devoted to discovery on high discovery difficulty cases, however, is still only 33%.

We conducted multivariate statistical analyses that included discovery difficulty as a factor in predicting time to disposition, total lawyer work hours, lawyer work hours on discovery, lawyer satisfaction, and lawyer views of fairness. Higher discovery difficulty cases have significantly higher lawyer work hours, both in total and on discovery, but there is not a significant difference in lawyer satisfaction or views on fairness of judicial case management for cases of different discovery difficulty. Discovery difficulty was not a significant predictor of time to disposition, after the analysis accounted for the other multiple factors that are significant in predicting time to disposition.

E. Plaintiffs’ and Defendants’ Attorneys

In Table 2.5 we present information on differences between plaintiffs' and defendants' attorneys. Plaintiffs' attorneys reported spending a median of 100 total work hours per litigant, whereas defendants' attorneys reported spending a median of 75 total lawyer work hours per litigant, and the difference is statistically significant. There is not a significant difference between plaintiffs' and defendants' attorneys on lawyer work hours spent on discovery or on any of the other variables that we tested.

F. Hourly and Contingent Fee Attorneys

In Table 2.6 we present information on hourly and contingent fee attorneys (other types of fee structures are not included here because of the limited amount of data we had about them). We did not find a statistically significant difference between hourly and contingent fee lawyers in predicting any of the time to disposition, total lawyer work hours, lawyer work hours on discovery, satisfaction, or fairness measures that we analyzed statistically.
G. Size of Law Firm or Legal Department

In Table 2.7 we present information on differences between attorneys based on the size of the law firm or legal department: more than five or less. Attorneys from larger firms work significantly more hours per litigant, in total and on discovery, than their counterparts from smaller firms, although the fraction of time they spend on discovery is about the same. In studying the data, we suspect there may be some systematic bias by litigants in favor of hiring larger firms to handle the more complex and more costly cases.

H. Size of Monetary Stakes

In Table 2.8 we present information on the size of the monetary stakes, which we categorized into stakes over or under $500,000 in the table. Our statistical analysis was conducted on the log of stakes. We found that higher stakes are associated with significantly higher total lawyer work hours, significantly higher lawyer work hours on discovery, and significantly longer time to disposition, but that stakes are not significantly related to satisfaction or fairness. Even for cases with stakes over $500,000, the median percentage of lawyer work hours spent on discovery was only 30%.

I. Nature of Suit

In Table 2.9 we present information on the nature of suit, categorized as tort, contract, or other. We found no statistically significant difference between those three categories of cases on any of the time to disposition, lawyer work hours, satisfaction, or fairness measures. We believe that the tort and contract categories are too aggregated, with too heterogeneous a composition within each category, to be meaningful in studying lawyer work hours and time to disposition. Smaller, more narrowly defined categories should be studied, but we had too few cases in our sample to do subcategories within tort, contract, and other types of cases in detail.

J. Cases with Most Lawyer Work Hours

Finally, in Table 2.10 we present information by category of total lawyer work hours: bottom 75%, top 25%, and top 10% of closed cases. The top categories of the cases with the most total lawyer work

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46 See Kakalik et al., supra note 43, app.
47 About eight percent of our sample of cases remained open at the conclusion of our data collection. They are not included in this analysis.
hours were obviously significantly more costly and had significantly higher lawyer work hours spent on discovery, but they did not have statistically significantly longer time to disposition after other variables such as complexity and stakes were factored into the multivariate analysis. The top 10% had a median of 950 total work hours per litigant, a median of 300 lawyer work hours on discovery, and a median percentage of lawyer work hours spent on discovery of 36%. These top categories of the most costly cases in terms of lawyer work hours also had significantly lower lawyer satisfaction with the judicial case management and a significantly lower percentage of the lawyers who felt the judicial case management was fair.
### Table 2.1
Information by Case Closure Point: 1992–93 Sample, Closed General Civil Cases with Lawyer Work Hours Reported

<table>
<thead>
<tr>
<th>Variable</th>
<th>Case Closure Point</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before Issue Joined</td>
</tr>
<tr>
<td>Percent in category</td>
<td>28</td>
</tr>
<tr>
<td>Median days to disposition</td>
<td>122</td>
</tr>
<tr>
<td>% lawyers satisfied with management</td>
<td>65</td>
</tr>
<tr>
<td>% lawyers view management as fair</td>
<td>82</td>
</tr>
<tr>
<td>Median total lawyer work hours per litigant</td>
<td>20</td>
</tr>
<tr>
<td>Average total lawyer work hours per litigant</td>
<td>65</td>
</tr>
<tr>
<td>% with zero discovery work hours</td>
<td>72</td>
</tr>
<tr>
<td>Median lawyer work hours on discovery per litigant</td>
<td>0</td>
</tr>
<tr>
<td>Average lawyer work hours on discovery per litigant</td>
<td>13</td>
</tr>
<tr>
<td>Median percent discovery hours of total lawyer work hours</td>
<td>0</td>
</tr>
<tr>
<td>Average number of discovery motions on case</td>
<td>0.1</td>
</tr>
<tr>
<td>% of total lawyer work hours on all cases</td>
<td>13</td>
</tr>
<tr>
<td>% of discovery lawyer work hours on all cases</td>
<td>8</td>
</tr>
</tbody>
</table>

Note: Percentages in rows may not add to 100 due to rounding and missing data.
Table 2.2
How Lawyers Spend Their Work Hours: 1992–93 Sample, General Civil Cases with Issue Joined, Closed with Time to Disposition over 270 Days and with Lawyer Work Hours Reported

<table>
<thead>
<tr>
<th>Type of Work</th>
<th>Average Lawyer Work Hours per Litigant</th>
<th>Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trials, including direct preparation for trial</td>
<td>26</td>
<td>11</td>
</tr>
<tr>
<td>Alternative dispute resolution after filing</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Discovery after filing, including motions</td>
<td>83</td>
<td>36</td>
</tr>
<tr>
<td>Motion practice, excluding discovery</td>
<td>36</td>
<td>16</td>
</tr>
<tr>
<td>Other pretrial conferences or talks with judicial officer</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Other time worked after filing federal case: on research, investigation, writing, talking with parties and lawyers outside court, or anything else related to the litigation</td>
<td>55</td>
<td>24</td>
</tr>
<tr>
<td>All time worked before filing federal case, in preparation for filing case</td>
<td>15</td>
<td>7</td>
</tr>
<tr>
<td>Total work hours per litigant</td>
<td>232</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: Lawyers were asked the following question after case closure: "Approximately how many of the total number of hours worked for your party or parties were spent on each of the activities listed below? Again do not include activity related to state court, any government administrative proceeding, or appellate litigation." Columns may not sum exactly due to rounding and missing data.
Table 2.3
Information by Category of Case Complexity: 1992–93 Sample, General Civil Cases with Issue Joined, Closed with Time to Disposition over 270 Days and with Lawyer Work Hours Reported

<table>
<thead>
<tr>
<th>Variable</th>
<th>Case Complexity</th>
<th>Significant Difference Shown in Multivariate Analysis?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>Percent in category</td>
<td>23</td>
<td>61</td>
</tr>
<tr>
<td>Median days to disposition</td>
<td>594</td>
<td>463</td>
</tr>
<tr>
<td>% lawyers satisfied with management</td>
<td>72</td>
<td>73</td>
</tr>
<tr>
<td>% lawyers view management as fair</td>
<td>86</td>
<td>89</td>
</tr>
<tr>
<td>Median total lawyer work hours per litigant</td>
<td>150</td>
<td>78</td>
</tr>
<tr>
<td>Average total lawyer work hours per litigant</td>
<td>432</td>
<td>201</td>
</tr>
<tr>
<td>% with zero discovery work hours</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>Median lawyer work hours on discovery per litigant</td>
<td>42</td>
<td>20</td>
</tr>
<tr>
<td>Average lawyer work hours on discovery per litigant</td>
<td>147</td>
<td>76</td>
</tr>
<tr>
<td>Median percent discovery hours of total lawyer work hours</td>
<td>28</td>
<td>25</td>
</tr>
<tr>
<td>Average number of discovery motions on case</td>
<td>1.9</td>
<td>0.8</td>
</tr>
</tbody>
</table>

Note: Percentages in rows may not add to 100 due to rounding and missing data.
### Table 2.4
Information by Category of Discovery Difficulty: 1992–93 Sample, General Civil Cases with Issue Joined, Closed with Time to Disposition over 270 Days and with Lawyer Work Hours Reported

<table>
<thead>
<tr>
<th>Variable</th>
<th>Difficulty of Discovery</th>
<th>Significant Difference Shown in Multivariate Analysis?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>Percent in category</td>
<td>19</td>
<td>53</td>
</tr>
<tr>
<td>Median days to disposition</td>
<td>581</td>
<td>465</td>
</tr>
<tr>
<td>% lawyers satisfied with management</td>
<td>73</td>
<td>72</td>
</tr>
<tr>
<td>% lawyers view management as fair</td>
<td>86</td>
<td>89</td>
</tr>
<tr>
<td>Median total lawyer work hours per litigant</td>
<td>140</td>
<td>96</td>
</tr>
<tr>
<td>Average total lawyer work hours per litigant</td>
<td>503</td>
<td>215</td>
</tr>
<tr>
<td>% with zero discovery work hours</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>Median lawyer work hours on discovery per litigant</td>
<td>50</td>
<td>25</td>
</tr>
<tr>
<td>Average lawyer work hours on discovery per litigant</td>
<td>205</td>
<td>73</td>
</tr>
<tr>
<td>Median percent discovery hours of total lawyer work hours</td>
<td>33</td>
<td>27</td>
</tr>
<tr>
<td>Average number of discovery motions on case</td>
<td>1.9</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Note: Percentages in rows may not add to 100 due to rounding and missing data.
Table 2.5
Information by Type of Attorney: 1992–93 Sample, General Civil Cases with Issue Joined, Closed with Time to Disposition over 270 Days and with Lawyer Work Hours Reported

