COST SHIFTING FOR E-DISCOVERY: A SUGGESTED REFORM

Matthew Reiber*

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* Matthew Reiber is an Associate Professor of Law at Jacksonville University College of Law. LL.M. (taxation), 2009, New York University School of Law; J.D. 1984, Columbia University School of Law.
INTRODUCTION


1 FED. R. CIV. P. 54(d)(1) (providing that “[u]nless a federal statute, these rules, or a court order provides otherwise, costs—other than attorney’s fees—should be allowed to the prevailing party”).

2 See, e.g., Chapman v. AI Transp., 229 F.3d 1012, 1038 (11th Cir. 2000) (en banc) (explaining that Rule 54(d) “establishes a presumption that costs are to be awarded to a prevailing party, but vests the district court with discretion to decide otherwise”); Moore v. Weinstein Co., 40 F. Supp. 3d 945, 947 (M.D. Tenn. 2014) (stating that “Rule 54(d)(1) creates a presumption in favor of awarding costs to the prevailing party but allows the denial of costs at the discretion of the trial court.”).


4 JAMES W. MOORE ET AL., MOORE’S MANUAL: FEDERAL PRACTICE AND PROCEDURE ¶ 25.60 (2023) [hereinafter MOORE’S MANUAL] (explaining that “‘costs’ is a term of art that refers only to those particular types of expenses that a court may tax on an opposing party . . . as an incident of the judgment in the action. Although the court generally should make an award of costs to the prevailing party, the prevailing party is not necessarily entitled to recover all of the various types of litigation expenses, because the term ‘costs’ is not synonymous with litigation expenses”).

5 The term “costs” does not include attorney’s fees unless a statute specifically defines “costs” to include them. See Alyeska Pipeline Serv. Co. v. Wilderness Soc’y, 421 U.S. 240, 254–55 (1975) (“Although . . . Congress has made specific provision for attorneys’ fees under certain federal statutes, it has not changed the general statutory rule that allowances for counsel fees are limited to the sums specified by the costs statute.”).
The amounts involved are sometimes modest, and always a fraction of total litigation expenses, causing courts to candidly

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6 W. Va. Univ. Hosps., Inc. v. Casey, 499 U.S. 83, 86 (1991) (explaining that Section 1920 defines “the full extent of a federal court’s power to shift litigation costs absent express statutory authority to go further”).

Section 1920 provides:

A judge or clerk of any court of the United States may tax as costs the following: (1) Fees of the clerk and marshal; (2) Fees for printed or electronically recorded transcripts necessarily obtained for use in the case; (3) Fees and disbursements for printing and witnesses; (4) Fees for exemplification and the costs of making copies of any materials where the copies are necessarily obtained for use in the case; (5) Docket fees under section 1923 of this title; (6) Compensation of court appointed experts, compensation of interpreters, and salaries, fees, expenses, and costs of special interpretation services under section 1828 of this title. A bill of costs shall be filed in the case and, upon allowance, included in the judgment or decree.

28 U.S.C. § 1920 (2018); MOORE’S MANUAL, supra note 4, ¶ 25.60 (describing how a court’s ability to provide costs is modified when “express provisions are made in federal statutory authority”); see MOORE’S FEDERAL PRACTICE, supra note 3, ¶ 54.102 (containing a summary of these other statutes and rules).

7 The modest sums allowed for certain items include attorney’s docket fees ($20 under 28 U.S.C. § 1923(a)); witness fees ($40 per day, per witness, together with travel and subsistence allowances under 28 U.S.C. § 1821(b)); and filing fees ($350 under 28 U.S.C. § 1914(a)).

8 For example, expert witness fees (other than the daily witness fee) are not a recoverable cost even though they can be a significant litigation expense. See, e.g., Johns Manville Corp. v. Knauf Insulation, LLC, No. 15-CV-00531, 2018 WL 2388556, at *1 (D. Colo. May 25, 2018) (disallowing expert witness fees of $585,422.51); Levesque v. Gov’t Emps. Ins. Co., No. 15-14005-CIV, 2022 WL 1667408, at *2, *5 (S.D. Fla. Feb. 28, 2022) (disallowing expert witness fees of $161,382.90); Amsted Indus. v. Buckeye Steel Castings Co., 23 F.3d 374, 375 (Fed. Cir. 1994) (disallowing expert witness fees of $146,453.61); Taniguchi v. Kan Pac. Saipan, Ltd., 566 U.S. 560, 573 (2012) (discussing how attorney’s fees, consultant fees, and investigative fees are not taxable even though they can also involve substantial sums).
acknowledge the mismatch between the two. The disparity can be especially pronounced in cases involving e-discovery because courts typically construe the words “making copies” in Section 1920(4) very narrowly and allow recovery for only those e-discovery activities that are analogous to photocopying paper documents. This makes pyrrhic victory the norm, given the probability that the expense of collecting, processing, and producing electronically stored information (“ESI”) will erode the

9 See, e.g., Taniguchi, 566 U.S. at 573 (“Taxable costs are a fraction of the nontaxable expenses borne by litigants for attorneys, experts, consultants, and investigators.”); In re Paoli R.R. Yard PCB Litig., 221 F.3d 449, 458 (3d Cir. 2000) (“[W]hile a prevailing party is awarded its costs, those costs often fall well short of the party’s actual litigation expenses.”); 10 CHARLES ALAN WRIGHT ET AL., FEDERAL PRACTICE AND PROCEDURE § 2666 (3d ed. 1998) [hereinafter WRIGHT ET AL.] (“Under the American system, costs almost always amount to less than the successful litigant's total expenses in connection with a lawsuit.”).


12 See infra notes 203–230 and 247–252 (describing the collection, processing, and production of ESI).

13 The Sedona Conference Glossary, supra note 10, at 303 (clarifying the term “electronically stored information” or “ESI” refers to “information that is stored electronically, regardless of the media or whether it is in the original format in which it was created, as opposed to stored in hard copy (i.e., on paper)”); FED. R. CIV. P. 34(a) (advisory committee’s note to 2006 amendment) (defining the term “expansively” for purposes of the Federal Rules of Civil Procedure to ensure it is “broad enough to cover all current types of computer-based information, and flexible enough to encompass future changes and developments.”).
fruits of victory.\textsuperscript{14} Even courts that authorize modest recoveries based on a narrow construction of the relevant statutory language recognize that “there may be strong policy reasons in general, or compelling equitable circumstances in a particular case, to award the full cost of electronic discovery to the prevailing party . . . .”\textsuperscript{15} For these courts, however, broader


\textsuperscript{15} Race Tires Am., Inc. v. Hoosier Racing Tire Corp., 674 F.3d 158, 171 (3d Cir. 2012).
cost shifting must await further guidance from Congress.\textsuperscript{16} The unfortunate upshot is that prevailing parties—who often must collect, process, and produce vast quantities of electronic documents\textsuperscript{17} using expensive processes

\textsuperscript{16} CBT Flint Partners, LLC v. Return Path, Inc., 737 F.3d 1320, 1327 (Fed. Cir. 2013) (“[L]arger-scale shifting of litigation expenses” will need to be addressed “under other statutory provisions that set particular standards for particular types of cases to implement context-specific policies.”); Consumer Fin. Prot. Bureau v. Weltman, Weinberg & Reis, Co., 342 F. Supp. 3d 766, 771 (N.D. Ohio 2018) (“As electronic document management becomes more prevalent, and the benefits of such a system become more widely accepted, Congress might well consider re-visiting the restrictions set forth in 28 U.S.C. § 1920 to permit recovery of costs associated with more modern means of case management.”); United States ex rel. King v. Solvay S.A., Civil Action H-06-2662, 2016 WL 3523873, at *16 (S.D. Tex. June 28, 2016) (“It is Congress’s place, not the judiciary’s, to expand the reach of the statute to account for changing practices associated with electronic discovery—if Congress believes such a change is appropriate.”). \textit{See generally} Rimini Street, Inc. v. Oracle USA, Inc., 139 S.Ct. 873, 877 (2019) (“If, for particular kinds of cases, Congress wants to authorize awards of expenses beyond the six categories specified in the general costs statute, Congress may do so.”).

that make fact-finding more manageable—recover less for their efforts than their counterparts in an earlier, pre-digital era. Put simply, the joy of victory is quickly muted when the prevailing party learns it can recover only pennies on the dollar for its e-discovery outlays.

[2] Compounding this problem, courts do not agree about which e-discovery activities are sufficiently equivalent to photocopying paper

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18 A group of experts recently calculated the cost of producing ESI from various data sources. Making various assumptions based on their collective judgments and experience, along with a literature review and certain standard industry-wide assumptions, they calculated the end-to-end cost of e-discovery for an “average” or “typical” litigant that collects 47.75 gigabytes of data from five common sources and produces 1.59 gigabytes in discovery. See Rabiej Litig. L. CTR., DISCOVERY PROPORTIONALITY MODEL A NEW FRAMEWORK, 14–15 (2022) [hereinafter DISCOVERY PROPORTIONALITY MODEL]. Their conclusions are striking—both with respect to the modest amount of data that is produced when compared to the amount collected, as well as the expense of the process. See id. In particular, they posit a thirty-fold reduction in data from initial collection to ultimate production and a total outlay of $123,584. In particular, they conclude: (1) a party collecting 5 gigabytes of email will spend $33,493.48 to produce 0.44 gigabytes; (2) a party collecting 30 gigabytes of data from a laptop computer will spend $47,963.65 to produce 0.79 gigabytes; (3) a party collecting 8 gigabytes of data from a mobile device will spend $23,137.85 to produce 0.21 gigabytes; (4) a party collecting 4.5 gigabytes of file share data will spend $10,515.21 to produce 0.11 gigabytes; and (5) a party collecting 0.25 gigabytes of data from a website will spend $8,474.67 to produce 0.04 gigabytes. See id.

19 For example, a defendant in United States ex rel. Barko v. Halliburton Co. produced approximately 171,000 pages of electronic documents. In the pre-digital era, the defendant would have recovered between $17,100 and $42,750 at the “going rate” of $0.10 to $0.25 per page for photocopying. See In re Paoli R.R. Yard PCB Litig., No. 86-2229, 1999 WL 569435, at *7 (E.D. Pa. Aug. 2, 1999) (reviewing case law and noting that allowable photocopying costs ranged from $0.10 to $0.25 per page). Yet the court concluded the defendant could recover only $362.41 for what it claimed were analogous e-discovery costs. United States ex rel. Barko v. Halliburton Co., 954 F.3d 307, 312 (D.C. Cir. 2020).

20 See Halliburton, 954 F.3d at 309, 312 (citing a recovery of 0.6% of e-discovery expenses); see also Country Vintner of N.C., LLC v. E. & J. Gallo Winery, Inc., 718 F.3d 249, 252–53 (4th Cir. 2013) (citing a recovery of 0.2% of e-discovery expenses).
documents to qualify for cost shifting.\textsuperscript{21} They agree that converting native files\textsuperscript{22} to tagged image file format (“TIFF”)\textsuperscript{23} qualifies as “making copies.” They disagree whether other activities that facilitate the use of electronic documents in later stages of the litigation similarly qualify (such as extracting and indexing text and metadata\textsuperscript{24} and creating load files\textsuperscript{25} so electronic documents can be easily searched and used at depositions, hearings, and trials). While courts often disallow recovery for most e-discovery activities that reduce the volume of potentially relevant ESI to a


\textsuperscript{22} A “native file” or “native file format” is a “file as it has been created by its associated software application, such as MS Word or Excel. It is an electronic file in its original, unaltered format.” Michael I. Quartararo, \textit{Project Management in Electronic Discovery: An Introduction to Core Principles of Legal Project Management and Leadership in ediscovery} 365 (2d ed. 2021). For example, the native file or native file format for a document created in Microsoft Word is the original Word format (.doc or .docx). See id.

\textsuperscript{23} ESI is often produced in tagged image file format (“TIFF”). TIFF is a preferred production format because the images are static and not easily altered; because privileged information can be easily redacted; and because numbers and confidentiality designations can be readily affixed. \textit{Id.} at 35.

\textsuperscript{24} “Text” is the content of an electronic document (such as the words in an email). “Metadata” is data about an electronic document, such as when an electronic document was created and by whom. The text and metadata of an electronic document are extracted and then indexed so the electronic document, along with all the other electronic documents, can be more easily organized, searched, and retrieved at later stages of the litigation. \textit{Id.} at 156–60.