<table>
<thead>
<tr>
<th>Variable</th>
<th>Type of Attorney</th>
<th>Significant Difference Shown in Multivariate Analysis?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Plaintiff</td>
<td>Defendant</td>
</tr>
<tr>
<td>Percent in category</td>
<td>42</td>
<td>58</td>
</tr>
<tr>
<td>Median days to disposition</td>
<td>459</td>
<td>471</td>
</tr>
<tr>
<td>% lawyers satisfied with management</td>
<td>72</td>
<td>74</td>
</tr>
<tr>
<td>% lawyers view management as fair</td>
<td>88</td>
<td>89</td>
</tr>
<tr>
<td>Median total lawyer work hours per litigant</td>
<td>100</td>
<td>75</td>
</tr>
<tr>
<td>Average total lawyer work hours per litigant</td>
<td>271</td>
<td>204</td>
</tr>
<tr>
<td>% with zero discovery work hours</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>Median lawyer work hours on discovery per litigant</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Average lawyer work hours on discovery per litigant</td>
<td>96</td>
<td>74</td>
</tr>
<tr>
<td>Median percent discovery hours of total lawyer work hours</td>
<td>25</td>
<td>29</td>
</tr>
<tr>
<td>Average number of discovery motions on case</td>
<td>0.9</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Note: Percentages in rows may not add to 100 due to rounding and missing data.
Table 2.6
Information by Type of Private Attorney Fee: 1992–93 Sample, General Civil Cases with Issue Joined, Closed with Time to Disposition over 270 Days and with Lawyer Work Hours Reported

<table>
<thead>
<tr>
<th>Variable</th>
<th>Type of Private Attorney Fee</th>
<th>Significant Difference Shown in Multivariate Analysis?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hourly</td>
<td>Contingent</td>
</tr>
<tr>
<td>% lawyers satisfied with management</td>
<td>72</td>
<td>73</td>
</tr>
<tr>
<td>% lawyers view management as fair</td>
<td>89</td>
<td>87</td>
</tr>
<tr>
<td>Median total lawyer work hours per litigant</td>
<td>83</td>
<td>95</td>
</tr>
<tr>
<td>Average total lawyer work hours per litigant</td>
<td>269</td>
<td>177</td>
</tr>
<tr>
<td>% with zero discovery work hours</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>Median lawyer work hours on discovery per litigant</td>
<td>21</td>
<td>20</td>
</tr>
<tr>
<td>Average lawyer work hours on discovery per litigant</td>
<td>107</td>
<td>46</td>
</tr>
<tr>
<td>Median percent discovery hours of total lawyer work hours</td>
<td>27</td>
<td>27</td>
</tr>
<tr>
<td>Average number of discovery motions on case</td>
<td>1.0</td>
<td>0.9</td>
</tr>
</tbody>
</table>

Note: Percentages in rows may not add to 100 due to rounding and missing data. Types of attorneys and fees not shown in the table include prepaid legal insurance attorneys, government attorneys who were an employee of a party, private attorneys who were full time employees of a party, attorneys with mixed fee arrangements, and attorneys who charged no fee.
Table 2.7

Information by Size of Firm or Legal Department: 1992–93
Sample, General Civil Cases with Issue Joined, Closed with Time to Disposition over 270 Days and with Lawyer Work Hours Reported

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number of Lawyers in Firm or Legal Department</th>
<th>Significant Difference Shown in Multivariate Analysis?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent in category</td>
<td>68</td>
<td>31</td>
</tr>
<tr>
<td>Median days to disposition</td>
<td>460</td>
<td>473</td>
</tr>
<tr>
<td>% lawyers satisfied with management</td>
<td>73</td>
<td>75</td>
</tr>
<tr>
<td>% lawyers view management as fair</td>
<td>89</td>
<td>89</td>
</tr>
<tr>
<td>Median total lawyer work hours per litigant</td>
<td>90</td>
<td>66</td>
</tr>
<tr>
<td>Average total lawyer work hours per litigant</td>
<td>275</td>
<td>137</td>
</tr>
<tr>
<td>% with zero discovery work hours</td>
<td>14</td>
<td>17</td>
</tr>
<tr>
<td>Median lawyer work hours on discovery per litigant</td>
<td>21</td>
<td>15</td>
</tr>
<tr>
<td>Average lawyer work hours on discovery per litigant</td>
<td>101</td>
<td>44</td>
</tr>
<tr>
<td>Median percent discovery hours of total lawyer work hours</td>
<td>26</td>
<td>25</td>
</tr>
<tr>
<td>Average number of discovery motions on case</td>
<td>1.0</td>
<td>0.8</td>
</tr>
</tbody>
</table>

Note: Percentages in rows may not add to 100 due to rounding and missing data.
Table 2.8
Information by Size of Monetary Stakes: 1992–93 Sample, General Civil Cases with Issue Joined, Closed with Time to Disposition over 270 Days and with Lawyer Work Hours Reported

<table>
<thead>
<tr>
<th>Variable</th>
<th>Monetary Stakes</th>
<th>Significant Difference Shown in Multivariate Analysis?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Over $500,000</td>
<td>$500,000 or Less, Greater Than Zero</td>
</tr>
<tr>
<td>Percent in category</td>
<td>28</td>
<td>61</td>
</tr>
<tr>
<td>Median days to disposition</td>
<td>537</td>
<td>447</td>
</tr>
<tr>
<td>% lawyers satisfied with management</td>
<td>68</td>
<td>77</td>
</tr>
<tr>
<td>% lawyers view management as fair</td>
<td>89</td>
<td>90</td>
</tr>
<tr>
<td>Median total lawyer work hours per litigant</td>
<td>172</td>
<td>68</td>
</tr>
<tr>
<td>Average total lawyer work hours per litigant</td>
<td>483</td>
<td>126</td>
</tr>
<tr>
<td>% with zero discovery work hours</td>
<td>9</td>
<td>14</td>
</tr>
<tr>
<td>Median lawyer work hours on discovery per litigant</td>
<td>48</td>
<td>17</td>
</tr>
<tr>
<td>Average lawyer work hours on discovery per litigant</td>
<td>190</td>
<td>36</td>
</tr>
<tr>
<td>Median percent discovery hours of total lawyer work hours</td>
<td>30</td>
<td>25</td>
</tr>
<tr>
<td>Average number of discovery motions on case</td>
<td>1.5</td>
<td>0.8</td>
</tr>
</tbody>
</table>

Note: Percentages in rows may not add to 100 due to rounding and missing data.
### Table 2.9

Information by Nature of Suit: 1992–93 Sample, General Civil Cases with Issue Joined, Closed with Time to Disposition over 270 Days and with Lawyer Work Hours Reported

<table>
<thead>
<tr>
<th>Variable</th>
<th>Nature of Suit</th>
<th>Significant Difference Shown in Multivariate Analysis?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent in category</td>
<td>Tort</td>
<td>Contract</td>
</tr>
<tr>
<td>Median days to disposition</td>
<td>477</td>
<td>430</td>
</tr>
<tr>
<td>% lawyers satisfied with management</td>
<td>76</td>
<td>73</td>
</tr>
<tr>
<td>% lawyers view management as fair</td>
<td>91</td>
<td>88</td>
</tr>
<tr>
<td>Median total lawyer work hours per litigant</td>
<td>80</td>
<td>100</td>
</tr>
<tr>
<td>Average total lawyer work hours per litigant</td>
<td>147</td>
<td>312</td>
</tr>
<tr>
<td>% with zero discovery work hours</td>
<td>7</td>
<td>15</td>
</tr>
<tr>
<td>Median lawyer work hours on discovery per litigant</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Average lawyer work hours on discovery per litigant</td>
<td>48</td>
<td>104</td>
</tr>
<tr>
<td>Median percent discovery hours of total lawyer work hours</td>
<td>30</td>
<td>25</td>
</tr>
<tr>
<td>Average number of discovery motions on case</td>
<td>1.0</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Note: Percentages in rows may not add to 100 due to rounding and missing data.
Table 2.10

Information by Category of Total Lawyer Work Hours: 1992–93 Sample, General Civil Cases with Issue Joined, Closed with Time to Disposition over 270 Days and with Lawyer Work Hours Reported

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category of Total Lawyer Work Hours</th>
<th>Significant Difference Shown in Multivariate Analysis?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bottom 75%</td>
<td>Top 25%</td>
</tr>
<tr>
<td>Percent in category</td>
<td>75</td>
<td>25</td>
</tr>
<tr>
<td>Median days to disposition</td>
<td>442</td>
<td>578</td>
</tr>
<tr>
<td>% lawyers satisfied with management</td>
<td>76</td>
<td>64</td>
</tr>
<tr>
<td>% lawyers view management as fair</td>
<td>90</td>
<td>83</td>
</tr>
<tr>
<td>Median total lawyer work hours per litigant</td>
<td>55</td>
<td>375</td>
</tr>
<tr>
<td>Average total lawyer work hours per litigant</td>
<td>66</td>
<td>730</td>
</tr>
<tr>
<td>% with zero discovery work hours</td>
<td>17</td>
<td>6</td>
</tr>
<tr>
<td>Median lawyer work hours on discovery per litigant</td>
<td>12</td>
<td>100</td>
</tr>
<tr>
<td>Average lawyer work hours on discovery per litigant</td>
<td>19</td>
<td>280</td>
</tr>
<tr>
<td>Median percent discovery hours of total lawyer work hours</td>
<td>25</td>
<td>33</td>
</tr>
<tr>
<td>Average number of discovery motions on case</td>
<td>0.6</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Note: Percentages in rows may not add to 100 due to rounding, missing data, and inclusion of top 10 percent within numbers shown for top 25 percent.
III. Evaluation of Various Discovery Management Policies