\textsuperscript{25} A load file consists of text and image files which are used to load documents in ediscovery software. \textit{May a Prevailing Litigant Recover All E-Discovery Costs?}, PerCipient (Sept. 10, 2014), https://percipient.co/may-prevailing-litigant-recover-ediscovery-costs/ [perma.cc/T8TE-RAVD]. A “data load file” contains “data relevant to the individual documents, such as selected metadata, coded data, and extracted text.” The Sedona Conference Glossary, \textit{supra} note 10, at 332.
more manageable amount (such as removing system files,26 eliminating duplicates,27 and suppressing email threads28), some allow recovery in at least some circumstances.29

[3] These outcome differences appear to result—at least in part—from ambiguity about the meaning of the statutory words “making copies” when applied to e-discovery, as well as from an unwillingness to recognize all the steps involved in reproducing electronic documents that remain faithful to the original, are readily usable at depositions, hearings, and trial, but not so voluminous as to overwhelm the fact-finding process.30 They also appear to result—again, at least in part—from reliance on a false equivalence between producing electronic and hardcopy documents and an insistence on viewing discovery involving the former through the prism of the latter.31 While litigants sometimes require upwards of thirty pages to establish the metes and bounds for collecting, processing, and producing electronic

26 “System files” are “[f]iles allowing computer systems to run; non-user created files.” The Sedona Conference Glossary, supra note 10, at 377; May a Prevailing Litigant Recover All E-Discovery Costs?, supra note 25.

27 “Deduplication” is the “process of comparing electronic files or records based on their characteristics and removing, suppressing, or marking exact duplicate files or records within the data set for the purposes of minimizing the amount of data for review and production.” The Sedona Conference Glossary, supra note 10, at 293.

28 Email thread suppression is the process of removing redundant attachments within email conversation threads. Id. at 305, 381.


30 See id.

31 See id.
no comparable planning or instruction was ever required to photocopy a piece of paper. And while courts readily concede “[i]t may be that extensive ‘processing’ of ESI is essential to make a comprehensive and intelligible production[,]” much of the expense is not recoverable because courts insist on force-fitting e-discovery into a paper document construct. 

[4] At some level, these problems all stem from Congress’s failure to clearly identify which e-discovery activities qualify for cost shifting. In 2008, Congress amended 28 U.S.C. § 1920(4) to allow prevailing parties to recover at least some of the cost of producing ESI in discovery but failed to draw a neat line between recoverable cost and nonrecoverable expense, relying instead on the phrase “making copies” without delimitation or explanation. On the one hand, Congress may have intended that all e-discovery costs would be recoverable because one legislator stated the amendment would make “electronically produced information coverable in court costs” without limitation or qualification. On the other hand, Congress may have intended that only a subset of these costs would be recoverable because the subject matter committee of the Judicial Conference that initially recommended the amendment suggested only a


“limited” change because anything more “might go well beyond the intended scope of the statute[.]”

Given the ambiguity of the relevant language and the absence of definitive legislative history, it is hard to blame the courts for reading the statute one way rather than another.

[5] To ameliorate this situation, Congress should revisit cost shifting with respect to e-discovery and amend Section 1920 to clarify which e-discovery activities are eligible for cost shifting, taking into consideration the unique steps involved in reproducing electronic documents for use in litigation. In addition, Congress should consider whether cost shifting for e-discovery can be used to motivate the parties to make the discovery process less burdensome and more efficient. Finally, Congress should consider whether district courts should have the flexibility to consider specific case and party factors (such as the losing party’s capacity to pay and the closeness of the case) when making bottom-line awards. With respect to each of these, this article advocates the following.

[6] First, any amendment should specifically identify which e-discovery activities qualify for cost shifting. Since 1853, Congress has established clear boundaries between recoverable costs and nonrecoverable expenses. Congress’s attempt to include e-discovery among recoverable costs fell short because the chosen language, “the costs of making copies of any materials,” applies awkwardly to e-discovery and has prevented courts from making consistent, defensible decisions about which side of the line particular activities fall. The differences of opinion within the bench and bar about what is (or should be) recoverable is a predictable byproduct of statutory language that is not up to the task.


39 Id. at 4–6.
Second, any amendment should retain the general rule that attorney’s fees are not a recoverable cost. The present statutory scheme traces its roots to congressional antipathy toward fee shifting as a part of cost shifting.\textsuperscript{40} Not surprisingly, Rule 54(d) of the Federal Rules of Civil Procedure excludes attorney’s fees from recoverable costs in most cases.\textsuperscript{41} Although roughly seventy percent of the cost of e-discovery is attributable to attorney’s fees, and while prevailing parties most assuredly chafe at their inability to recover them, there is no principled reason to depart from this general rule with respect to e-discovery when other litigation-related activities, including other discovery-related activities, can generate similarly large tabs but are not compensable.

Third, any amendment should incorporate incentives to motivate the parties to reduce the volume of ESI that must be collected, processed, and produced in discovery. The Federal Rules of Civil Procedure are replete with efforts to reduce the burden and expense of e-discovery. The hue and cry leading to these rules-based reforms is well documented and fully justified, given that e-discovery cuts across all types of litigation and infects even modestly sized, moderately complex cases.\textsuperscript{42} These efforts should be supplemented with incentives embedded in the cost shifting statute. The cost of e-discovery is spread primarily across three components: collection (eight percent), processing (nineteen percent), and attorney review (seventy-three percent).\textsuperscript{43} As the progression of percentages suggests, the most effective way to reduce overall cost is to collect less and then eliminate, to the fullest extent possible, duplicative and nonprobative data before attorney review begins. If end-to-end e-discovery costs can run as

\textsuperscript{40} Id. at 4–5.

\textsuperscript{41} FED. R. CIV. P. 54(d)(1), (2)(A).


\textsuperscript{43} Nicholas M. Pace & Laura Zakaras, \textit{Where the Money Goes: Understanding Litigant Expenditures for Producing Electronic Discovery}, RAND INST. CIV. JUST. xiv (2012).
high as $6,700 for each gigabyte of hosted email initially collected,\textsuperscript{44} then it is surely worthwhile to consider the utility of cost shifting as a tool to reduce the volume of ESI subject to the process.

[9] Fourth, in the same vein, any amendment should incorporate incentives to motivate the parties to improve the probative value of the electronic evidence produced in discovery. Given the vast quantities involved, some relevant ESI will evade detection while some irrelevant ESI will seep through. The fact-finding process is undermined when litigants lack evidence that supports a claim or defense because it was not recognized as such during review. And it is made inefficient when the parties must wade through meaningless evidence because of misidentification during review. If a typical case involves hundreds of gigabytes of data (and if a gigabyte can contain 100,000 pages of emails or 65,000 pages of Word files\textsuperscript{45}), then under- and over-inclusive productions are not a possibility but a \textit{fait accompli}. It is likewise worthwhile to consider whether cost shifting can motivate better results.

[10] Fifth, any amendment should backstop the discovery rules by providing district courts with an opportunity, at the end of a case and after all the dust has settled, to evaluate the extent to which the parties marshaled discovery to secure the just, speedy, and inexpensive resolution of the case. A trial judge’s ability to issue interlocutory orders is an obvious prophylactic.\textsuperscript{46} But because these orders are interlocutory, they can result from contentions that, over time, prove to have been misinformed or

\textsuperscript{44} \textit{Discovery Proportionality Model}, \textit{supra} note 18, at 14–15. The model assumes five gigabytes of email are collected, but only 0.44 gigabytes are produced. It also assumes the total cost of producing the email is $33,493.48. \textit{Id.} at 14.


\textsuperscript{46} Michael Francis McNamara, The Granting and Dissolution of the Interlocutory Injunction 1 (June 20, 1895) (LL. B. thesis, Cornell University School of Law) (on file with Cornell Historical Theses and Dissertations Collection).
uninformed. The district courts should, therefore, have the ability, at the end of a case and with the benefit of a full record, to adjust recoverable costs based, e.g., on the extent to which the losing party cooperated with the prevailing party to limit the burden of discovery, and the extent to which the prevailing party limited its production to the ESI the losing party actually wanted.

[11] Sixth, any amendment should safeguard against the possibility that the risk of cost shifting will chill potential litigants from pursuing their rights or cause actual litigants to compromise them for non-merits-based reasons. Any cost shifting scheme must be sensitive to these possibilities and provide relief to losing litigants who would experience extreme financial hardship if required to pay the prevailing party’s e-discovery costs, as well as protect those litigants who advanced worthwhile causes but nevertheless came up short.

[12] To accomplish these objectives, this article advocates an amendment to Section 1920 that gives the district courts the discretion to award the prevailing party:

The proportionate cost of collecting, processing, and hosting electronically stored information prior to production, together with all the cost of producing or otherwise making such information available to the other parties, as may be adjusted taking into consideration: (a) any applicable discovery request, agreement, or court order regarding the production of electronically-stored information; (b) the extent to which the losing party cooperated with the prevailing party to reduce the volume of electronically-stored information subject to discovery; (c) the extent to which the prevailing party limited its production to the electronically stored information requested by the losing
party; (d) the losing party’s ability to pay; and (e) the closeness of the case on the merits.\textsuperscript{47}

[13] By clearly identifying the e-discovery activities eligible for cost shifting (and by using widely understood terms within the legal and technical communities), the amendment would allow the district courts to more easily determine whether contested items fall within recoverable costs. By providing incentives to reduce burden and improve results, the amendment would complement existing rules-based efforts to make e-discovery more manageable. By allowing the district courts to consider the parties’ actions and decisions during discovery, along with the losing party’s capacity to pay and the closeness of the case, the amendment would give the district courts the tools to fashion equitable outcomes in individual cases.

[14] This article is divided into three parts. Part I traces the history of cost shifting in the federal system. This Part demonstrates that Congress has always allowed prevailing parties to recover at least some of their litigation expenses; that the present scheme, fashioned over more than a century and a half, reflects Congress’s intent to limit cost recovery to specific items of expense and to exclude attorney’s fees from the calculus in most cases; and that Congress has never limited aggregate cost recovery for discovery-related expenses even though substantial sums are often involved. Part II then reviews the judicial decisions involving cost shifting for e-discovery. This Part explains that many of the lower federal courts allow recovery for a limited range of e-discovery activities, while some other courts consider agreements and court orders when determining what qualifies for cost shifting, and still other courts allow recovery for a broad range of activities. This Part acknowledges the interpretive challenges confronted by courts given the opaque statutory language, identifies other plausible constructions of the relevant text, and concludes that Congress must revisit the issue and

\textsuperscript{47} The proposed amendment would apply only to ESI produced in response to a request under Rule 34(b), and to ESI produced in lieu of an interrogatory answer under Rule 33(d). It would not apply to ESI provided in connection with a required disclosure under Rule 26(a).
clarify which e-discovery activities are eligible for cost shifting so the lower federal courts can make informed and consistent decisions. Part III accordingly proposes text for an amendment to Section 1920, along with an explanation for each choice made regarding what is recoverable and under which circumstances.

I. COST RECOVERY IN THE FEDERAL SYSTEM

A. Statutory Authorization: 1789-2008

[15] Congress has always allowed prevailing litigants to recover at least some of their litigation costs in federal court actions.48 The Judiciary Act of 1789 implied that costs were recoverable generally (and authorized some

48 See In re Costs in Civ. Cases, 30 F. Cas. 1058, 1059 (C.C.S.D.N.Y. 1852) (No. 18,284) (“The right of the prevailing party to recover costs is . . . recognized and admitted in the judiciary act of 1789, and in numerous acts of congress that have been passed from time to time since that period down to the present day. All of them assume that the costs which have been taxed and usually allowed by the practice of the courts are to be recovered.”). This is different from the common law tradition in which prevailing litigants were unable to recover costs. See Alyeska Pipeline Serv. Co. v. Wilderness Soc’y, 421 U.S. 240, 247 (1975) (“At common law, costs were not allowed . . .”); Wright et al., supra note 9, at § 2665 (“At early common law the taxation of costs, in the modern sense of the concept, was unknown.”); see also Philip M. Payne, Costs in Common Law Actions in the Federal Courts, 21 VA. L. REV. 397, 397 (1935) (“By the common law, no costs were awarded to either party . . . .”)

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specifically). Other early laws were in accord, and the federal courts routinely awarded costs to the prevailing party in the early years of the republic. While Congress’s early efforts may have lacked cohesion, there cannot be any doubt about its intent to allow cost shifting.

[16] Congress addressed the issue again in 1793 and, this time, authorized the federal courts to award costs according to state law.\(^{52}\)

\(^{49}\) Judiciary Act of 1789, ch. 20, § 11, 1 Stat. 73, 78 (identifying original jurisdiction of circuit courts in relation to the specific amount in controversy, “exclusive of costs”); \textit{id.} § 12, at 79 (authorizing removal in relation to the specific amount in controversy, “exclusive of costs”); \textit{id.} § 20, at 83 (prohibiting plaintiff from recovering “costs,” and in the discretion of the court paying “costs,” when plaintiff recovers less than $500); \textit{id.} § 23, at 85 (authorizing single or double “costs” at the discretion of the court following unsuccessful appeal by judgment loser).