A. Introduction

Discovery management policies include the CJRA principles of early and ongoing judicial control of pretrial processes such as discovery, requiring lawyers to prepare jointly a discovery/case management plan early in the case, exchanging information early without formal discovery, requiring good-faith efforts to resolve discovery disputes before filing motions and limiting interrogatories and other forms of discovery.\(^{48}\)

To conduct this further evaluation of discovery management policies, discovery management policy information was obtained at the district level from court documents, local rules and interviews with judges and clerks in each of the twenty study districts. In addition, discovery management information was obtained at the case level from over 5000 court dockets and from lawyer surveys for cases filed in 1992-93, after the CJRA was passed. For each case, we learned when the judge started managing the case, if a trial schedule had been set, if a discovery schedule had been set, and, if so, when and how much time was allowed between the date the schedule was set and the date of discovery cutoff. From the dockets, we also learned if any discovery motions had been filed. Details of discovery management at the case level, however, such as limitations on depositions or requirements for sequencing of discovery, are usually not recorded on the docket and so were not available. We also surveyed the lawyers on each case to learn how much time they worked on the case and how much of that work time was devoted to discovery, to learn if early disclosure of information was made without a formal discovery request and to learn if good faith efforts had been made to resolve discovery disputes before a motion was filed.

The remaining five subsections of this section contain our evaluation of the following five types of discovery management policies:

- Early case management and discovery planning,
- Early disclosure,
- Good-faith efforts in resolving discovery disputes,
- Limiting interrogatories, and
- Shortening discovery cutoff time.

\(^{48}\) For details of each district's CJRA plan and its implementation, see generally James S. Kakalik et al., Implementation of CJRA, supra note 1.
Due to lack of sufficient data, we could not evaluate policies limiting the number or length of depositions, limiting document discovery, or dealing with issues of privilege. We also had insufficient data to evaluate methods lawyers use to manage discovery outside the court’s purview.49

B. Early Case Management and Discovery Planning

All of the twenty study courts’ CJRA plans accepted the principle of early and ongoing judicial control of the pretrial process. Case management styles varied considerably, however, between districts and between judges in a given district. Four of the ten pilot districts required that counsel jointly present a discovery/case management plan at the initial pretrial conference, and nine of the other pilot and comparison districts later adopted this management technique after our sample cases were selected when the December 1993 Federal Rules changes were made.

In our statistical analyses, we defined early judicial case management as any schedule, conference, status report, joint plan, or referral to ADR within 180 days of case filing. This definition gives time for nearly all cases to have service and answer or other appearance of the defendants (which legally can take up to six months)—so issue is joined and it is appropriate to begin management if the judge wants to do so. We also explored alternative definitions of “early” using time periods other than six months, with results similar to those reported here.

1. Lawyer Work Hours

In our main evaluation report, we estimated a statistically significant increase in total lawyer work hours from early management. There were no consistent statistically significant differences for any of the components of early management considered separately.

Our main evaluation report showed that attorneys shown on the docket to have filed status reports or joint discovery/case management plans before day 180 in the life of the case did not have significantly different work hours than attorneys on cases with other forms of early management. On the other hand, we found that attorneys from districts with a policy that required early status reports or joint plans did

49 See Kakalik et al., supra note 48, app.
report statistically significantly fewer work hours than attorneys from other districts.50

We explored this difference in our findings between case-level and district-level data in some depth in our further analysis of judicial discovery management policies, and learned that the case-level data are not reliable because of major differences in docketing practices between districts that require plans or status reports. The docketsthat say a discovery plan was submitted are generally accurate, but the docketsthat are silent on the subject of a discovery plan can mean either no plan was submitted, or a plan was submitted to the court but that fact was not separately shown on the docket. The case-level information on whether or not a discovery plan had been submitted was dropped from this further study because the docketing practices regarding the submission of those plans or reports were found to vary markedly between districts, making that case-level variable undesirable for statistical analyses across districts.

In our further analysis of judicial discovery management policies, we found that early management is associated with significantly increased total lawyer work hours if the district does not require discovery/case management plans. We estimated that early management without a mandatory planning policy increases work hours between twenty-six or thirty-one hours depending on whether or not early management includes trial setting.51 Early management is not associated with significantly increased total lawyer work hours, however, if the district requires discovery/case management plans. We estimate almost no effect on lawyer work hours for the typical case with early management that includes a mandatory planning policy.52 This lends strong support for the continuation of a requirement of discovery/case management planning. That is, it appears that doing early management without planning increases lawyer work hours, but early management coupled with planning does not increase lawyer work hours.

Our interviews suggested reasons why early management may increase lawyer work hours. Lawyers need to respond to a court's management—for example, talking to the litigant and to the other

50 This result holds when we use either the intra-district correlation-adjusted or unadjusted standard errors.
52 Although the estimated effect is an hour or less, our 95% confidence intervals range from -19 to 18 hours if early setting of a trial schedule is included and -20 to 28 hours if early setting of a trial schedule is not included in the policy applied to the case. These confidence intervals indicate that although we estimate almost no effect, there is a possibility that the policies might reduce lawyer work or might increase lawyer work by as much as about three days.
lawyers in advance of a conference with the judge, traveling, spending time waiting at the courthouse, meeting with the judge and updating the file after the conference. In addition, once judicial case management has begun, a discovery cutoff date has usually been established and attorneys may feel an obligation to begin discovery. Doing so could shorten time to disposition, but it may also increase lawyer work hours on cases that were about to settle when the judge began early management. The CJRA data indicate that cases that are managed early have a higher likelihood of having at least some lawyer hours spent on discovery.

When a district requires discovery/case management plans, however, the increase in lawyer work hours associated with early management appears to be offset by benefits associated with the required planning, and the net effect is no significant increase in lawyer work hours. There are at least two plausible explanations for this outcome. First, the planning itself may produce the benefit. The requirement that the lawyers jointly meet and prepare a discovery/case management plan for submission to the court may result in more efficient litigation with less lawyer work hours. Another plausible explanation is that the judges in districts that require plans also may manage cases differently and better (in ways that we did not measure) than judges in districts that do not require plans.

When we looked at various subsets of cases, we found no strong evidence that the effects of early management and discovery planning were systematically concentrated on certain types of cases based on level of complexity, level of discovery difficulty, plaintiff or defendant side of the case, contingent or hourly fee lawyer, size of the law organization in which the lawyer worked, case stakes, tort or contract or other nature of suit categories, or the top 25% most costly cases among general civil litigation that has time to disposition over 270 days after filing.55

In addition to the further analysis that we did on total lawyer work hours, we also analyzed lawyer work hours on discovery. The policy implications and findings of statistical significance emerging from our analysis of lawyer work hours on discovery are very similar to those from our analysis of total lawyer work hours.

55 These cases had total lawyer work hours per litigant of more than 188.
2. Time to Disposition

In our main evaluation report, using only cases with time to disposition over 270 days, we found that early management predicted significantly shorter time to disposition. We explored the component procedures of early management separately in our main evaluation report, and fit a separate model for each component. This model includes both a flag for early management as well as a flag for the particular early management procedure. For example, to explore the specific effect of setting a trial schedule prior to the 180th day of the case, we fit a model that includes our early management flag and a flag that is one if the case received a trial schedule before day 180 and zero otherwise. The estimated coefficient for the trial schedule flag estimates the difference between cases that receive early management that includes setting the trial schedule and those that receive early management but do not include setting the trial schedule early. Using this approach, we found that cases where a trial schedule was set before day 180 had statistically significantly shorter time to disposition than did cases receiving other types of early management. We found no statistically significant differences for conferences or mandatory arbitration, and we had mixed results for schedules in general and status reports or joint discovery/case management plans. Hence, we concluded that there was not strong evidence that this joint discovery/case management plan policy was an important predictor of time to disposition.

In our further analysis of judicial discovery management policies, we again found that a statistically significant reduction in time to disposition was associated with early management without setting a trial schedule early, and a significantly larger reduction was associated with early management that included setting a trial schedule early. In our further analysis, we considered those two early management and trial scheduling policies used both with and without a discovery plan requirement, and the results were statistically significant. There was little difference in time to disposition with or without a discovery plan if a trial was scheduled early, but cases closed earlier if discovery planning took place in the absence of an early trial schedule.54 Thus, our further analysis suggests that the requirement of a discovery/case management

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54 If we use the standard errors adjusted for intra-district correlation as discussed in the appendix to our RAND report MR-941-ICJ, 1997, then early management without an early scheduling of a trial and without a discovery plan does not significantly reduce time to disposition (coefficient = -0.062, p = 0.169 for cases that close over 270 days after filing).
plan is beneficial in reducing time to disposition, especially if a trial schedule is not set early. And we indicated above that the use of discovery plans appears to have beneficial effects in controlling lawyer work time.

Early management with a mandatory planning policy reduces time spent on a typical case by an estimated 104 days when a trial schedule is set early, and by about 85 days for early management with a mandatory planning policy but without setting a trial schedule early. The estimated reduction for early management with neither mandatory planning nor setting a trial schedule early is much smaller—only about 29 days.55

Our statistical analysis of subsets of cases does not lead to any suggestions for focusing these management policies only on certain types of cases. Our statistical results are consistent for most subsets of cases analyzed, although the top 25% most costly cases appear to benefit especially from the early setting of a trial schedule (early management of those top 25% of the costly cases without a trial date scheduled was not associated with significantly reduced time to disposition). And cases that are high in complexity, high in discovery difficulty, or high in stakes appear to benefit especially from the use of discovery/case management plans.