\(^{50}\) These are, in chronological order, the following: Act of Sept. 29, 1789, ch. 21, § 2, 1 Stat. 93, 94 (authorizing seizure of defendant at plaintiff’s option “until a tender of the debt and costs in gold or silver shall be made”); \textit{id.} at 93 (“the forms of writs and executions, except their style, and modes of process and rates of fees, except fees to judges, in the circuit and district courts, in suits at common law, shall be the same in each state respectively as are now used or allowed in the supreme courts of the same”); Act of May 26, 1790, ch. 13, 1 Stat. 123, 123 (continuing Act of September 29, 1789 for an additional year); Act of Feb. 18, 1791, ch. 8, 1 Stat. 191, 191 (continuing Act of September 29, 1789 for an additional year further); Act of May 8, 1792, ch. 36, § 8, 1 Stat. 275, 278 (repealing portion of Act of September 29, 1789 regarding fees).

\(^{51}\) See, e.g., Turner v. Enrille, 4 U.S. 7, 8 (1799) (awarding costs to prevailing appellant); Brown v. Van Braam, 3 U.S. (3 Dall.) 344, 355 (1797) (awarding costs to prevailing appellee); Clerke v. Harwood, 3 U.S. (3 Dall.) 342, 343 (1797) (awarding costs to prevailing appellant); Cotton v. Wallace, 3 U.S. (3 Dall.) 302, 304 (1796) (awarding costs to prevailing appellee); Penhallow v. Doane’s Adm’rs, 3 U.S. (3 Dall.) 54, 120 (1795) (affirming circuit court’s award of costs but denying costs on appeal); Hollingsworth v. Adams, 2 U.S. (2 Dall.) 396, 396 (C.C.D. Pa. 1798) (No. 6,611) (awarding costs to prevailing defendant).

\(^{52}\) Act of Mar. 1, 1793, ch. 20, § 4, 1 Stat. 332, 333 (“[T]here be allowed and taxed in the supreme, circuit and district courts of the United States, in favour of the parties obtaining judgments therein, such compensation for their travel and attendance, and for attorneys [sic] and counsellors’ fees . . . as are allowed in the supreme or superior courts of the respective states.”).
Although this authorization expired in 1799, federal courts continued to award costs consistently with forum law for the next fifty years. Because state practice was not uniform, the costs awarded in federal court differed

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53 The 1793 Act was extended twice before lapsing in 1799. See Act of Feb. 25, 1795, ch. 28, 1 Stat. 419, 419; see also Act of Mar. 31, 1796, ch. 11, 1 Stat. 451, 451–52.

54 See, e.g., Rimini St., Inc. v. Oracle USA, Inc., 139 S. Ct. 873, 879 (2019) (“From 1789 to 1853, federal courts awarded costs and fees according to the relevant state law of the forum State.”); Taniguchi v. Kan Pac. Saipan, Ltd., 566 U.S. 560, 564 (2012) (“[I]t was the practice of federal courts in the early years to award costs in the same manner as the courts of the relevant forum State.”); Crawford Fitting Co. v. J.T. Gibbons, Inc., 482 U.S. 437, 439 (1987) (“Apparently from 1799 until 1853 federal courts continued to refer to state rules governing taxable costs.”); Alyeska Pipeline Serv. Co. v. Wilderness Soc’y, 421 U.S. 240, 250 (1975) (“The practice after 1799 and until 1853 continued as before, that is, with the federal courts referring to the state rules governing awards of counsel fees, although the express legislative authorization for that practice had expired.”); Hathaway v. Roach, 11 F. Cas. 818, 819 (C.C.D. Mass. 1846) (No. 6213) (“[I]t is understood to have been the practical usage by the courts of the United States to conform to the state laws as to costs, when no express provision has been made and is in force by any act of congress in relation to any particular item, or when no general rule of court exists on this subject.”).
from place to place. Some states authorized substantial amounts, primarily because recoverable costs included some or all of the prevailing party’s attorney’s fees, while other states authorized considerably less (and sometimes nothing at all). The situation was exacerbated because equity courts were not constrained by fixed standards and instead awarded costs as

55 See, e.g., Burnham v. Rangeley, 4 F. Cas. 775, 777–78 (C.C.D. Me. 1847) (No. 2,177) (noting differences in state laws regarding recovery of costs when case is dismissed for lack of jurisdiction); Caldwell v. Jackson, 11 U.S. (7 Cranch) 276, 276 (1812) (“In Maryland, each party pays to the clerk his own fees; that is, the fees for those services which the clerk has performed for him; and the successful party recovers them from his antagonist.”); Peyton v. Brooke, 7 U.S. (3 Cranch) 92, 96 (1805) (“The clerk was right in adding the costs of the alias ca. sa. The judgment is for costs, generally; which includes all the costs belonging to the suit, whether prior, or subsequent to the rendition of the judgment. If new costs accrue, the judgment opens to receive them.”); Anonymous, 1 F. Cas. 998, 998–99 (C.C.D. Mass. 1814) (No. 445) (holding under Massachusetts law, marshal’s fee could be recovered from attorney when client is not a forum resident and is incapable of paying fee); Patterson v. Ball, 18 F. Cas. 1323, 1323 (C.C.D.C. 1809) (No. 10,823) (holding under Virginia law, attorney’s fees could not be taxed because they were not recoverable); Forrest v. Hanson, 9 F. Cas. 456, 459 (C.C.D.C. 1802) (No. 4,943) (holding under Maryland law, plaintiff was entitled to recover “full costs” regardless of the amount of the recovery on defamation claim); Pennington v. Thornton, 19 F. Cas. 170, 170 (C.C.D.C. 1802) (No. 10,939A) (awarding, under Maryland law, the cost of successful service of writ on one defendant and unsuccessful service of writ on another defendant).

56 See Wright et al., supra note 9, § 2665 (stating that “[i]n the United States the English practice [of allowing recovery of all litigation expenses] generally was adopted by the states at a relatively early time. This meant that during the early part of the nineteenth century total reimbursement, including attorney’s fees, typically was given to the prevailing litigant.”); Alyeska Pipeline Serv. Co. v. Wilderness Soc’y, 421 U.S. 240, 251 (1975) (stating that “there was great diversity in practice among the courts . . . ”). Over time, practices changed. New York, for example, abolished costs for fees and counselors. See In re Costs in Civil Cases, 30 F. Cas. 1058, 1059 (C.C.S.D.N.Y. 1852) (No. 18,284) (stating that “the legislature of the state have abolished all costs and fees to attorneys and counsel . . . “). In contrast, Maine and New Hampshire continued to allow them. See Allen v. Blunt, 1 F. Cas. 450, 459–60 (C.C.D. Mass. 1846) (No. 217) (summarizing state cases in which attorney’s fees were awarded as part of costs of pursuing case); see also Hanson v. Cox, 11 F. Cas. 463, 465 (C.C.D.C. 1844) (No. 6,040) (applying law of Maryland; awarding $24.62).
justice required,\textsuperscript{57} and also because some trial courts allowed juries to award attorney’s fees, if they saw fit, to ensure prevailing plaintiffs were made whole.\textsuperscript{58}

[17] The inconsistencies resulting from reliance on forum law did not go unnoticed. Congress passed a law in 1842 authorizing the Supreme Court to establish rules regarding cost recovery in the federal system.\textsuperscript{59} Congress instructed the Court to establish rules “further diminishing the costs and expenses in suits and proceedings in the said courts” and “prescribe a table of the various items of costs which shall be taxable and allowed . . . .”\textsuperscript{60} Congress also instructed the Court that “the items so stated in the said table, and no[ ] others, shall be taxable or allowed in bills of costs; and they shall be fixed as low as they reasonably can be, with a due regard to the nature of

\textsuperscript{57} Hunter v. Marlboro, 12 F. Cas. 957, 970 (C.C.D. Mass. 1846) (No. 6,908) (stating that “costs [in equity] may be given to neither party, or some to one and some to the other, or all to one side, as the justice of the whole case may seem to demand.”); Hovey v. Stevens, 12 F. Cas. 615, 620 (C.C.D. Mass. 1846) (No. 6746) (“It is, doubtless, a sound principle in chancery, to exercise some wider discretion over the allowance of cost, than is done in a court of law.”); Brooks v. Byam, 4 F. Cas. 271, 271 (C.C.D. Mass. 1843) (No. 1,949) (“Certainly costs in equity are altogether in the discretion of the court.”).

\textsuperscript{58} See Whipple v. Cumberland Mfg. Co., 29 F. Cas. 934, 936 (C.C.D. Me. 1843) (No. 17,516) (“In respect to damages, in cases of this sort, where the plaintiff comes to vindicate his right against an injury by wrong-doers, if he establishes his right of action, the jury have a right, if they choose, to give him such damages as will fully indemnify him, beyond what the costs taxed in the cause will reach. In considering what is the proper amount or measure of damages, they are at liberty to take into consideration the necessary expenses of fees to counsel, and other necessary expenses, to which the plaintiff has been put in the progress of the cause, and by the nature of the defence, beyond what he will be indemnified for by the taxable costs.”).

\textsuperscript{59} Act of Aug. 23, 1842, ch. 188, § 7, 5 Stat. 516, 518.

\textsuperscript{60} Id.; see CONG. GLOBE, 27th Cong., 2d Sess. 723 (1842) (the object of the law is to “diminish the costs and expenses of suits” in the federal courts) (statement of Sen. John Berrien).
the duties and services . . . performed . . . .”61 The Court failed to enact any such rules, and the issue remained dormant for another decade.

[18] Congress re-visited the issue in 1853.62 This time, Congress acted unilaterally, and the resulting law (referred to as “the 1853 Act”) established a unified scheme for awarding costs in the federal system.63 The legislative history reflects a concern about the absence of uniform rules and the practice of relying on state standards.64 According to Senator Bradbury, “[t]here is now no uniform rule . . . for the regulation of the costs in actions between private suitors. One system prevails in one district, and a totally different one in another . . . .”65 Of particular concern were awards of attorney’s fees. Senator Bradbury explained:

The abuses that have grown up in the taxation of attorneys’ fees which the losing party has been compelled to pay in civil suits, have been a matter of serious complaint. The papers before the committee show that in some cases those costs have been swelled to an amount exceedingly oppressive to suitors, and altogether disproportionate to the magnitude and importance of the causes in which they are taxed, or the labor


63 Id.

64 See CONG. GLOBE, 32d Cong., 2d Sess. 207 (1853) (statement of Sen. James Bradbury); see also Roadway Express, Inc. v. Piper, 447 U.S. 752, 761 (1980) (“Congress sought to standardize the treatment of costs in federal courts, to ‘make them uniform—make the law explicit and definite.’”) (quoting H.R. Rep. No. 50, 32d Cong., 1st Sess. 6 (1852)).

65 CONG. GLOBE, 32d Cong., 2d Sess. 207 (1853) (statement of Sen. James Bradbury). At the time, the jurisdiction of the trial courts was divided between “circuit courts” and “district courts.” At the risk of overgeneralizing, the former adjudicated civil cases while the latter adjudicated criminal cases. See Erwin C. Surrency, A History of Federal Courts, 28 MO. L. REV. 214 (1963).
bestowed. I have a bill before me where, upon recovery of some $36 in damages in a case of no complicated or expensive litigation, the attorney’s fees are swelled with motions, orders, briefs, and attendance, &c., to more than $240 . . . .

[19] To correct the situation, Congress identified categories of costs that could be recovered by prevailing parties:

The bill of fees of clerk, marshal, and attorneys, and the amount paid printers, and witnesses, and lawful fees for exemplifications and copies of papers necessarily obtained for use on trial in cases . . . shall be taxed by a judge or clerk of the court, and be included in and form a portion of a judgment or decree against the losing party.

Congress emphasized that these costs, and only these costs, were recoverable, thus precluding awards for items not denominated in the statute, such as attorney’s fees.

[20] In addition, Congress identified precise amounts for certain costs: attorney’s docket fees ($20 following a jury trial, $10 following a bench trial); clerk fees ($1 for issuing a summons, $0.10 for filing papers, and $0.10 for administering oaths); marshal fees ($2 for serving a summons); witness fees ($1.50 for each day’s attendance at trial plus $0.05 per mile round trip for travel); and printer’s fees ($0.40 for each 100 words of any


68 Id. at 161 (“[T]he following and no other compensation shall be taxed and allowed.”) (emphasis added); see also Stimpson v. Brooks, 23 F. Cas. 100, 101 (C.C.S.D.N.Y. 1856) (No. 13,454) (The 1853 Act “is not left open to any liberality of intendment, but must be rigorously enforced, conformably to the mandate of congress.”); Lyell v. Miller, 15 F. Cas. 1137, 1137 (C.C.D. Mich. 1855) (No. 8,620) (The 1853 Act “applies to all taxations of costs, after it took effect, and it abolished all prior laws on the subject.”).
published notice). In contrast, Congress did not identify amounts for “papers necessarily obtained for use on trial” or limit aggregate recoverable costs (allowing these to ebb and flow depending on the nature of the case). Although Congress’s precision has been interpreted by a leading authority as evidencing its intent to promote access to the courts by limiting potential cost shifting, Congress’s purpose appears to have been more limited: to “standardize” cost recovery in the federal system and “limit allowances for attorneys’ fees.”