3. Attorney Satisfaction

In our main evaluation report, we found no statistically significant effects on attorney satisfaction for early case management in our model with cases closed over 270 days after filing. Furthermore, we found no statistically significant differences in attorney satisfaction for cases receiving any of the components of early management (such as requiring a status report or discovery/case management plan or an early setting of a trial date) compared to cases not receiving the component.

In our further analysis of judicial discovery management policies, we again find no statistically significant effect on lawyer satisfaction from early management, setting a trial schedule early in the case and requiring a discovery plan. We considered those three policies used in various combinations and did not find any significant difference in satisfaction, although as noted previously, some of those policies do significantly affect time to disposition and lawyer work hours.

Our statistical analysis of subsets of cases does not lead to any suggestions for focusing these management policies on certain types

55 See Kakalik et al., supra note 43, app. tbl. A.7.
of cases. Our statistical results are consistent for nearly all subsets of cases analyzed, including the top 25% most costly cases.

4. Attorneys' Views on Fairness

We found no statistically significant effects for any of the policy variables on attorneys' views on fairness.

5. Information by Type of Early Management and Discovery Plan Policy

Table 3.1 presents information on time to disposition, lawyer work hours, satisfaction, and views on fairness for cases that were and were not subject to an early management and joint discovery/case management plan. The numbers in the table, which reflect actual survey responses from the sample cases, generally corroborate the results of the statistical analysis. We caution, however, that the districts, and the cases from those districts, differ on factors other than the policies on early management and discovery planning. Our multivariate analyses adjust for those other factors, and the bivariate Table 3.1 does not.

C. Early Disclosure

CJRA brought about substantial change in early disclosure among our study districts. Only one district required it before CJRA; after CJRA, all pilot and comparison districts have adopted one of five approaches providing either voluntary or mandatory exchange of information by lawyers, sometimes only for specified types of cases. Three pilot and two comparison districts adopted the voluntary exchange model, which encourages lawyers to cooperate in exchanging information. Three pilot districts and one comparison district followed a mandatory exchange model for a limited subset of cases and a voluntary model on other cases. Two pilot districts and one comparison district required lawyers to disclose mandatorily certain information, including anything bearing significantly on their sides' claims or defenses. Two other pilot districts and one other comparison district have a similar mandatory requirement, but they apply it to all information bearing significantly on both sides' claims or defenses.

The December 1993 revised Rule 26(a)(1), which requires the mandatory exchange of information relevant to disputed facts alleged

56 At least one other district required attorneys to confer before the first pretrial conference to attempt to agree on a scheduling order.
with particularity in the pleadings plus information on damages and insurance, was implemented after our sample of cases was selected, and hence cannot be evaluated with our CJRA data. After our sample cases were selected, four pilot districts switched from their initial early disclosure procedure, and six comparison districts decided to follow the revised Rule 26(a)(1). The ten other pilot and comparison districts decided to opt out and are not following the revised Rule 26(a)(1). Some districts opted out to retain their pilot program disclosure rules, some of which were more stringent in their disclosure requirements than the revised Rule 26(a)(1).

RAND's lawyer surveys indicate that when early disclosure was made for cases in the 1992-93 sample, it was "full disclosure" 57% of the time, and "pro forma" disclosure 43% of the time. For general civil cases with issue joined, lawyers report more disclosure when it is mandatory (60% of the cases in mandatory disclosure districts, versus 45% in voluntary disclosure districts and 40% in districts with no disclosure policy). Part of the problem with a mandatory early disclosure requirement is compliance; lawyers report that when disclosure is done on a mandatory basis, it is full disclosure for 50% of the cases and pro forma disclosure for the other half of the cases.

When one party does not comply with mandatory early disclosure, the other side's lawyer may ignore the problem, make a formal discovery request, or file a motion requesting the court to force compliance. According to our analysis of dockets on over 5000 cases, and according to judges we have interviewed in pilot and comparison districts that implemented their plans in December 1991, such compliance motions are extremely rare. Despite the dire warnings of critics of early mandatory disclosure, we did not find any explosion of ancillary litigation and motion practice related to disclosure in any of the pilot or comparison districts using mandatory disclosure.

1. Lawyer Work Hours

In our main evaluation report, we found no statistically significant difference in lawyer work hours between cases where the attorneys reported disclosure of relevant information and cases where there was no early disclosure. We also found that attorneys representing cases in districts with some type of mandatory disclosure policy had work hours that were not statistically significantly different from hours worked by attorneys in other districts. It should be noted, however, that in our main evaluation report we found that attorney work hours were significantly lower for the three districts that had a particular type of
mandatory disclosure: *early mandatory disclosure of information bearing on both sides of the dispute*. With only three districts using this particular type of mandatory disclosure policy, however, it is difficult to generalize this statistical finding.

We could not evaluate the mandatory disclosure prescribed under the December 1993 amendments to Rule 26(a) (1) because our sample of cases was selected well before that amendment took effect, and none of our study districts had a mandatory disclosure policy that was exactly the same as the amended Rule 26(a) (1) when our sample cases were selected. Hence, the "empirical" story of the effects of Rule 26(a) (1) remains to be told.

We found that a district policy encouraging voluntary early disclosure had no statistically significant effect on attorney work hours. We found small and not statistically significant differences in work hours between lawyers on cases from districts with a voluntary early disclosure policy compared to lawyers from districts with no general policy on early disclosure.\(^{57}\)

In our current analysis of judicial discovery management policies, we again found that mandatory early disclosure requirements were not associated with significantly reduced lawyer work hours. Regardless of whether early disclosure occurs, cases from districts with mandatory early disclosure policies tend to have similar estimated lawyer work hours as cases from districts without a mandatory disclosure policy that had no early disclosure. The confidence intervals are large so there is a possibility that mandatory early disclosure policies could reduce or increase lawyer work hours,\(^{58}\) but our best estimate is a small eight hour increase if early disclosure is conducted and no effect if no early disclosure occurs in districts with a mandatory disclosure policy. Some people suggested that if we had looked at subsets of cases, such as those that were more or less complex or had more or less difficulty with discovery, we might have found a subset of cases for which this policy was effective. We have explored many different subsets of cases, including subsets based on stakes, complexity and discovery difficulty. We found no strong evidence that a policy of early mandatory disclosure reduced lawyer work time on any of the subsets of cases examined.

Attorneys who voluntarily choose to do early disclosure, however, in districts where such disclosure is voluntary, have significantly lower work hours. Cases with voluntary early disclosure required an estimated fourteen fewer work hours than cases without voluntary disclo-

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\(^{57}\) Coefficient = 0.236, \(p = 0.129\) for cases closed over 270 days after filing.

\(^{58}\) See KAKALIK ET AL., *supra* note 43, app. (bl. A.18.)
sure. It may be that lower work hours among voluntary disclosing attorneys reflect a type of "choice or selection bias," i.e., attorneys on cases for which they voluntarily choose to disclose may be less contentious attorneys or may be on less contentious cases and hence spend fewer total work hours on the case, but not necessarily because of the early disclosure.

In addition to the further analysis that we did on total lawyer work hours, we also analyzed lawyer work hours on discovery. The policy implications and findings of statistical significance emerging from our analysis of lawyer work hours on discovery are very similar to those from our analysis of total lawyer work hours. We focus our discussion on the total lawyer work hours, however, because we think the total is a better measure of the cost of litigation than the lawyer hours spent on discovery. Our interviews suggest that some types of discovery management may reduce discovery hours by shifting lawyer work to other types of activity (disclosure as a substitute for some discovery, for example).

2. Time to Disposition

In our main evaluation report, we found no statistically significant difference in time to disposition between cases from districts that have a policy of mandatory disclosure and those that do not. Furthermore, in separate model runs, we found that cases from districts with a policy of mandatory disclosure of information bearing on both sides of the case did not differ significantly in terms of time to disposition from other cases.\(^{59}\) Also, we found that cases where the attorneys reported an early disclosure of relevant information were not statistically significantly different from other cases in terms of time to disposition.\(^{60}\) We also found that a district policy encouraging voluntary early disclosure had no statistically significant effect on time to disposition. Cases from districts with a voluntary early disclosure policy were compared to cases from districts with no general policy on early disclosure.\(^{61}\)

In our current analysis of judicial discovery management policies, we again find that early disclosure requirements are not associated with

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\(^{59}\) Coefficient = 0.04, \(p = 0.37\) for cases closing over 270 days after filing.

\(^{60}\) We imputed the missing values of our early disclosure variable and found that our result was not sensitive to the particular imputed values.

\(^{61}\) Coefficient = 0.045, \(p = 0.416\) for cases closed over 270 days after filing. Some districts had policies on early disclosure for a limited number of cases. We considered these districts to have no general policy of early disclosure and included them in our comparison group for studying the effects of voluntary and mandatory early disclosure.
significantly reduced time to disposition. Our estimated effects for early disclosure indicate that the policies reduce time to disposition by about twenty days or less for a typical case. For all three early disclosure policies, the confidence intervals cross zero.62

Some people suggested that if we had looked at subsets of cases, such as those that were more or less complex or had more or less difficulty with discovery, we might have found a subset of cases for which this policy was effective. We have explored many different subsets of cases, including subsets based on stakes, complexity and discovery difficulty. We found no strong evidence that a policy of early mandatory disclosure shortened time to disposition on any of the subsets of cases examined.