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70 Independent Iron Works, Inc. v. U. S. Steel Corp., 322 F.2d 656, 677 (9th Cir. 1963); see, e.g., Revised Statutes of the United States, ch. 16, 18 Stat. 184, 983 (1874) (citing the language of the text to show that Congress used the same language twenty years later in the Revised Statutes of 1874) (“The bill of fees of the clerk, marshal, and attorney, and the amount paid printers and witnesses, and lawful fees for exemplifications and copies of papers necessarily obtained for use on trials . . . shall be taxed by a judge or clerk of the court[ ] and be included in and form a portion of a judgment or decree against the losing party.”). The amounts for attorney’s docket fees, clerk’s fees, marshal’s fees, witness fees, and printer’s fees also remained the same. Id. at 824, 828–29, 848, 853. Congress retained this portion of the 1853 Act in the Judicial Code of 1911. See also Act of Mar. 3, 1911, ch. 231, § 297, 36 Stat. 1169 (highlighting that the terms of the 1853 Act regarding taxation of costs remain in force and effect). Congress retained the same rules for cost shifting when they were included in Title 28 in 1926. See also 28 U.S.C. § 830 (1926) (“The bill of fees of the clerk, marshal, and attorney, and the amount paid printers and witnesses, and lawful fees for exemplifications and copies of papers necessarily obtained for use on trials . . . shall be taxed by a judge or clerk of the court[ ] and be included in and form a portion of a judgment or decree against the losing party.”).

71 In re Paoli R.R. Yard PCB Litig., 221 F.3d 449, 458 (3d Cir. 2000) (quoting 10 WRIGHT ET AL., FEDERAL PRACTICE & PROCEDURE § 2665 (4th ed. 2023)) (stating that Congress’ approach to cost recovery reflects “the egalitarian concept of providing relatively easy access to the courts to all citizens and reducing the threat of liability for litigation expenses as an obstacle to the commencement of a lawsuit or the assertion of a claim or a defense that might have some merit.”).

72 See Alyeska Pipeline Serv. Co. v. Wilderness Soc’y, 421 U.S. 240, 251–52 (1975); see also Friedman v. Ganassi, 853 F.2d 207, 210 (3d Cir. 1988) (“At no time in the history of the 1853 Act has it authorized or mandated the payment of attorney’s fees to the prevailing party, other than the de minimis amounts permitted by 28 U.S.C. § 1923(a).”).
The significance of the 1853 Act cannot be overstated. It is the most complete expression of congressional intent regarding cost shifting in the federal system and the frequent starting point for resolving questions about recoverable costs today.\textsuperscript{73} As the Supreme Court noted, the “sweeping reforms”\textsuperscript{74} of the 1853 Act have been carried forward to the present “without any apparent intent to change the controlling rules.”\textsuperscript{75} Its “comprehensive scope” and the “particularity with which it was drafted” has been consistently interpreted as Congress’s impr\textsuperscript{76} imatur on “rigid controls on cost-shifting in federal courts.”\textsuperscript{76} Not surprisingly, the scope of cost shifting today remains faithful to the principles and policies underlying the 1853 Act.\textsuperscript{77}

Congress rewrote the statutory text in 1948, roughly to its current form, and placed it at 28 U.S.C. § 1920.\textsuperscript{78} Congress added a provision authorizing cost shifting for “fees of the court reporter for all or any part of the stenographic transcript necessarily obtained for use in the case” (i.e., deposition and trial transcripts), and it broadened the text for papers by expanding the scope of cost recovery from papers obtained for use “on trial”


\textsuperscript{75} \textit{Alyeska Pipeline}, 421 U.S. at 255.

\textsuperscript{76} Crawford Fitting Co., 482 U.S. at 444.


\textsuperscript{78} Act of June 25, 1948, ch. 646, 62 Stat. 955. Congress continued to identify precise amounts for certain categories of costs (although it increased some of them). For example, the attorney’s docket fee remained $20 but the amount became applicable to both jury and bench trials. \textit{Id.} at 956. Similarly, the prior provision for clerk’s fees was eliminated and subsumed under a new “filing fee.” \textit{Id.} at 954. Finally, witness fees were increased to $2 for each day’s attendance at a deposition or trial. \textit{Id.} at 955.
to papers obtained for use “in the case”\textsuperscript{79} (\textit{i.e.}, documents produced during discovery regardless of whether they were offered and admitted at trial). As a result, the expenses of transcribing testimony at depositions, at trial, and for producing documents in advance of trial, became recoverable without any cap or limit, resulting in significant recoveries in some cases.\textsuperscript{80}

[23] Congress amended the statute in 1978, adding an additional subsection allowing recovery for “court appointed experts, compensation of interpreters, and salaries, fees, expenses, and costs of special interpretation services under section 1828 of this title.”\textsuperscript{81} Congress did not cap the amount recoverable for interpreters, and while the Supreme Court subsequently

\textsuperscript{79} Id. at 955.

\textsuperscript{80} See infra notes 101–04 and accompanying text.

\textsuperscript{81} Court Interpreters Act, Pub. L. 95-539, § 7, 92 Stat. 2044 (codified at 28 U.S.C. § 1920(6)).
limited recovery to the interpretation of spoken words but not the translation of written ones, the amounts involved remained substantial.

B. 2008 Amendment Allowing Cost Shifting for E-Discovery

Congress amended the statute again in 2008 to clarify that prevailing parties could recover the cost of reproducing electronic materials, as well as paper documents. To accomplish this, Congress struck the more limited phrase “copies of papers” and replaced it with the broader phrase “the costs of making copies of any materials.” The amendment arose from a recommendation made five years earlier by a subject matter committee of the Judicial Conference. The subject matter committee, the Committee on

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82 Taniguchi v. Kan Pac. Saipan, Ltd., 566 U.S. 560, 575 (2012) (“Because the ordinary meaning of ‘interpreter’ is someone who translates orally from one language to another, we hold that the category of ‘compensation of interpreters’ in §1920(6) does not include costs for document translation.”).


85 See JUDICIAL CONFERENCE PROCEEDINGS REPORT, supra note 37.

86 Id. at 9–10.
Court Administration and Case Management, had been asked to consider “whether the list of taxable costs should be amended to include expenses associated with new courtroom technologies.”

The subject matter committee answered this question in the affirmative, albeit with qualifications:

Concluding that adding the full range of such costs might go well beyond the intended scope of the statute, the Committee recommended that the Conference endorse two limited amendments to 28 U.S.C. § 1920, the first to permit taxing the cost of transcripts produced electronically, and the second to permit taxing the costs associated with copying materials whether or not they are in paper form. The [Judicial] Conference adopted the Committee’s recommendation and agreed to seek the following amendments to 28 U.S.C. § 1920 (new language is in bold, language to be deleted is struck through):

A judge or clerk of any court of the United States may tax as costs the following:

* * * *

(2) Fees of the court reporter for all or any party of the stenographic transcript for printed or electronically recorded transcripts necessarily obtained for use in the case; and

* * * *

(4) Fees for exemplification and copies of papers the costs of making copies of any

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87 Id.
materials where the copies are necessarily obtained for use in the case . . .

[25] The Judicial Conference’s recommendation was thereafter included in a 2004 bill making various technical changes to the operation of the federal courts.\footnote{Id. at 9–10.} When introducing the bill, Senator Hatch noted it would “improve the procedures for recouping technology costs.”\footnote{A GUIDE TO THE LEGISLATIVE HISTORY OF THE FEDERAL MAGISTRATE JUDGES SYSTEM, OFF. JUDGES PROGRAMS 70 (2009), \url{https://www.uscourts.gov/sites/default/files/magistrate_judge_legislative_history.pdf} [https://perma.cc/W2RN-94RC].} The accompanying analysis explained the bill would “expand the concept of ‘papers’ in order to reflect the decreasing use of paper and the increasing use of technology in creating, filing, and exchanging court documents.”\footnote{150 CONG. REC. S5080 (daily ed. May 10, 2004) (statement of Sen. Orrin Hatch).} Neither Senator Hatch nor the accompanying analysis explained which “technology costs” or which aspects of “exchanging court documents” would be eligible for cost recovery.\footnote{Id. at S5087.} The bill did not advance, however.

[26] Four years later, in 2008, a bill containing the same relevant text was introduced by Representative Lofgren in the House; she explained it would make “electronically produced information coverable in court costs.”\footnote{See id.} Senator Leahy introduced the bill in the Senate and said it would “ensure that the Federal judiciary has the tools to keep up with the changes and challenges of the 21st century.”\footnote{154 CONG. REC. H22, 823–24 (daily ed. Sept. 27, 2008) (statement of Rep. Zoe Lofgren).} Unfortunately, neither congressperson

\footnote{See 154 CONG. REC. S9898 (daily ed. Sept. 27, 2008) (statement of Sen. Patrick Leahy).}
detailed the activities that would qualify for cost shifting. The breadth of Representative Lofgren’s statement (“electronically produced information [would be] coverable in court costs”) suggests that all e-discovery costs would qualify, but the absence of further explanation leaves room for doubt. The absence of meaningful guidance is not surprising—the bills were introduced in their respective chambers on September 24 and passed on September 27. The 2008 amendment brought 28 U.S.C. § 1920 to its current form.

II. COST SHIIFTING FOR E-DISCOVERY IN THE FEDERAL COURTS

Following the 2008 amendment to Section 1920(4), the lower federal courts began addressing the scope of recoverable costs for e-discovery. The subsequent decisions fall roughly into three groups. One group construes “making copies” narrowly and allows recovery for very few e-discovery expenses (typically converting native files to a production format and transferring them to production media). Another group construes “making copies” narrowly but allows recovery of more e-discovery expenses when agreements or court orders define the form in which the “copy” will be made (usually imaging hard drives, as well as extracting and indexing text and metadata, and creating load files). Finally, a third emphasizes the burden of collecting and producing ESI, as well as the benefit of using technology to marshal the process, and allows recovery for even more e-discovery expenses (including eliminating

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99 See Register, supra note 35, at 1099–100.

100 See id. at 1102.
duplicates, performing keyword searches, and hosting data on a review platform). Each group is reviewed in the following sections.

**A. Narrow Construction**

[28] A large number of federal courts construe the words “making copies” narrowly and allow recovery for a subset of activities necessary to collect, process, and produce ESI. United States ex rel. Barko v. Halliburton Co. is illustrative. Plaintiff initiated a *qui tam* action alleging defendants defrauded the government while administering military support contracts in wartime Iraq. Defendants collected more than 2.4 million pages of potentially relevant electronic documents in response to Plaintiff’s discovery requests. Defendants then used specialized software to eliminate system files and duplicates and to suppress email threads. Defendants’ lawyers, with the assistance of a software review tool, then reviewed the remainder and produced 171,000 pages (or about seven percent of the original collection).

[29] Following discovery, the district court granted Defendants’ motion for summary judgment, and Defendants (now having the status of

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101 See *id.* at 1103.

102 See *id.* at 1093.


104 *Id.* at 309.

105 *Id.*

106 See *id.*

107 *Id.*

prevailing parties) sought $58,894.01 for e-discovery expenses,\(^\text{109}\) exclusive of attorney’s fees.\(^\text{110}\) In particular, Defendants sought reimbursement for: (i) processing ESI, loading it into an e-discovery platform, searching for key words or phrases, and producing statistical reports ($6,477.79); (ii) hosting electronic documents on the e-discovery platform while they were reviewed by attorneys ($33,035.14); (iii) converting native ESI to a format suitable for loading into the e-discovery platform and performing ancillary tasks associated with delivering electronic documents to Plaintiff ($11,995.08); and (iv) preparing and finalizing the production ($7,386.00).\(^\text{111}\) Of these four categories, the first three involved the work of technical experts and the cost of a software tool to facilitate review and production. The fourth involved work by paralegals.\(^\text{112}\) The clerk taxed the full amount, and the district court agreed, noting: “not for nothing, declining to tax e-discovery costs on par with traditional discovery costs disincentivizes litigants’ embrace of e-discovery innovations with potential to lower cost and improve judicial economy.”\(^\text{113}\)

[30] The court of appeals reversed in part.\(^\text{114}\) The court read Section 1920(4) narrowly and allowed recovery for only those e-discovery activities


\(^{110}\) Id. at *2, *22.

\(^{111}\) Id. at *9–11.

\(^{112}\) Id.

\(^{113}\) United States ex rel. Barko v. Halliburton Co., No. 05-1276, 2018 WL 6411342, at *4 (D.D.C. Dec. 6, 2018); Affidavit of Tirzah S. Lollar in Support of the Bill of Costs of KBR Defendants at 14, United States ex rel. Barko v. Halliburton Co., No. 1:05-CV-1276 (D.D.C. Apr. 4, 2017), ECF No. 280-1 [hereinafter Lollar Affidavit] (stating the amount requested by defendants and allowed by the district court was approximately 35 cents per page—an amount only slightly higher than the amount awarded for copies of paper documents in a pre-digital era).

equivalent to photocopying paper documents. This meant the cost of converting native files to the production format, converting hardcopy documents to PDF format, and transferring both to a thumb drive. As a result, the court reduced the award from $58,894.01 to $362.41 (or about 0.5% of defendants’ non-lawyer e-discovery expenses).

[31] The court of appeals began its analysis by comparing the statute’s text before and after the 2008 amendment and stated that “nothing about the edit . . . suggests that Congress meant to dramatically alter the scope of recoverable costs” when it replaced “copies” with “making copies.” The court then focused on the word “copies” and the phrase “making copies” and explained that these phrases mean “causing imitations or reproductions of original works to come into being” and “to cause to happen,” respectively. From this, the court concluded that “making copies” merely “refers to the task of duplication; it does not include the steps leading up to duplication any more than the old version did.” Of course, this is not the

115 Id. at 312.

116 Id.

117 Id.

118 The pre-2008 version authorized the recovery for “copies of papers necessarily obtained for use in the case.” The 2008 version authorizes the recovery for “making copies of any materials where the copies are necessarily obtained for use in the case.” The amendment thus added the verb “making” immediately before “copies” and replaced “papers” with “any materials.” See JUDICIAL CONFERENCE PROCEEDINGS REPORT, supra note 37.

119 Halliburton, 954 F.3d at 310 (quotations and citations omitted).

120 Id.

121 See id; see also CBT Flint Partners, LLC v. Return Path, Inc., 737 F.3d 1320, 1326 (Cir. 2013) (“[W]e see no significance in the change from ‘copies’ to ‘making copies,’ a change that appears to reflect no more than the linguistic aim of using activity-describing phrases (‘exemplification,’ ‘making copies’) on both sides of the conjunction in section 1920(4).”).
only plausible construction of “making copies.” Given the dictionary definitions of “making” and “copies” referenced by the court, these words can alternatively include the series of steps that culminate in the reproduction of ESI—a construction that seems preferable given the pre-amendment statute already authorized courts to award fees for “copies” of records.122 Put differently, the verb “making” would be unnecessary if Congress merely intended the district courts to award the cost of the last act necessary to reproduce ESI.

[32] The court of appeals also examined the events leading to the 2008 amendment and concluded that they supported a narrow construction.123 The court noted that the amendment originated with a subject matter committee of the Judicial Conference,124 and that the committee recommended a “limited” amendment to avoid a dramatic expansion of recoverable costs.125 The court ignored, however, the full recommendation, the “costs associated with copying materials,” which suggests that all associated costs, and not just a portion of them, would be eligible for cost shifting.126 The court also disregarded the statements of the legislators who introduced the relevant bills in Congress which suggested a broader meaning of the statutory text.127

[33] The court of appeals found further support for its narrow construction in Taniguchi v. Kan Pacific Saipan, Ltd.,128 a 2012 case in which the Supreme Court concluded that recovery of the cost of


123 Halliburton, 954 F.3d at 311.

124 Id. at 311.

125 Id.

126 Id. (emphasis added).

127 Id.

interpreters” in Section 1920(6) was limited to the cost of interpreting written words but not the translation of written ones.\textsuperscript{129} The court noted the Supreme Court’s admonitions in \textit{Taniguchi} that lower federal courts should not “stretch the ordinary meaning of the cost items Congress authorized in §1920,”\textsuperscript{130} and that the statute covers only “relatively minor, incidental expenses.”\textsuperscript{131} The court took comfort that a narrow construction was consistent with these admonitions because it would result in modest recoveries for e-discovery.\textsuperscript{132} Of course, the statute has never limited a prevailing party to “relatively minor, incidental expenses.”\textsuperscript{133} As Justice Ginsberg correctly noted in her dissenting opinion in \textit{Taniguchi}: “[t]he tab for unquestionably allowable costs, however, may run high.”\textsuperscript{134} And they do. The district courts frequently award staggering sums for reproducing hardcopy documents (nearly $330,000 in one case),\textsuperscript{135} recording and

\textsuperscript{129} Id. at 569.
\textsuperscript{130} Id. at 573.
\textsuperscript{131} Id.
\textsuperscript{132} Id.
\textsuperscript{133} \textit{Taniguchi}, 566 U.S. at 573.
\textsuperscript{134} Id. at 581 n.4 (Ginsberg, J., dissenting).

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transcribing testimony at depositions and trial ($277,000 in one case),136 and reimbursing witnesses for attending judicial proceedings (more than


$35,000 in one case.\textsuperscript{137} In fact, one district court awarded $2,674,631.36 in aggregate costs.\textsuperscript{138} While certain recoverable costs are “relatively minor, incidental expenses” (e.g., a $20 attorney’s docket fee, a $40 witness fee, a $350 filing fee) when considered separately and individually, they can swell in discovery-intensive cases, and Congress has never suggested prevailing parties should recover less.\textsuperscript{139}

[34] The court of appeals then applied its narrow construction to Defendants’ e-discovery costs.\textsuperscript{140} According to the court: “[S]ection 1920(4) authorizes taxation of costs for the digital equivalent of a law-firm associate photocopying documents to be produced to opposing counsel.”\textsuperscript{141} The court, therefore, limited Defendants’ recovery to the cost of converting ESI “to the production formats (in this case, PDF and TIFF) and transferring those production files to portable media (here, USB drives).”\textsuperscript{142} The court explained: “[t]hese tasks resemble the final stage of ‘doc review’ in the pre-digital age: photocopying the stack of responsive and privilege-screened documents to hand over to opposing counsel. Such costs were taxable then,

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\textsuperscript{139} Id. at *10.
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\textsuperscript{140} United States ex rel. Barko v. Halliburton Co., 954 F.3d 307, 312 (D.C. Cir. 2020).
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\textsuperscript{141} Id. at 311.
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\textsuperscript{142} Id. at 312.
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and the e-discovery analogs of such costs are taxable now."\textsuperscript{143} Of course, producing electronic documents requires more instruction and expertise than producing hardcopy documents. The former requires technical expertise beyond that of the best-trained lawyer (and often requires page after page of technical specifications to guide the process),\textsuperscript{144} while the latter requires no more expertise than the ability to push a button.

\textsuperscript{[35]} Aside from the propriety of the court of appeals’ construction and application of the statutory language, a more fundamental problem exists with its bottom-line decision. If the court is correct and if prevailing parties are limited to recovering the cost of converting native files to the production format and transferring them to production media, then e-discovery costs are not recoverable as a practical matter. Defendants recovered $362.41.\textsuperscript{145} A prevailing party would not rationally pay an attorney to assemble the documentation necessary to support the claimed amount (and defend the amount if challenged) if it could only recover a few hundred dollars\textsuperscript{146} because the fee for seeking recovery would exceed the amount recovered by many multiples. Congress plainly intended to allow recovery, but the court’s decision would seem to preclude that outcome in many cases.

\textsuperscript{[36]} Any criticism of United States ex rel. Barko v. Haliburton Co. must be tempered by acknowledging that its construction of Section 1920(4) is

\textsuperscript{143} Id. The court therefore disallowed recovery for converting ESI from native format to a format compatible with the e-discovery hosting platform; the license fee for the hosting platform; and the processing the ESI on the hosting platform. “Because ‘[n]one of the steps that preceded [or followed] the actual act of making copies in the pre-digital era would have been considered taxable,’ such tasks are untaxable now, whether performed by law-firm associate or algorithm.” \textit{Id.} (quoting Race Tires Am., Inc. v. Hoosier Racing Tire Corp., 674 F.3d 158, 169 (3d Cir. 2012)).


\textsuperscript{145} United States \textit{ex rel}. Barko v. Halliburton Co., 954 F.3d 307, 312 (D.C. Cir. 2020).

\textsuperscript{146} See also Country Vintner of N.C., LLC v. E. & J. Gallo Winery, Inc., 718 F.3d 249, 252–53 (4th Cir. 2013) (prevailing party recovered 0.2% of its e-discovery expenses).
consistent with the decisions of a number of other courts, including other courts of appeals.\textsuperscript{147} These courts agree that the statute should be construed narrowly, that cost recovery is limited to e-discovery activities equivalent to photocopying paper documents, and that very few e-discovery expenses, therefore, qualify for cost shifting.\textsuperscript{148} Any such criticism must also be tempered by acknowledging that the amendment to Section 1920 allowing


recovery for e-discovery expenses sped through Congress, and it is doubtful that Congress would have intended large-scale cost shifting on such a thin legislative record.

B. Narrow Construction Influenced by Party Agreements and Court Orders

[37] Some courts construe “making copies” narrowly but allow recovery for more e-discovery expenses when party agreements or court orders define the form in which the “copy” will be produced. The courts in *CBT Flint Partners, LLC v. Return Path, Inc.* and *Jo Ann Howard &

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149 *JUDICIAL CONFERENCE PROCEEDINGS REPORT*, *supra* note 37, at 10.

150 *CBT Flint Partners, LLC v. Return Path, Inc.*, 737 F.3d 1320 (Cir. 2013) (applying regional law of the Eleventh Circuit).
Associates, P.C. v. Cassity\textsuperscript{151} reflect the potential for greater cost shifting in such circumstances, as do a number of other courts.\textsuperscript{152}

\textsuperscript{151} Jo Ann Howard & Assocs., P.C. v. Cassity, 146 F. Supp. 3d 1071, 1088 (E.D. Mo. 2015).

\textsuperscript{152} See Deere & Co. v. Duroc, 650 Fed. App’x. 779, 782 (Cir. 2016) (affirming district court’s decision to award costs for activities required by the parties’ ESI Agreement; “[t]he district court held that when the costs of complying with the agreement are within the obligations of the Agreement and reasonably incurred in complying with the agreement, they are recoverable.”); see also In re Online DVD-Rental Antitrust Litig., 779 F.3d 914, 928 (9th Cir. 2015) (“When copies are made in a fashion necessary to comply with obligations . . . [imposed by agreement or order], costs are taxable so long as the copies are also ‘necessarily obtained for use in the case.’”); Country Vintner of N.C. v. E. & J. Gallo Winery, Inc., 718 F.3d 249, 260 n.19 (4th Cir. 2013) (“If, for instance, a case directly or indirectly required production of ESI-unique information such as metadata, we assume, without deciding, that taxable costs would include any technical processes necessary to copy ESI in a format that includes such information.”); Hecker v. Deere & Co., 556 F.3d 575, 591 (7th Cir. 2009) (stating that the district court did not abuse its discretion in awarding costs for converting data into a readable format “in response to plaintiffs’ discovery requests”); Genuine Enabling Tech., LLC v. Nintendo Co., C19-00351, 2021 U.S. Dist. LEXIS 11611, at *5 (W.D. Wash. Jan. 21, 2021) (“When analyzing costs associated with electronic document processing, determining whether certain tasks fall under Section 1920(4) often depends on the context and parties’ agreement to forms of production.”); Vehicle Mkt. Rsch., Inc. v. Mitchell Int’l, Inc., No. 09-2518, 2017 U.S. Dist. LEXIS 97876, at *16 (D. Kan. June 26, 2017) (stating the cost of creating load files is recoverable “if they contain information required by the requested production”); United States ex rel. King v. Solvay S.A., H-06-2662, 2016 U.S. Dist. LEXIS 83547, at *38 (S.D. Tex. Jun 28, 2016) (“[I]f the opposing party has requested metadata, then the costs of ‘copying’ that metadata should be recoverable.”); Agjunction, LLC v. Agrian, Inc., No. 14-CV-2069, 2016 U.S. Dist. LEXIS 70066, at *30 (D. Kan. May 27, 2016) (stating that the cost of forensic consulting company that copied defendants’ source code was recoverable because court ordered defendants to make their source code available to plaintiff; cost of imaging hard drives was recoverable because plaintiff’s discovery request specifically asked for imaged hard drives); In re Nexium (Esomeprazole) Prods. Liab. Litig., ML 12-2404, 2015 U.S. Dist. LEXIS 183643, at *3 (C.D. Cal. Aug. 26, 2015) (stating that costs for certain activities were recoverable because they were required by the parties’ stipulated order).
1. CBT Flint Partners, LLC v. Return Path, Inc.