3. Attorney Satisfaction

In our main evaluation report, we found that a district policy of mandatory early disclosure corresponded to statistically significantly lower attorney satisfaction. For cases in which the attorneys report the actual early disclosure of information, however, they also report significantly higher satisfaction than attorneys from other cases.

A district policy of voluntary early disclosure is associated with fewer satisfied attorneys, but our estimated effects are small and not statistically significant.63 Our model compared attorney responses from districts with a policy of voluntary early disclosure to the responses from attorneys from districts with no general policy on early disclosure.

In our current analysis of judicial discovery management policies, we again found that attorneys from districts with a mandatory disclosure policy were less satisfied, but their level of satisfaction was not significantly different from the level of satisfaction for attorneys who did not do early disclosure in voluntary disclosure districts. Attorneys who voluntarily choose to do early disclosure, however, in districts where such disclosure is voluntary, are significantly more satisfied. Since most districts had a voluntary disclosure policy at the time of the study, this explains the overall finding in our main evaluation report that disclosing attorneys were more satisfied. It may be that greater satisfaction among voluntary disclosing attorneys reflects a type of "choice or selection bias," i.e., attorneys on cases for which they voluntarily choose to disclose may be less contentious attorneys or may be

63 Coefficient = -0.070, p = 0.835 for cases that close over 270 days after filing.
on less contentious cases and hence more satisfied, but not necessarily because of the early disclosure.

Our statistical analysis of subsets of cases does not lead to any suggestions for focusing these management policies on certain types of cases. Our statistical results are consistent for most subsets of cases analyzed, including the top 25% most costly cases.

4. Attorneys' Views on Fairness

We found no statistically significant effects for any of the policy variables on attorneys' views on fairness.

5. Information by Early Disclosure Policy

Table 3.2 presents information on time to disposition, lawyer work hours, satisfaction and views on fairness for cases that were and were not subject to an early disclosure policy. The numbers in the table, which reflect actual survey responses from the sample cases, generally corroborate the results of the statistical analysis. We caution, however, that the districts and the cases from those districts differ on factors other than the policy on early disclosure. Our multivariate analyses adjust for those other factors, and the bivariate Table 3.2 does not.

D. Good-Faith Efforts in Resolving Discovery Disputes

Before CJRA, all but one district in the study had rules requiring good-faith efforts to resolve disputes before filing discovery motions; these rules have been continued or strengthened as required by the CJRA. Since our main evaluation report did not find any significant relationship between good-faith efforts and the variables studied, we did not do any further investigation of this policy in this report. Our main evaluation report findings on good-faith efforts are summarized below, however.

1. Lawyer Work Hours

In our main evaluation report, we explored the effects of good-faith efforts in resolving discovery disputes before filing motions using only cases with at least one motion. We found no statistically significant effects of good-faith efforts on work hours among attorneys from these cases. It could be that by restricting our attention to only cases with

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64 Coefficient = 0.27, p = 0.06 for cases closed over 270 days after filing.
motions, we miss the helpful effect of good-faith effort on avoiding motions; the positive effects we observe (i.e., good-faith effort increases work hours, but not significantly) do not suggest, however, any reduction in work hours from good-faith motions.

2. Time to Disposition

In our main evaluation report, we found no evidence of significant effects on time to disposition from good-faith efforts to resolve discovery disputes before filing motions. Looking at cases with at least one discovery motion, we found no statistically significant difference between cases where the attorney reported good-faith efforts and other cases. We did not do any further investigation of this policy in this document.

3. Attorney Satisfaction

In our main evaluation report, we explored the effects of good-faith efforts in resolving discovery disputes using only cases with at least one motion. We found that case-level-reported good-faith effort in resolving discovery disputes had no statistically significant effects on lawyer satisfaction.

4. Attorneys' Views on Fairness

We estimated the effects of good-faith efforts in resolving discovery disputes using a subsample of cases that had at least one discovery motion in our main evaluation report. Using this sample there was no statistically significant effect for cases with one or more discovery motions.

E. Limiting Interrogatories

Before CJRA, most districts left court control of the volume of discovery to the judge in each case; CJRA had little effect on this arrangement. Before CJRA, most pilot and comparison districts had a local rule that limited the number of interrogatories and requests for admission, but none limited the number of depositions and only one limited the time per deposition. After CJRA, one pilot and one comparison district adopted a new limit on deposition length, and two

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63 Coefficient = -0.01, p = 0.81 for cases closed over 270 days after filing.
66 Coefficient = 0.45, p = 0.23 for cases that had time to disposition over 270 days.
comparison districts adopted new limits on the number of depositions. Given the small number of districts that had a policy limiting depositions, we have insufficient data to evaluate that policy. Hence, this subsection focuses on limits on interrogatories.

1. Lawyer Work Hours

In our main evaluation report, a district policy on limiting interrogatories predicted fewer lawyer work hours; however, this difference was not statistically significant. In our current and more detailed analysis of judicial discovery management policies, we found a significant reduction in total lawyer work hours in districts with interrogatory limitations. We estimate that limiting interrogatories will reduce lawyer work by about sixteen hours.67

Looking at subsets of cases, the significant reductions appeared for hourly fee attorneys, defense attorneys, contract cases and medium complexity cases. These findings support the policy of limiting interrogatories as a means of limiting lawyer work hours because there is no statistical evidence that interrogatory limitations hurt, and they may help for several subsets of cases.

In addition to the further analysis that we did on total lawyer work hours, we also analyzed lawyer work hours on discovery. The policy implications and findings of statistical significance emerging from our analysis of lawyer work hours on discovery are very similar to those from our analysis of total lawyer work hours.

2. Time to Disposition

In our main evaluation report, we found that a district policy on limiting interrogatories was not a statistically significant predictor of shorter time to disposition for cases closed over 270 days after filing. Thus, we concluded that our data provided almost no evidence of an effect of district policies of limiting interrogatories on time to disposition.

In our current analysis of judicial discovery management policies, we found a significant reduction in time to disposition using unadjusted standard errors, but there was not a significant reduction when we used the standard errors adjusted for intra-district correlation.68

67 See Kakalik et al., supra note 43, app. tbl. A.13. This estimate has rather large confidence bounds, which are the result of the small variation in the data, because only four of our 20 study districts did not have limits on interrogatories during the study time period.

68 See Kakalik et al., supra note 43, app. Coefficient = - 0.068, p = 0.386 for cases that close over 270 days after filing.
Our estimated effect for a district policy limiting the number of interrogatories is relatively small with large confidence bounds. Analyses on subsets of cases also showed no significant effects for nearly all subsets. Consequently, we again conclude that our data provide almost no evidence of an effect of district policies of limiting interrogatories on time to disposition.

3. Attorney Satisfaction

In our main evaluation report, we found no statistically significant effect for a district policy limiting interrogatories for all cases with issue joined. On the other hand, in our analysis of cases closed over 270 days after filing, attorneys from districts with a policy of limiting interrogatories reported being significantly more satisfied with case management.

In our current analysis of judicial discovery management policies, we again found that districts with a policy of limiting interrogatories had attorneys who report significantly higher satisfaction. This finding also was true for most subsets of cases analyzed, and there was no indication of a significant negative effect for any subset of cases.

4. Attorneys' Views on Fairness

We found no statistically significant effects for any of the policy variables on attorneys' views on fairness.

5. Information by Interrogatory Limitation Policy

Table 3.3 presents information on time to disposition, lawyer work hours, satisfaction, and views on fairness for cases that were and were not subject to a district policy of limiting the number of interrogatories. The numbers in the table, which reflect actual survey responses from the sample cases, generally corroborate the results of the statistical analysis. One is not able to see the reduction in lawyer work hours predicted by a policy of limiting interrogatories in the bivariate tables, however, because the districts and the cases from those districts differ on factors other than the limitation on interrogatories. Our multivariate analyses adjust for those other factors, and the bivariate Table 3.3 does not.

See Kakalik et al., supra note 43, app. tbl. A.7.
F. Shortening Discovery Cutoff Time

Discovery clearly was subject to more management in 1992-93 after CJRA was passed. In addition to the new mandatory early disclosure requirements in some districts, the median district times to discovery cutoff were shortened in some districts. For example, in 1991 the fastest and slowest districts' median days from schedule to discovery cutoff were 100 and 274 days, respectively, for all general civil cases closed after issue was joined. In 1992-93, these medians had fallen to 83 and 217 days, respectively.

1. Lawyer Work Hours

In our main evaluation report, we found that reported lawyer work hours significantly decrease as the district median days from the setting of a discovery schedule to the discovery cutoff date gets shorter.  

In our current analysis of judicial discovery management policies, we again find that reported total lawyer work hours significantly decrease as the number of district median days to discovery cutoff gets smaller. We estimate that a sixty-day reduction in the district median discovery cutoff (from 180 days to 120 days) will reduce lawyer work by fifteen hours and we are quite confident that this policy will lead to at least some reduction in work hours. When we looked at subsets of cases, this significant decrease occurred for most subsets, with some exceptions such as low complexity and low discovery difficulty cases (which are unlikely to require as much time for discovery as more complex or more difficult cases).

In addition to the further analysis that we did on total lawyer work hours, we also analyzed lawyer work hours on discovery. The policy implications and findings of statistical significance emerging from our analysis of lawyer work hours on discovery are very similar to those from our analysis of total lawyer work hours.

2. Time to Disposition

In our main evaluation report, we found that the district's median days to discovery cutoff was a statistically significant predictor of time to disposition; shorter cutoff predicts shorter time to disposition.

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70 The time to discovery cutoff for each case was not used in this analysis because of potential bias in the multivariate regression results due to missing case descriptors that are correlated with discovery cutoff time for the case.