[38] In CBT Flint Partners, LLC v. Return Path, Inc.,\textsuperscript{153} Plaintiff sued Defendants for patent infringement.\textsuperscript{154} During discovery, Defendant Cisco Ironport Systems (“Cisco”) collected 1.2 terabytes of ESI—a staggering amount equal to twelve percent of the printed volumes in the Library of Congress\textsuperscript{155}—and thereafter produced nearly ten million pages of electronic documents.\textsuperscript{156} Following discovery, the district court granted Defendants’ motion for summary judgment.\textsuperscript{157} Cisco, then the prevailing party, sought $243,453.02 for e-discovery.\textsuperscript{158} The clerk taxed the amount in full, and the district court agreed, reasoning:

A careful review of the [vendor’s] invoices reveals that the services provided are not the type of services that attorneys or paralegals are trained for or are capable of providing. The services are highly technical. They are the 21st Century equivalent of making copies. . . . The services are certainly necessary in the electronic age. The enormous burden and expense of electronic discovery are well known. Taxation of these costs will encourage litigants to exercise restraint in burdening the opposing party with the huge cost of unlimited demands for electronic discovery.\textsuperscript{159}

\textsuperscript{153} See generally CBT Flint Partners, 737 F.3d 1320 (applying Eleventh Circuit law).

\textsuperscript{154} Id. at 1324.

\textsuperscript{155} Brief of Defendants-Appellees Cisco IronPort Systems, LLC & Return Path, Inc. at 6.

\textsuperscript{156} Id. at 12.

\textsuperscript{157} CBT Flint Partners, 737 F.3d at 1324.

\textsuperscript{158} Id.

The district court separately noted Cisco’s unchallenged contention that the amount paid for e-discovery services was less than what would have been paid to photocopy an equivalent number of paper documents.\(^{160}\) That amount would have been about $280,000 (assuming a per-page rate of $0.20 for copying).

[39] The Federal Circuit reversed in part.\(^{161}\) Applying regional circuit law regarding the production of paper documents, the court concluded that activities preceding the duplication of electronic documents are not recoverable.\(^{162}\) The court lamented the absence of congressional guidance regarding cost recovery for e-discovery, noting the statements made by Representative Lofgren and Senator Leahy failed to provide “help for courts that must apply the statutory language.”\(^{163}\) The court continued, “[t]hey do not say that the new language covers all, or even a significant share, of the costs of electronic-document production. And they do not clarify what activities constitute ‘making copies.’”\(^{164}\) In this circumstance:

Without a clearer prescription of dramatic change than we can find in the 2008 amendment, those background principles [in regional circuit law] call for reading the new language to effect only modest changes in the award of costs under the generally applicable section 1920(4)—leaving larger-scale shifting of litigation expenses to be addressed under other statutory provisions that set particular standards.

\(^{160}\) Id.

\(^{161}\) CBT Flint Partners, 737 F.3d at 1324.

\(^{162}\) Id. at 1330.

\(^{163}\) Id. at 1326.

\(^{164}\) Id.
for particular types of cases to implement context-specific policies.\textsuperscript{165}

\[40\] Having concluded the statute should be construed narrowly, the Federal Circuit pivoted and focused on the e-discovery activities that fell within the statutory language, explaining:

\[\text{[R]ecoverable costs . . . are those costs necessary to duplicate an electronic document in as faithful and complete a manner as required by rule, by court order, by agreement of the parties, or otherwise. To the extent that a party is obligated to produce . . . electronic documents in a particular format or with particular characteristics intact (such as metadata, color, motion, or manipulability), the costs to make duplicates in such a format or with such characteristics preserved are recoverable . . . . But only the costs of creating the produced duplicates are included, not a number of preparatory or ancillary costs commonly incurred leading up to, in conjunction with, or after duplication.}\textsuperscript{166}

\[41\] The court therefore concluded that Cisco could recover the cost of imaging hard drives, extracting text, extracting metadata, creating load files, and transferring the electronic documents to production media (assuming it was required to do so by rule, agreement, or order).\textsuperscript{167} But Cisco could not

\textsuperscript{165} Id. at 1327.

\textsuperscript{166} CBT Flint Partners, 737 F.3d at 1328. The court underscored the impact of a rule, agreement, or court order regarding e-discovery, as they may “necessitate the taking of several steps that are all part of ‘making copies’ reasonably understood.” Id. at 1329. The court noted, for example, that when a party is obligated to convert native files to TIFF, or to preserve metadata, it may be required to create an initial copy of the ESI and then extract the text and metadata before creating a production copy, in which event the cost of both copies would be recoverable. Id. The court continued, however, that in the absence of such requirements the party would be able to recover only the cost of copying the native files directly to the production media. Id. at 1330.

\textsuperscript{167} See CBT Flint Partners, 737 F.3d at 1332–33.
recover the cost of other activities, such as formulating a plan that minimizes the collection of irrelevant ESI and reviewing the ESI for relevance and privilege.\textsuperscript{168}

[42] \textit{CBT Flint Partners} is important for three reasons. First, the court acknowledged that “making copies” can include more than converting ESI from one format to another (at least when required by an agreement, or court order) because a “copy” of an electronic document can come in more than one form.\textsuperscript{169} Second, the court allowed recovery for imaging hard drives, and thus tacitly recognized recovery for collecting ESI (again, at least in some circumstances).\textsuperscript{170} And third, the court acknowledged the potential impact of agreements and court orders regarding cost recovery.\textsuperscript{171} The court stopped short of including other activities, however, even when the activity is required by agreement or order (and even when the activity makes the discovery process more manageable).\textsuperscript{172} The court appears to have lumped all these other activities under the rubric of non-recoverable attorney review, even though certain activities were performed by technical experts prior to such review.\textsuperscript{173}

2. \textit{Jo Ann Howard & Associates, P.C. v. Cassity}

[43] \textit{Jo Ann Howard & Associates, P.C. v. Cassity} similarly recognizes the potential impact of discovery requests, party agreements, and court

\textsuperscript{168} See \textit{id.} at 1331–32. The Federal Circuit remanded the case for consideration of “what requirements governing the format or other characteristics of the produced documents were imposed on the defendants.” \textit{id.} at 1330, 1333.

\textsuperscript{169} See \textit{id.} at 1329–30.

\textsuperscript{170} See \textit{id.} at 1328, 1333.

\textsuperscript{171} See \textit{id.} at 1328–30.

\textsuperscript{172} \textit{CBT Flint Partners}, 737 F.3d at 1330–32.

\textsuperscript{173} \textit{Id.} at 1333.
orders. Plaintiffs sued Defendants for money damages arising out of a scheme to defraud consumers and funeral homes in connection with the sale of pre-need funeral insurance. During discovery, Plaintiffs produced nearly five million pages of electronic documents pursuant to a stipulation that required converting native files to TIFF, extracting text and metadata, creating load files, and endorsing Bates numbers. The case went to trial, and the jury returned verdicts totaling $455 million in compensatory damages and $35.55 million in punitive damages. Plaintiffs, then the prevailing party, sought $317,884.56 for e-discovery. Defendants objected, contending the amount should be reduced because it included activities other than converting native files to TIFF and transferring the images to production media. The clerk allowed the full


175 Id. at 1076.

176 Id. at 1084 n.8.


179 Plaintiffs’ Memorandum in Support of Bill of Costs at 9, Jo Ann Howard & Assoc., P.C. v. Cassity, No. 09-CV-1252 (E.D. Mo. Apr. 6, 2015), ECF No. 2395.

180 Memorandum Objecting to Plaintiffs’ First Amended Bill of Costs at 12, Jo Ann Howard & Assoc., P.C. v. Cassity, No. 4:09-CV-1252 (E.D. Mo. May 21, 2015), ECF No. 2407.
The district court agreed, albeit reducing the amount to $309,977.87.\textsuperscript{182}

[44] In allowing the bulk of the requested e-discovery expenses, the district court reasoned the expenses involved activities necessary to produce complete and accurate copies of the ESI and were required by a stipulation regarding the form in which ESI would be produced, explaining:

because the term “copies” is construed to include copies of digital documents, any process or procedure\[ ] inherent in producing a completed “copy” of the final digital document must be recoverable, as the ultimate digital copy could not be complete and accurately produced but for the completion of those ancillary procedures. . . . This includes things like the costs of OCR scanning, TIFF conversions, producing load files, the imaging of computer storage drives, the transfer of files from one drive or disc to another, and the extraction or imaging of metadata. These are all examples of procedures undertaken by Plaintiffs which are implicit in the creation of a copy of a digital document . . . .\textsuperscript{183}

[45] The court thus recognized that several steps may be necessary to reproduce an electronic document, and the prevailing party should recover for each of them.

[46] With respect to the latter, the court explained that party agreements and court orders can play a role in determining which e-discovery activities qualify for cost shifting:


\textsuperscript{182} Jo Ann Howard & Assocs., P.C. v. Cassity, 146 F. Supp. 3d 1071, 1085 (E.D. Mo. 2015).

\textsuperscript{183} Id. at 1084.
[T]he costs of making copies were incurred pursuant to a standing order requiring Plaintiffs to produce to Defendant copies of all documents produced by Plaintiffs throughout the course of the litigation, and also to a stipulated agreement between the parties to produce all ESI in a particularly specified manner, including all metadata. In order to . . . [comply] with both the agreement and the order, it was necessary, within the meaning of § 1920(4), for Plaintiffs to produce copies of all documents to Defendant with their metadata intact.\textsuperscript{184}

[47] The court thus acknowledged the collateral consequences for cost shifting when the prevailing party seeks to recover the cost of complying with an agreement or order regarding the form in which ESI will be produced.\textsuperscript{185}

C. Ad Hoc Decisions

[48] A few courts allow prevailing parties to recover the bulk of their e-discovery expenses because of the magnitude of the task of collecting, processing, and producing ESI and the need for non-lawyer experts to

\textsuperscript{184} Id. at 1084–85.

\textsuperscript{185} See Deere & Co. v. Duroc LLC, 650 F. App’x 779, 782–83 (Cir. 2016) (holding that the trial court did not abuse its discretion in awarding cost of e-discovery activities by negotiated ESI Agreement: “[t]he district court held that when the costs of complying with the agreement are within the obligations of the Agreement and reasonably incurred in complying with the Agreement, they are recoverable.”).
marshal the effort.\(^{186}\) *In re Aspartame Antitrust Litigation*,\(^ {187}\) a division of markets case in which the defendants collectively gathered and processed more than 80 million pages of electronic documents,\(^ {188}\) is representative. In that case, the district court explained:

> [I]n cases of this complexity, e-discovery saves costs overall by allowing discovery to be conducted in an efficient and cost-effective manner. We agree with defendants that electronic discovery allows parties to save costs associated with manually producing, handling, storing, and delivering thousands (and often millions) of pages of hard-copy documents. In this case, defendants’ use of . . . vendors to conduct keyword searches and remove duplicate documents allowed [them] to reduce their pool of potentially responsive documents by 87% and 38.5% respectively, at significant cost savings.\(^ {189}\)

[49] The district court, therefore, allowed recovery for a panoply of tasks: imaging hard drives; creating a database; eliminating duplicates and

\(^{186}\) *In re Aspartame Antitrust Litig.*, 817 F. Supp. 2d 608, 614–15 (E.D. Pa. 2011) (emphasizing the cost savings of e-discovery in an antitrust case in which one defendant collected “87.73 gigabytes of data—the equivalent to copying 4.4 to 6.1 million pages of documents” while another defendant collected “over 1.05 terabytes of potentially responsive electronic documents—over 75 million pages . . .”); *Tibble v. Edison Int’l*, No. CV 07-5359, 2011 WL 3759927, at *6–8 (C.D. Cal. Aug. 22, 2011) (recognizing need of technical expertise to locate, retrieve, and produce ESI and allowing recovery of about $530,000 for the cost of employing individuals with the requisite expertise); *CBT Flint Partners, LLC v. Return Path, Inc.*, 676 F. Supp. 2d 1376, 1381 (N.D. Ga. 2009) (“A careful review of the . . . invoices reveals that the services provided are not the type of services that attorneys or paralegals are trained for or are capable of providing. The services are highly technical. They are the 21st Century equivalent of making copies. . . . The services are certainly necessary in the electronic age.”).

\(^{187}\) *In re Aspartame Antitrust Litig.*, 817 F. Supp. 2d at 608.

\(^{188}\) *Id.* at 614–15.