71 See Karakir et al., supra note 48, app. tbl. A.13.

72 The statistical significance holds even if we use adjusted standard errors. The time to
In our current analysis of judicial discovery management policies, we again found that the district's median days to discovery cutoff was a statistically significant predictor of time to disposition. We estimated that reducing median discovery cutoff time had a large effect. We expect that for a typical case, a sixty-day reduction in the median discovery cutoff (from 180 days to 120 days) would correspond to about a fifty-five-day reduction in time to disposition. In our analysis of subsets of cases, we found that reducing time to discovery cutoff significantly reduced time to disposition on most subsets of cases analyzed.

3. Attorney Satisfaction

In our main evaluation report, we found no statistically significant relationship between the district median days to discovery cutoff and attorney satisfaction.

In our current analysis of judicial discovery management policies, we again found no statistically significant relationship between the district median days to discovery cutoff and attorney satisfaction.

4. Attorneys' Views on Fairness

We found no statistically significant effects for any of the policy variables on attorneys' views on fairness.

5. Information on Discovery Cutoff Time Policy

Table 3.4 presents information on time to disposition, lawyer work hours, satisfaction, and views on fairness for cases from districts with shorter and longer times from discovery scheduling to cutoff. "Shorter" means the cases in the ten study districts with the shortest median discovery time to cutoff. The numbers in the table, which reflect actual survey responses from the sample cases, generally corroborate the results of the statistical analysis. One is not able to see the reduction in lawyer work hours predicted by a policy of shorter time to discovery cutoff in the bivariate tables, however, because the districts and the cases from those districts differ on factors other than the median time to discovery cutoff. Our multivariate analyses adjust for those other factors, and the bivariate Table 3.4 does not.

discovery cutoff for each case was not used in this analysis because of potential bias in the multivariate regression results due to missing case descriptors that are correlated with discovery cutoff time for the case.

G. Summary of Effects on Lawyer Work Hours

In our main evaluation report, our analyses for total lawyer work hours showed that cases with early management tended to require greater work hours and cases from districts with shorter median discovery cutoff tended to require fewer hours. There were no other clearly consistent policy variable effects on lawyer work hours per party represented. Thus, of all the policy variables we investigated as possible predictors of reduced lawyer work hours, only judicial management of discovery seemed to produce the desired effect.

We found that several attorney and case characteristics were important predictors of lawyer work hours. These control variables tended to be far better at explaining variance in lawyer work hours than did the policy variables. For example, of the total variance explained by our model, about 95% was explained by the control variables. This means that lawyer work hours seem to be driven primarily by factors other than case management policy. Case stakes and case complexity are the most important predictors of lawyer work hours, and these two case characteristics alone explained about half of the variance in our models. In contrast, of the total variance in our time to disposition models, only about half was explained by the control variables and the other half was explained by the policy variables.

In our current analysis of judicial discovery management policies, we found that early management was associated with significantly increased total lawyer work hours if the district did not require discovery/case management plans. Early management was not associated with significantly increased total lawyer work hours, however, if the district required discovery/case management plans. This lends strong support for the continuation of a requirement of discovery/case management planning. That is, it appears that doing early management without planning increases lawyer work hours, but early management coupled with planning does not increase lawyer work hours.

In our current analysis, we also found that mandatory early disclosure requirements were not associated with significantly reduced lawyer work hours. We have explored many different subsets of cases, including subsets based on stakes, complexity and discovery difficulty. We found no strong evidence that a policy of early mandatory disclosure reduced lawyer work time on any of the subsets of cases examined. Attorneys who voluntarily choose to do early disclosure, however, in districts where such disclosure is voluntary, have significantly lower work hours. It may be that lower work hours among voluntary disclosing attorneys reflect a type of "choice or selection bias," i.e., attorneys
on cases for which they voluntarily choose to disclose may be less contentious attorneys or may be on less contentious cases and hence spend fewer total work hours on the case, but not necessarily because of the early disclosure.

We find a significant reduction in total lawyer work hours in districts with interrogatory limitations. Looking at subsets of cases, the significant reductions appeared for hourly fee attorneys, defense attorneys, contract cases and medium complexity cases. These findings support the policy of limiting interrogatories as a means of limiting lawyer work hours because there is no statistical evidence that interrogatory limitations hurt, and they may help for several subsets of cases.

In our current analysis of judicial discovery management policies, we again found that reported total lawyer work hours significantly increased as the number of district median days to discovery cutoff got larger. When we looked at subsets of cases, this significant increase occurred for most subsets, with some exceptions such as low complexity and low discovery difficulty cases (which are unlikely to require as much time for discovery as more complex or more difficult cases).

In addition to the further analysis that we did on total lawyer work hours, we also analyzed lawyer work hours on discovery. The policy implications and findings of statistical significance emerging from our analysis of lawyer work hours on discovery are very similar to those from our analysis of total lawyer work hours.\textsuperscript{74}

**H. Summary of Effects on Time to Disposition**

In our main evaluation report, we found four policies that showed consistent statistically significant effects on time to disposition: (1) early judicial management, (2) setting the trial schedule early, (3) reducing discovery cutoff (median days to discovery cutoff in a district), and (4) having litigants at or available on the telephone for settlement conferences. Other policies and procedures we studied either were not statistically significant or not consistently significant.

In our current analysis of judicial discovery management policies, we again found a statistically significant reduction in time to disposition from early management without setting a trial schedule early, and a significantly larger reduction from early management that included setting a trial schedule early. We considered those two early manage-

\textsuperscript{74}For details of our statistical analysis of total lawyer work hours and lawyer work hours on discovery, see \textit{Kakalik et al.}, \textit{supra} note 43, app.
ment and trial scheduling policies used both with and without a discovery plan requirement, and the results were statistically significant. There was little difference in time to disposition with or without a discovery plan if a trial was scheduled early, but cases closed earlier if discovery planning took place in the absence of an early trial schedule. Thus, our analysis suggests that the requirement of a discovery/case management plan is beneficial in reducing time to disposition, especially if a trial schedule is not set early.

Our statistical analysis of subsets of cases does not lead to any suggestions for focusing these management policies only on certain types of cases. Our statistical results are consistent for most subsets of cases analyzed, although the top 25% most costly cases appear to benefit especially from the early setting of a trial schedule (early management of those top 25% of the costly cases without a trial date scheduled did not significantly reduce their time to disposition). And cases that are high in complexity, high in discovery difficulty, or high in stakes appear to benefit especially from the use of discovery/case management plans.

Early mandatory disclosure again was not statistically significant, and limiting interrogatories was not consistently significant in predicting reduced time to disposition.75

1. Summary of Effects on Attorney Satisfaction

In our main evaluation report, we found that the policies that had the greatest effects on time to disposition and lawyer work hours—i.e., early management, median days to discovery cutoff and setting a trial schedule early in the case—had no statistically significant effect on lawyer satisfaction. Attorneys with cases where early disclosure occurs reported significantly greater satisfaction. However, attorneys from districts with a policy of requiring mandatory early disclosure were significantly less likely to report satisfaction with case management. Districts with policies of limiting interrogatories had attorneys who were significantly more satisfied, but the district median time to discovery cutoff did not significantly affect attorney satisfaction.

In our current analysis of judicial discovery management policies, we again found no statistically significant effect on lawyer satisfaction from early management, setting a trial schedule early in the case and requiring a discovery plan. We considered those three policies used in

75 For details of our statistical analysis of time to disposition, see KAKALIK ET AL., supra note 43, app.
various combinations and did not find any significant difference in satisfaction, although as noted previously, some of those policies do significantly affect time to disposition and lawyer work hours.

Our current analysis of early disclosure found that attorneys in districts with a mandatory disclosure policy were less satisfied, but their level of satisfaction was not significantly different from the level of satisfaction for attorneys who did not do early disclosure in voluntary disclosure districts. Attorneys who voluntarily chose to do early disclosure, however, in districts where such disclosure was voluntary, were significantly more satisfied. Since most districts had a voluntary disclosure policy at the time of the study, this explains the overall finding in our main evaluation report that disclosing attorneys were more satisfied. It may be that greater satisfaction among voluntary disclosing attorneys reflects a type of “choice or selection bias,” i.e., attorneys on cases for which they voluntarily choose to disclose may be less contentious attorneys or may be on less contentious cases and hence more satisfied, but not necessarily because of the early disclosure.

Districts with policies of limiting interrogatories again had attorneys who were significantly more satisfied, but the district median time to discovery cutoff still did not affect significantly attorney satisfaction even when subsets of cases were analyzed.76

J. Summary of Effects on Attorney Views on Fairness

In our main evaluation report, we found no consistent statistically significant effects of judicial case management on attorney views on fairness.

In our current analysis of judicial discovery management policies, we found no statistically significant effects for any of the policy variables on attorney views on fairness.

A very high percentage of attorneys, about 90%, reported that case management was fair. There is little variability in our data and it is not surprising that we do not find statistically significant effects of judicial case management on attorney views on fairness.77

76 For details of our statistical analysis of attorney satisfaction with judicial case management, see KAKALIK ET AL., supra note 43, app.
77 For details of our statistical analysis of attorney views on fairness, see KAKALIK ET AL., supra note 43, app.
### Table 3.1
Information by Type of Early Management and Discovery Plan Policy: 1992–93 Sample, General Civil Cases with Issue Joined, Closed with Time to Disposition over 270 Days, and with Lawyer Work Hours Reported

<table>
<thead>
<tr>
<th>Variable</th>
<th>Type of Early Management and Discovery Plan Policy</th>
<th>Significant Difference for Policy Shown in Multivariate Analysis?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Early Manage, with Early Trial Set, with Mandatory Plan Policy</td>
<td>Early Manage, with Early Trial Set, without Mandatory Plan Policy</td>
</tr>
<tr>
<td>Median days to disposition</td>
<td>448</td>
<td>398</td>
</tr>
<tr>
<td>% lawyers satisfied with management</td>
<td>75</td>
<td>69</td>
</tr>
<tr>
<td>% lawyers view management as fair</td>
<td>88</td>
<td>89</td>
</tr>
<tr>
<td>Median total lawyer work hours per litigant</td>
<td>80</td>
<td>100</td>
</tr>
<tr>
<td>% with zero discovery work hours</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Median lawyer work hours on discovery per litigant</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>Median percent discovery hours of total lawyer work hours</td>
<td>31</td>
<td>30</td>
</tr>
</tbody>
</table>

Note: Percentages in rows may not add to 100 due to rounding and missing data.
Table 3.2
Information by Early Disclosure Policy: 1992–93 Sample, General Civil Cases with Issue Joined, Closed with Time to Disposition over 270 Days, and with Lawyer Work Hours Reported

<table>
<thead>
<tr>
<th>Type of Early Disclosure Policy</th>
<th>Mandatory and Disclosure Was Made</th>
<th>Mandatory and Disclosure Was Not Made</th>
<th>Not Mandatory and Disclosure Was Made</th>
<th>Not Mandatory and Disclosure Was Not Made</th>
<th>Significant Difference for Policy Shown in Multivariate Analysis?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median days to disposition</td>
<td>447</td>
<td>477</td>
<td>455</td>
<td>482</td>
<td>No</td>
</tr>
<tr>
<td>% lawyers satisfied with</td>
<td>71</td>
<td>63</td>
<td>81</td>
<td>70</td>
<td>Not if mandatory, but significantly more satisfied if voluntarily disclose</td>
</tr>
<tr>
<td>management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% lawyers view management as</td>
<td>87</td>
<td>88</td>
<td>93</td>
<td>85</td>
<td>No</td>
</tr>
<tr>
<td>fair</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median total lawyer work</td>
<td>100</td>
<td>75</td>
<td>73</td>
<td>80</td>
<td>Not if mandatory, but significantly less hours if voluntarily disclose</td>
</tr>
<tr>
<td>hours per litigant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% with zero discovery work</td>
<td>10</td>
<td>15</td>
<td>16</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>hours</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median lawyer work hours on</td>
<td>28</td>
<td>19</td>
<td>15</td>
<td>23</td>
<td>Not if mandatory, but significantly less hours if voluntarily disclose</td>
</tr>
<tr>
<td>discovery per litigant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median percent discovery hours</td>
<td>29</td>
<td>25</td>
<td>25</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>of total lawyer work hours</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of disclosures that were full</td>
<td>50</td>
<td>57</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>rather than pro forma</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Percentages in rows may not add to 100 due to rounding and missing data.
Table 3.3

Information by Interrogatory Limit Policy: 1992–93 Sample, General Civil Cases with Issue Joined, Closed with Time to Disposition over 270 Days, and with Lawyer Work Hours Reported

<table>
<thead>
<tr>
<th>Variable</th>
<th>Type of Interrogatory Limitation Policy</th>
<th>Significant Difference for Policy Shown in Multivariate Analysis?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>District Policy to Limit Interrogatories</td>
<td>No</td>
</tr>
<tr>
<td>Median days to disposition</td>
<td>468</td>
<td>455</td>
</tr>
<tr>
<td>% lawyers satisfied with management</td>
<td>74</td>
<td>68</td>
</tr>
<tr>
<td>% lawyers view management as fair</td>
<td>89</td>
<td>88</td>
</tr>
<tr>
<td>Median total lawyer work hours per litigant</td>
<td>80</td>
<td>66</td>
</tr>
<tr>
<td>% with zero discovery work hours</td>
<td>14</td>
<td>19</td>
</tr>
<tr>
<td>Median lawyer work hours on discovery per litigant</td>
<td>20</td>
<td>15</td>
</tr>
<tr>
<td>Median percent discovery hours of total lawyer work hours</td>
<td>26</td>
<td>25</td>
</tr>
</tbody>
</table>

Note: Percentages in rows may not add to 100 due to rounding and missing data.
Table 3.4

Information by Shorter and Longer Time to Discovery Cutoff: 1992–93 Sample, General Civil Cases with Issue Joined, Closed with Time to Disposition over 270 Days, and with Lawyer Work Hours Reported

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category of District</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Districts with Shorter Median Time to Discovery Cutoff</td>
</tr>
<tr>
<td>Median days to discovery cutoff in 10 districts</td>
<td>83-177</td>
</tr>
<tr>
<td>Median days to disposition</td>
<td>455</td>
</tr>
<tr>
<td>% lawyers satisfied with management</td>
<td>68</td>
</tr>
<tr>
<td>% lawyers view management as fair</td>
<td>87</td>
</tr>
<tr>
<td>Median total lawyer work hours per litigant</td>
<td>83</td>
</tr>
<tr>
<td>% with zero discovery work hours</td>
<td>14</td>
</tr>
<tr>
<td>Median lawyer work hours on discovery per litigant</td>
<td>25</td>
</tr>
<tr>
<td>Median percent discovery hours of total lawyer work hours</td>
<td>28</td>
</tr>
</tbody>
</table>

Note: Days to discovery cutoff in district means days from first schedule to first discovery cutoff, without consideration of continuances. Percentages in rows may not add to 100 due to rounding and missing data.
IV. Policy Findings

When judges were asked their opinions about discovery management on the cases in our 1992–93 sample, the vast majority responded that such management was generally desirable (96% in favor of setting discovery limits; 89% in favor of requiring early disclosure; and 98% in favor of good-faith efforts before filing discovery motions).

When lawyers were asked their opinions on discovery management on those same cases, a majority responded that such management was generally desirable (86% in favor of setting discovery limits; 71% in favor of requiring early disclosure; and 96% in favor of good-faith efforts before filing discovery motions).

Given that judges and lawyers are generally favorably inclined toward judicial management of discovery, and given that discovery is often cited in anecdotes as being a problem leading to excessive cost and delay, we analyzed the efficacy of various discovery management policies in reducing lawyer work hours and time to disposition.

A. Findings on Early Case Management and Discovery Planning

Our multivariate statistical analysis supports the policy of early management and early scheduling of a trial date as a means of reducing time to disposition. Our current analysis also supports the requirement of discovery/case management plans as a means of reducing the time to disposition, limiting lawyer work hours, and thereby limiting the costs of litigation in cases that are managed early.

Early management without setting a trial schedule early predicts a statistically significant reduction in time to disposition, and early management that includes setting a trial schedule early predicts a significantly larger reduction. We considered those two early management and trial scheduling policies used both with and without a discovery plan requirement, and the results were statistically significant. There was little difference in time to disposition with or without a discovery plan if a trial was scheduled early, but cases closed significantly earlier if discovery planning took place in the absence of an early trial schedule. Thus, our analysis suggests that the requirement of a discovery/case management plan is beneficial in reducing time to disposition, especially if a trial schedule is not set early.

Our statistical analysis of subsets of cases does not lead to any suggestions for focusing these management policies only on certain types of cases. Our statistical results are consistent for most subsets of cases analyzed, although the top 25% most costly cases appear to

78 These cases had total lawyer work hours per litigant of more than 188.
benefit especially from the early setting of a trial schedule (early management of those top 25% of the costly cases without a trial date scheduled did not significantly reduce their time to disposition). And cases that are high in complexity, high in discovery difficulty, or high in stakes appear to benefit especially from the use of discovery/case management plans.

In our analysis of judicial discovery management policies, we find that early management is associated with significantly higher total lawyer work hours if the district does not require discovery/case management plans. Early management is not associated with significantly higher total lawyer work hours, however, if the district requires discovery/case management plans, and this lends strong support for the continuation of a requirement of discovery/case management planning. That is, it appears that doing early management without planning increases lawyer work hours, but early management coupled with planning does not increase lawyer work hours.

Our interviews suggested reasons why early management may increase lawyer work hours. Lawyers need to respond to a court’s management—for example, by talking to the litigant and to the other lawyers in advance of a conference with the judge, by traveling, and by spending time waiting at the courthouse, meeting with the judge and updating the file after the conference. In addition, once judicial case management has begun a discovery cutoff date has usually been established, and attorneys may feel an obligation to begin discovery. Doing so could shorten time to disposition, but it may also increase lawyer work hours on cases that were about to settle when the judge began early management. The CJRA data indicate that cases that are managed early have a higher likelihood of having lawyer hours spent on discovery. When a district requires discovery/case management plans, however, the increase in lawyer work hours associated with early management appears to be offset by benefits associated with the required planning, and the net effect is no significant increase in lawyer work hours. There are at least two plausible explanations for this outcome. First, the planning itself may produce the benefit. The requirement that the lawyers jointly meet and prepare a discovery/case management plan for submission to the court may result in more efficient litigation with less lawyer work hours. Another plausible explanation is that the judges in districts that require plans may also manage cases differently and better (in ways that we did not measure) than judges in districts that do not require plans.

When we looked at various subsets of cases, we found no strong evidence that the effects of early management and discovery planning
were systematically concentrated on certain types of cases based on level of complexity, level of discovery difficulty, plaintiff or defendant side of the case, contingent or hourly fee lawyer, size of the law organization in which the lawyer worked, case stakes, tort or contract or other nature of suit categories, or the top 25% most costly cases among general civil litigation that has time to disposition over 270 days after filing.

We find no statistically significant effect on lawyer satisfaction or views on fairness from early management, setting a trial schedule early in the case and requiring a discovery plan.