\(^{189}\) *Id.* at 615 (quotations and citations omitted).
performing keyword searches; extracting text and creating load files; converting electronic documents to static images; rendering the text of the images for optical character recognition; and technical support.\textsuperscript{190} The court also allowed recovery for privilege review and for hosting electronic documents before and after production because discovery remained ongoing.\textsuperscript{191} Finally, the district court allowed recovery for electronic data recovery and backup tape restoration because “[t]hese are technical processes that would not be done by an attorney.”\textsuperscript{192} The court disallowed recovery for the license fee associated with the document review platform, however, concluding that it fell within the category of litigation expenses incurred for the convenience of counsel.\textsuperscript{193}

[50] \textit{In re Aspartame Antitrust Litigation} is not aberrational. Other courts have similarly allowed recovery for imaging hard drives,\textsuperscript{194} loading data

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\item $^{190}$\textit{Id.} at 615–16.
\item $^{191}$\textit{Id.}
\item $^{192}$\textit{In re Aspartame Antitrust Litig.}, 817 F. Supp. 2d 608, 616 (E.D. Pa. 2011).
\item $^{193}$\textit{Id.}
\end{enumerate}
\end{footnotesize}
into an e-discovery software platform,\textsuperscript{195} hosting data,\textsuperscript{196} and consulting fees.\textsuperscript{197} These costs were allowed for much of the same reason as they were allowed in \textit{In re Aspartame Antitrust Litigation}: each made discovery more efficient while simultaneously making it less expensive.\textsuperscript{198}

[51] While commendable for their willingness to consider all the various tasks involved in reproducing ESI for use in litigation, some of these decisions are correctly criticized for reaching outcomes “untethered from the statutory mooring.”\textsuperscript{199} They often fail to connect an e-discovery activity to the statutory text and instead focus solely on the unique challenges, burdens, and expenses of transforming ESI into something that can facilitate fact-finding and the resolution of controversies.\textsuperscript{200} Whatever practical merit

\textsuperscript{195} See Consumer Fin. Prot. Bureau v. Weltman, Weinberg & Reis, Co., 342 F. Supp. 3d 766, 771 (N.D. Ohio 2018) (stating that “expenses for loading and exporting data into ‘Relativity’” was recoverable); Pacificorp v. Northwest Pipeline GP, No. 3:10-CV-00099-PK, 2012 WL 6131558, at *7 (D. Or. Dec. 10, 2012) (“Because the task of converting already-selected files into a database is a purely technical one, I find that these costs are taxable.”); see also Apple, Inc. v. Samsung Elec. Co., No. 11-CV-01846-LHK, 2014 WL 4745933, at *11–12 (N.D. Cal. Sept. 19, 2014) (allowing recovery for cost of loading data onto Catalyst Repository’s platform); \textit{In re Ricoh Co. Pat. Litig.}, 661 F.3d 1361, 1367 (Cir. 2011) (stating that the cost of using database as review platform would have been recoverable but for agreement between parties that they would share this cost); Chenault v. Dorel Indus., Inc., No. A-08-CA-354-SS, 2010 WL 3064007, at *4 (W.D. Tex. Aug. 2, 2010) (overruling objections to cost shifting for cost of database “because the Court finds the cost of the electronic database was in lieu of expending much more in fees and disbursements . . .”).


\textsuperscript{197} \textit{In re Online DVD-Rental Antitrust Litig.}, 779 F.3d 914, 932 (9th Cir. 2015) (“The district court did not abuse its discretion in awarding $245,471.31 in consulting fees, TIFF images, and copying costs.”).

\textsuperscript{198} \textit{In re Aspartame Antitrust Litig.}, 817 F. Supp. 2d 608, 615 (E.D. Pa. 2011).

\textsuperscript{199} Race Tires Am., Inc. v. Hoosier Racing Tire Corp., 674 F.3d 158, 169 (3d Cir. 2012).

\textsuperscript{200} \textit{Id.}
these outcomes may possess, they are inconsistent with an objective of cost shifting in the federal system, which is maintaining uniformity about what is (and what is not) recoverable as described in the relevant statutory text.

III. A Proposed Amendment to Section 1920

[52] Congress should amend Section 1920 to clarify which e-discovery activities are eligible for cost shifting and under what circumstances. In particular, Congress should add a new subsection (7) giving the district courts discretion to allow prevailing parties to recover:

[T]he proportionate cost of collecting, processing, and hosting electronically stored information prior to production, together with all the cost of producing or otherwise making such information available to the other parties, as may be adjusted taking into consideration: (a) any applicable discovery request, agreement, or court order regarding the production of electronically-stored information; (b) the extent to which the losing party cooperated with the prevailing party to reduce the volume of electronically-stored information subject to discovery; (c) the extent to which the prevailing party limited its production to the electronically stored information requested by the losing party; (d) the losing party’s ability to pay; and (e) the closeness of the case on the merits.

[53] A conforming amendment would be required to subsection (4) to eliminate potential ambiguity about which portion of the statute applies to e-discovery.201

201 The proposed text retains the generally applicable prohibition on cost shifting for attorney’s fees, albeit indirectly through Rule 54(d) of the Federal Rules of Civil Procedure. FED. R. CIV. P. 54(d). That said, any reduction in the ESI that is collected, or any increase in the ESI that is ferreted out prior to attorney review, will reduce the prevailing party’s attorney’s fees by a corresponding amount by reducing the number of electronic documents that must be reviewed. 28 U.S.C.A § 1920 (2008).
A. Scope of Recoverable Costs—Collection, Processing, Hosting, Production

[54] The proposed text allows recovery for the proportionate cost of collecting, processing, and hosting ESI prior to production, along with all the costs of producing or otherwise making ESI available to the other parties. The words “collection,” “processing,” “hosting,” and “producing” are well-understood within the legal and technical communities, and their use in the statute should eliminate issues about what qualifies for recovery. In addition, their use should allow vendors to better prepare invoices that are connected to the statutory standard and allow litigants to prepare filings that are more likely to meet the court’s needs when recovery is disputed. Before proceeding, a brief review of these terms is appropriate.

1. Collection

[55] The “collection” of ESI involves gathering potentially relevant ESI from those who may have created it and the hard drives, servers, mobile devices, and social media where it may be located. ESI comes in a variety of types, the most common being emails, Word documents, PowerPoint

202 The district courts deny recovery when expenses are not adequately documented or explained. See, e.g., Race Tires Am., 674 F.3d at 166 (“The invoices that Hoosier and DMS submitted in support of their Bills of Costs are notable for their lack of specificity and clarity as to the services actually performed.”); In re Ricoh Co. Pat. Litig., 661 F.3d at 1368 (“[W]e find that the invoices and itemized spreadsheet . . . were not specific enough to permit the taxation of those costs.”); Jo Ann Howard & Assocs., P.C. v. Cassity, 146 F. Supp. 3d 1071, 1083 (E.D. Mo. 2015) (“[S]ome costs incurred paying Plaintiffs’ ‘support specialist’ for services rendered in production of the documents shall be reduced due to . . . the inability of this Court to parse apart some of the taxable and untaxable portions of the costs given the imprecision of the work documentation.”).

presentations, Excel spreadsheets, text messages, websites, and the like.\textsuperscript{204} A technician, using specialized software, gathers the potentially relevant ESI from these sources along with all associated metadata.\textsuperscript{205} The technician can focus their efforts on ESI created within a specific date range, containing particular keywords, or possessing other identifying attributes. Regardless, the technician will cast the net widely enough to capture the vast bulk of relevant ESI but not so broadly as to retrieve an undue amount of irrelevant ESI.

[56] The cost of collecting ESI can involve the fees for in-house technical personnel, out-house specialists, and software.\textsuperscript{206} A recent study pinned the cost between $250 and $350 per hour and more than $350 per device;\textsuperscript{207} an older study calculated a median cost of $940 per gigabyte;\textsuperscript{208} and a vendor recently advertised prices on a per-device basis of $1,000 to $1,500 for hard drives, $925 to $1,300 for mobile devices, and $500 to $850 for email accounts.\textsuperscript{209} Despite these variations, the cost of collecting ESI is around

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\item \textsuperscript{204} Id.
\item \textsuperscript{205} See QUARTARARO, supra note 22, at 112–21 (summarizing the collection process).
\item \textsuperscript{206} Id. at 112.
\item \textsuperscript{207} \textit{Feeding the Frenzy? Summer 2022 eDiscovery Pricing Survey Results}, COMPLEX DISCOVERY (May 18, 2022), https://complexdiscovery.com/feeding-the-frenzy-summer-2022-ediscovery-pricing-survey-results [hereinafter \textit{Summer 2022 eDiscovery Pricing Survey Results}].
\item \textsuperscript{208} Pace & Zakaras, supra note 43, at 28.
\end{itemize}
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ten percent of the total e-discovery expense.\textsuperscript{210} While the percentage is modest, efforts to reduce the volume collected can have significant downstream effects on the cost of processing, hosting, and attorney review because each of these subsequent costs is driven by volume.\textsuperscript{211} To provide context, \textit{Lawson v. Spirit AeroSystems, Inc.} involved a collection of 322,524 electronic documents,\textsuperscript{212} yet the end-to-end cost to produce approximately 24,000 of them (with a page count of about 170,000 pages)\textsuperscript{213} was $791,700.21.\textsuperscript{214} This amount included, among other things, $36,540 for processing, $128,281.55 for hosting, and $398,001.26 for first and second-level attorney review.\textsuperscript{215} The mushrooming cost of each successive step amply demonstrates the utility of focused collections that accentuate the

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\bibitem{210} \textit{Discovery Proportionality Model}, supra note 18, at 12 (stating that collection costs account for approximately five to fifteen percent of the overall cost); Pace & Zakaras, supra note 43, at xiv (stating an eight percent overall cost); \textit{eDiscovery Opportunity Costs: What Is the Most Efficient Approach?}, LOGIKCULL, https://www.logikcull.com/blog/ediscovery-opportunity-costs-infographic [https://perma.cc/2FAU-LRN8 (last visited Nov. 7, 2023) (stating a six percent overall cost).


\bibitem{214} \textit{Lawson}, 2020 WL 6343292, at *1 (stating that the district court shifted $754,029.46 of this amount because the requesting party pursued electronic discovery that was not proportional to the needs of the case under Rule 26(b)(1) of the Federal Rules of Civil Procedure).

\bibitem{215} \textit{Id.} at *8, *9.
retrieval of probative ESI and minimize the collection of nonprobative material.

2. Processing

[57] The “processing” of ESI involves the use of specialized software to perform certain automated tasks. One task is reducing the volume of collected ESI by eliminating non-user-created files, eliminating duplicates, and suppressing email threads by eliminating all but the most recent or complete email in a thread. A second task is extracting and indexing the text and metadata from each electronic document and creating data and load files so the ESI can be sorted and searched more easily by attorneys prior to production. A third task is converting the ESI to a single format so it can be more easily accessed on a review platform during subsequent reviews. The impact of aggressive processing can be significant: one vendor claims processing can reduce volume by as much as ninety percent and another claims deduplication alone can reduce volume by forty percent. Even after discounting for commercial puffery, the potential percentage reductions remain substantial.

216 See QUARTARARO, supra note 22, at 112, 123–24, 126.

217 Id. at 123–24, 126.

218 Id. at 35.

219 Id., at 281–82 (summarizing processing).


The cost of processing is based on volume and constitutes about twenty percent of total e-discovery expense.\textsuperscript{222} One authority pinned the price at $250 or less per gigabyte;\textsuperscript{223} a vendor advertised prices between $25 and $100 per gigabyte;\textsuperscript{224} and a recent study revealed that participants paid comparable amounts.\textsuperscript{225} The cost, therefore, mounts as volume increases, with aggregate dollar amounts sometimes exceeding $100,000.\textsuperscript{226} And, because processing is priced per gigabyte, a narrowly targeted collection (or a broadly sweeping collection) can materially impact its cost favorably (or unfavorably).

\textsuperscript{222} eDiscovery Opportunity Costs: What Is the Most Efficient Approach?, supra note 210 (asserting it constitutes twenty-four percent); Pace & Zakaras, supra note 43 (asserting it constitutes nineteen percent); DISCOVERY PROPORTIONALITY MODEL, supra note 18, at 12 (asserting it constitutes ten to twenty percent).

\textsuperscript{223} QUARTARARO, supra note 22, at 83.

\textsuperscript{224} What are the Costs of eDiscovery?, supra note 209.

\textsuperscript{225} See generally Summer 2022 eDiscovery Pricing Survey Results, supra note 207.