**B. Findings on Early Disclosure**

Our data and analyses do not support strongly the policy of mandatory early disclosure as a means of significantly reducing lawyer work hours and thereby reducing the costs of litigation, or as a means of reducing time to disposition. We find that cases in districts with some type of mandatory disclosure policy had lawyer work hours and time to disposition that are not significantly different from cases in districts without any type of mandatory disclosure policy. Regardless of whether or not early disclosure actually occurs, cases from districts with mandatory early disclosure policies tend to have similar estimated lawyer work hours as cases from districts without a mandatory disclosure policy that had no early disclosure.

Some people suggested that if we had looked at subsets of cases, such as those that were more or less complex or had more or less difficulty with discovery, we might have found a subset of cases for which this policy was effective. We now have explored many different subsets of cases, including subsets based on stakes, complexity and discovery difficulty. We found no strong evidence that a policy of early mandatory disclosure reduced lawyer work time or time to disposition on any of the subsets of cases examined. Attorneys who voluntarily choose to do early disclosure, however, in districts where such disclosure is voluntary, have significantly lower work hours. It may be that lower work hours among voluntary disclosing attorneys reflects a type of “choice or selection bias,” i.e., attorneys on cases for which they voluntarily choose to disclose may be less contentious attorneys or may be on less contentious cases and hence spend fewer total work hours on the case, but not necessarily because of the early disclosure. If the early disclosure is effective in reducing lawyer work time, then we would have expected to see some evidence of the effect on mandatory disclosure cases, not just on cases with voluntary disclosure.
It should be noted, however, that in our main evaluation report we found that attorney work hours were significantly lower for the three districts that had a particular type of mandatory disclosure: early mandatory disclosure of information bearing on both sides of the dispute. With only three districts using this particular type of mandatory disclosure policy, however, it is difficult to generalize this statistical finding.

We also note that we could not evaluate the mandatory disclosure prescribed under the December 1993 amendments to Rule 26(a)(1) because our sample of cases was selected well before that amendment took effect, and none of our study districts had a mandatory disclosure policy that was exactly the same as the amended Rule 26(a)(1) when our sample cases were selected. Hence, the "empirical" story of the effects of Rule 26(a)(1) remains to be told.

RAND's lawyer surveys indicate that when early disclosure was made for cases in the 1992-93 sample, it was "full disclosure" 57% of the time, and "pro forma" disclosure 43% of the time. For general civil cases with issue joined, lawyers report more disclosure when it is mandatory (60% of the cases in mandatory disclosure districts versus 45% in voluntary disclosure districts and 40% in districts with no disclosure policy). Part of the problem with a mandatory early disclosure requirement is compliance; lawyers report that when disclosure is done on a mandatory basis, it is full disclosure for 50% of the cases and pro forma disclosure for the remaining half of the cases.

Findings from a recent survey of about 1000 attorneys by the ABA's Litigation Section were similar to ours:

Analysis of the survey results suggests that Rule 26(a)(1) disclosure has not had a significant impact on federal civil litigation. To the extent that it has had any measurable effects, most are negative. The survey provided no evidence that, at the one year mark, disclosure had reduced discovery costs or delays. Nor do the responses suggest that disclosure has reduced conflict between adversaries during the discovery process. Consequently, during its first year of implementation, disclosure has not resulted in the systemic improvements for which its proponents had hoped.79

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79 KATHLEEN L. BLANNER ET AL., AMERICAN BAR ASSOCIATION, MANDATORY DISCLOSURE SURVEY: FEDERAL RULE 26(A)(1) AFTER ONE YEAR 1 (1996). The PA(E) advisory group also conducted a survey of about 4000 lawyers regarding the early mandatory disclosure procedures in that district, with results that were very similar to ours. This district's procedures stay discovery until both sides have completed mandatory disclosure of information likely to "bear significantly on the claims and defenses," plus other items such as names of individuals with information and
C. Findings on Good-Faith Efforts To Resolve Discovery Disputes

Our multivariate statistical analysis found no significant relationship between any of the variables studied and reported good-faith effort to resolve discovery disputes before filing a motion.

D. Findings on Limiting Interrogatories

Our multivariate statistical analysis supports the policy of limiting interrogatories as a means of significantly limiting lawyer work hours and thereby reducing the costs of litigation. There is no statistical evidence that interrogatory limitations hurt, and they appear to help significantly for several subsets of cases.

E. Findings on Shortening Discovery Cutoff Time

Our multivariate statistical analysis supports the policy of shorter times to discovery cutoff as means of significantly limiting lawyer work hours and thereby reducing the costs of litigation, and as a means of reducing the time to case disposition. When we looked at subsets of any insurance. Of the 1000 plus attorneys responding, over 60% felt that some rule mandating self-executing disclosure should remain in effect. Judges were 85% in favor of such disclosure. When asked about compliance, over 90% of lawyers said they themselves had complied more than minimally, and that over two-thirds of their opponents had complied more than minimally. See Robert M. Landis et al., Annual Report of the Advisory Group of the United States District Court for the Eastern District of Pennsylvania Appointed Under the Civil Justice Reform Act of 1990 5–6, app. A at 12 (1996).

The NY(E) advisory group also surveyed lawyers regarding early mandatory disclosure for cases filed after the plan was adopted. See Edwin J. Wesely et al., Civil Justice Reform Act Advisory Group, Annual Report of the Civil Justice Reform Act Advisory Group to the Eastern District of New York to the Honorable Thomas C. Platt, Chief Judge 5–6 (1994). Their annual report indicated:

The survey results at this stage are neither a ringing endorsement, nor a condemnation, of mandatory disclosure. About half the respondents said that mandatory disclosure improved pretrial discovery, and about half said that there was no change. A majority also said that mandatory disclosure had made either no contribution or a slight contribution to easing the problems of undue cost and unnecessary delay. On the other hand, an overwhelming majority said that mandatory disclosure had no negative effects on pretrial discovery . . . A majority (55%) would make mandatory disclosure a permanent part of the local rules, and an additional 23% would make mandatory disclosure a permanent part of the local rules if modifications were made.

It appears from these data that the parade of horribles predicted by some critics of mandatory disclosure has not come to pass. On the other hand, it is not clear the extent to which mandatory disclosure has improved the operation of pretrial discovery, if at all. The vast majority of respondents have had little experience with mandatory disclosure.

Id.
cases, these significant decreases in lawyer work hours and time to disposition occurred for most subsets, with some exceptions such as low complexity and low discovery difficulty cases (which are unlikely to require as much time for discovery as more complex or more difficult cases).

F. Interpreting Effects and Generalizing to Other Cases, Judges and Districts

Although the predicted effects discussed in this document serve as a useful gauge of our statistical model estimates, they might present the temptation to interpret them as the exact size of a causal effect. That is, one might incorrectly treat these estimates as if expanding the use of a particular case management procedure will reduce time to disposition or lawyer work hours a certain amount for each and every new case that receives the management. This almost assuredly will not happen in exactly the same way.

There are reasons why our observed effect might not generalize in exactly the same way to other cases, judges, or districts.

One reason is that the cases in our data that receive the policies might be different from those that do not receive the policies in some way not accurately measured by our control variables. Despite the fact that we have more and better data than have been available to previous studies, and that we have been as careful as possible in constructing our many models, one must still interpret the results carefully.

We believe that we have provided a reasonable estimate of the effects of policy for the cases, judges and districts we observed in our data. It is much more difficult to determine the effect of the policy if implemented on different cases or by different judges in the same or different districts.

Judges who choose to implement policies and management procedures often do so at their discretion. These judges may differ from other judges in their basic approach to case management or because of personality. These differences between judges could affect the implementation of policy, and this could change the policy's effect. For example, if enthusiastic managerial judges currently set trial schedules early and also work hard on settlement and this leads to early closure, then having less enthusiastic nonmanagerial judges setting trial schedules early may not have the same effect that we observed.

Similarly, districts that choose to implement policies and procedures do so because of the characteristics of the district and the judicial officers. Because policies were not assigned to cases at random in our
data, we cannot fully untangle the relationship between district characteristics and the use of policies. Hence, it is hard to determine exactly how the policies will affect time to disposition or lawyer work hours if implemented on a wider scale.

We stress that statistical models do not show cause and effect. Causation must be interpreted in light of understanding how the underlying civil justice system that generated the data operates.

Given our understanding of how the civil justice system operates, we believe that the policies we identified as important predictors of shorter time to disposition or lower lawyer work hours are likely to reduce time and work hours if implemented, but that our estimated effect should be treated as an upper bound to the effects that would occur if the policies were implemented in all districts by all judges for all cases.

We stress that there is a difference between adopting a policy at the district level and implementation in practice at the case level. For policy to have an effect on time to disposition or lawyer work hours, it must not just be adopted "on paper" but also must be implemented in practice at the case level. Using our attorney-level data, we have estimated the effect conditional on a policy or procedure actually being implemented.

G. General Policy Implication

Overall, lawyer work hours per litigant on discovery are zero for 38% of general civil cases, and low for the majority of cases. Discovery is not a pervasive litigation cost problem for the majority of cases. The empirical data show that any problems that may exist with discovery are concentrated in a minority of the cases, and the evidence indicates that discovery costs can be very high in some cases. Subjective information from our interviews with lawyers also suggests that the median or typical case is not "the problem." It is the minority of the cases with very high discovery costs that is the problem, and that generates the anecdotal parade of horribles that dominates much of the debate over discovery rules and discovery case management.

These findings suggest that policymakers consider focusing discovery rule changes and discovery management on the types of cases likely to have high discovery costs, and the discovery practices that are likely to generate those high costs. More attention is clearly needed on how to identify those high discovery cost cases early in their life, and how best to manage discovery on those cases.