3. Hosting

[59] Although the proposed amendment excludes attorney review from recoverable costs, a second cost associated with review would be recoverable: the cost of storing or “hosting” the ESI on a review platform while it is evaluated for relevance and privilege prior to production.227 The cost of hosting is typically based on time and volume—usually below $20 per month per gigabyte.228 However, that seemingly modest monthly amount can add up quickly. 229 Dropbox, Inc. v. Thru, Inc. illustrates this. 230 Plaintiff obtained reasonably favorable rates from $10 to $15 per month

227 Summer 2022 eDiscovery Pricing Survey Results, supra note 207.

228 Id.


per gigabyte\[^{231}\] and limited storage time to thirteen months by securing summary judgment,\[^{232}\] yet still racked up more than $90,000 in hosting fees because it was required to store as many as 1,262.4 gigabytes of data collected from its own custodians and received from the defendant in discovery.\[^{233}\]

[60] That hosting fees accumulate quickly only underscores the importance of earlier efforts to collect less and weed out more. Ancora Technologies, Inc. v. Apple, Inc. reveals how the parties’ decisions about collection and processing can impact (positively or negatively) the subsequent cost of hosting during review.\[^{234}\] Defendant reviewed “several hundred gigabytes” of ESI.\[^{235}\] The review spanned two years as additional ESI was periodically uploaded and reviewed.\[^{236}\] Defendant’s computer-assisted attorney review ultimately reduced the volume to 3.5 gigabytes, which were then produced to plaintiff.\[^{237}\] Putting aside the cost for attorney review (which must have been substantial), Defendant appears to have paid $71,611.52 for hosting the ESI prior to production.\[^{238}\] Some of the cost of


\[^{233}\] Kramer Declaration, supra note 231, ¶ 47 & Exh. H.


\[^{235}\] Id. at *8.


\[^{238}\] Id.
hosting (and some of the cost of attorney review) may have been avoided if the parties more successfully eliminated irrelevant ESI prior to attorney review, which appeared to have outpaced relevant ESI by a ratio of more than 50 to 1,²³⁹ (a ratio that is not uncommon).²⁴⁰

4. Production

[61] The “production” of ESI involves delivery of requested ESI to another party (usually in TIFF format and by way of a secure file transfer).²⁴¹ The cost of producing ESI is typically modest when compared to the cost of earlier steps in the process, but it can be substantial when the ESI must be maintained in a secure environment due to case-specific needs.²⁴² In re Ricoh Co. Patent Litigation involved such a scenario.²⁴³ The parties were unable to agree upon a format in which ESI would be produced, and they ultimately agreed to share the cost of maintaining the ESI on a

²³⁹ See id. at *13; see also In re Diisocyanates Antitrust Litig., Misc. No. 18-1001, 2021 WL 4295729, at *7, *11 (W.D. Pa. Aug. 23, 2021) (noting defendant’s concern about expanding scope of electronic documents subject to attorney review because it increases the cost of hosting the documents as well as the cost of reviewing them); Lawson v. Spirit AeroSystems, Inc., No. 18-1100, 2020 WL 3288058, at *19 (D. Kan. June 18, 2020) (“[T]he volume of data subjected to the TAR process materially impacts technology costs such as data processing and hosting.”).


²⁴³ In re Ricoh Co. Pat. Litig., 661 F.3d 1361, 1363 (Cir. 2011).
review platform that would be maintained by a third party. The costs for doing so ultimately tallied more than $465,000.

**B. Calculation of the Prevailing Party’s Recoverable Cost**

[62] The proposed statutory text would allow cost recovery for (1) the “proportionate cost of collecting, processing, and hosting electronically stored information prior to production,” and (2) “all the cost of producing or otherwise making such information available to the other parties.” This sum would then be subject to adjustment (upward or downward) based on certain case- and party-specific factors. More specifically, recoverable costs would be calculated in three steps.

[63] The first step involves multiplying the prevailing party’s total cost of collecting, processing, and hosting ESI prior to production by the ratio created by the volume of ESI produced over the volume of ESI collected. For example, this part of the statutory formula would result in a prevailing party recovering $25 if the total cost of collecting, processing, and hosting ESI prior to production was $100, but only twenty-five percent of the collected ESI was produced to the other parties.

[64] The second step involves adding to the product calculated in step one “all the cost of producing or otherwise making such information available to the other parties.” For example, this second part of the statutory formula would increase the prevailing party’s recovery to $26.50 from the previously calculated $25 if the cost of delivering the ESI to the other parties was $1.50. As noted previously, the cost of producing or making ESI available to the other parties is often modest when compared to other aspects of the e-discovery process. However modest, the cost of delivering ESI to the party that asked for it should be included among recoverable costs.

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244 *Id.* at 1365–66.

245 See *id.* at 1367; see also infra Part III.
The third step involves adjusting the sum calculated in the first two steps (either upward or downward) based on certain factors. For example, this step could increase (or decrease) recoverable costs depending on the district court’s evaluation of the content of applicable discovery requests, agreements, or court orders; the extent to which the losing party cooperated with the prevailing party to reduce the volume of ESI involved in the discovery process; the extent to which the prevailing party limited its production to the ESI requested by the losing party; the losing party’s ability to pay; and the closeness of the case on the merits.246

1. Proportionate Recovery for Collecting, Processing, and Hosting ESI Prior to Production

The proposed statutory text limits recovery to the proportionate cost of collecting, processing, and hosting ESI prior to production, calculated by multiplying the total of these costs by the ratio created by the volume of ESI produced or otherwise made available to the losing party over the volume of ESI collected. 28 U.S.C. § 1920(4) currently allows prevailing parties to recover “the costs of making copies of any materials where the copies are necessarily obtained for use in the case”—an awkward phrase, but one consistently interpreted to mean the cost of the materials delivered to the other parties.247 The proposed statutory text accomplishes this same objective, albeit with more precise language that limits cost recovery to the “proportionate cost of collecting, processing, and hosting ESI prior to production.” A prevailing party would be unable to recover the cost of

246 See infra Part III.A.1–2.


248 See CBT Flint Partners, LLC v. Return Path, Inc., 737 F.3d 1320, 1330 (Cir. 2013) (“[I]f a vendor does its chargeable work . . . on a large volume of documents before culling to produce only a subset, the awarded copying costs must be confined to the subset actually produced.”) (emphasis in original); see also In re Ricoh Co. Pat. Litig., 661 F.3d at 1365 (“[T]he prevailing party can recover . . . the costs incurred in preparing a single copy of the original documents . . . where that copy is supplied to the opposing party.”).
collecting, processing, and hosting ESI that was not produced to the losing party or for the cost of activities performed for the convenience of its attorney (or for its own use).\textsuperscript{249} This limitation ensures the losing party pays for what it asked for and protects against inefficiencies in collecting and processing ESI due to the prevailing party’s data management policies or unilateral decisions.\textsuperscript{250}

This portion of the amendment should result in a greater recovery than is authorized under current law. In \textit{United States ex rel. Barko v. Halliburton Co.}, for example, the court of appeals concluded the prevailing defendant could recover $362.41 for e-discovery.\textsuperscript{251} The proposed amendment would increase this amount to $4,032.09.\textsuperscript{252} Although the increase is modest, the outcome makes arithmetic sense given that defendant collected and processed vastly more ESI than was delivered to plaintiff. Under the statutory formula, however, this amount would be

\textsuperscript{249} eBay, Inc. v. Kelora Sys., LLC, No. C 10-4947, 2013 WL 1402736, at *5 (N.D. Cal. 2013) (“[C]opies made solely for counsel’s convenience or the litigant’s own use are not recoverable because that are not ‘necessarily’ obtained for use in the case.”).

\textsuperscript{250} Because cost recovery is based on a ratio, a producing party (in anticipation of becoming a prevailing party) may attempt to manipulate the cost recovery ratio by producing quantities of irrelevant documents to increase the correlation between the numerator and denominator in the hope of recovering a larger percentage of its e-discovery outlays. Of course, a producing party does not know whether it will be a prevailing party and the ongoing cost of hosting irrelevant information following production, coupled with the inefficiencies thereby imposed on its own use of the information, should limit (if not eliminate) any such perfidy. And, in any event, the statutory formula allows the district court to adjust the award based on the extent to which the prevailing party limited its production to the ESI requested by the losing party.

\textsuperscript{251} United States ex rel. Barko v. Halliburton Co., 954 F.3d 307, 312 (D.C. Cir. 2020).

\textsuperscript{252} This amount is calculated by (a) multiplying the prevailing party’s cost of collecting, processing, and hosting the ESI (here, $51,508.01) by the ratio created by the volume of ESI actually produced over the volume of ESI originally collected (here, 171,000/2,400,000) and then (b) adding to that product the amount for converting the electronic documents to TIFF and transferring them to the production media (here, $362.14).
subject to potential adjustment. For example, the court would be able to consider the causes for the difference between the volume of ESI collected by defendant and the volume of ESI produced to plaintiff; to use a number, the court would consider what caused defendant to collect more than fourteen times the ESI delivered to plaintiff. The court would be able to consider whether the mismatch resulted from plaintiff’s unwillingness to cooperate with defendant to limit the sources and locations from which potentially relevant ESI was collected, whether defendant pursued an overly conservative collection effort, whether the manner in which defendant maintained its ESI prevented a more targeted or less extensive retrieval, or whether there was not any identifiable cause for the mismatch that could be fairly attributable to either party.

2. Full Cost for Producing or Making ESI Available to the Other Parties

[68] The proposed statutory text would allow the prevailing party to recover “all the cost of producing or otherwise making [the electronically stored] information available to the other parties.” The cost of delivering ESI is often modest, both in absolute and relative terms. Nevertheless, there can be situations in which the prevailing party is required to make the ESI available to the other parties in a secure environment. CBT Flint Partners, LLC v. Return Path, Inc. recognized this possibility:

Where legitimate trade-secret concerns entitle a producing party to use a special form of production media (such as making production copies available for review on a secured computer, rather than allowing the requester to take possession of the production copies), the costs of such production media are recoverable . . . . Covered costs include the costs incurred in providing a secured computer for the time the requester is entitled to access to it, installing on the secured computer whatever review software the requester
requires, and copying the source code files to the secured computer.\textsuperscript{253}

Similar results were obtained in \textit{eBay, Inc. v. Kelora Systems, LLC}, where Plaintiff made source code available to Defendant on a “secure and locked down machine”;\textsuperscript{254} \textit{Georgetown Rail Equipment Co. v. Holland L.P.}, where Plaintiff made source code available to Defendant through an escrow company;\textsuperscript{255} \textit{Apple Inc. v. Samsung Electronics Co.}, where Plaintiff made source code and design prototypes available at a secure room maintained by a third party;\textsuperscript{256} and \textit{In re Ricoh Co. Patent Litigation}, where the parties agreed Defendant would make relevant ESI available to Plaintiff on a third party’s e-discovery software platform.\textsuperscript{257} The cost for making the ESI available in these cases ranged from $1,800, to $8,250, to $99,910.17, to $469,404.86, respectively.\textsuperscript{258}

\begin{footnotesize}
\begin{enumerate}
\item \textsuperscript{253} CBT Flint Partners, LLC v. Return Path, Inc., 737 F.3d 1320, 1332–33 (Cir. 2013).
\item \textsuperscript{254} eBay, 2013 WL 1402736, at *6.
\item \textsuperscript{257} \textit{In re} Ricoh Co. Pat. Litig., 661 F.3d 1361, 1365 (Cir. 2011).
\item \textsuperscript{258} The cost for making source code available on a secure machine in \textit{eBay} was $1,800. \textit{eBay v. Kelora}, 2013 WL 1402736 at *6. The cost for making source code available through an escrow company in \textit{Georgetown Rail Equipment} was $8,250. \textit{Georgetown Rail Equip.}, 2016 WL 3531301 at *2. The cost for making source code and prototypes available in a secure facility in \textit{Apple} was $99,910.17. \textit{Apple v. Samsung}, 2014 WL 4745933 at *8; And the total cost for making documents available on a database in \textit{In re Ricoh Co. Patent Litigation} was $469,404.86, an amount that was shared 50-50 by the parties. \textit{In re Ricoh Co. Pat. Litig.}, 661 F.3d at 1364.
\end{enumerate}
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3. Potential Adjustment to Cost Recovery Based on Case- and Party-Specific Factors

[69] The proposed amendment would give the district court discretion to adjust previously calculated recoverable costs based on certain factors—in effect, allowing the district court to award more (or less) based upon “(a) any applicable discovery request, agreement, or court order regarding the production of electronically-stored information; (b) the extent to which the losing party cooperated with the prevailing party to reduce the volume of electronically-stored information subject to discovery; (c) the extent to which the prevailing party limited its production to the electronically stored information requested by the losing party; (d) the losing party’s ability to pay; and (e) the closeness of the case on the merits.” As with any factors-based analysis, some may apply in one case but not another; some may tip the balance one way, while others tip the balance the other way, and some may offset or cancel out others.

a. Discovery Requests, Agreements, and Court Orders

[70] The proposed amendment would allow the district court to consider the terms of any applicable discovery request, agreement, or court order regarding discovery of ESI. A litigant pursuing discovery has substantial autonomy to designate what will be produced\(^\text{259}\) and the form in which it will be produced.\(^\text{260}\) Further, they can enlist the court’s assistance to obtain compliance when necessary.\(^\text{261}\) Such a litigant is constrained only by relevance, privilege, and proportionality.\(^\text{262}\) But that autonomy should not


\(^{260}\) Id. at 34(b)(1)(C).

\(^{261}\) Id. at 37(a)(1).

\(^{262}\) Id. at 26(b)(1).
come risk-free. A party that imposes obligations on another party to collect, process, and produce ESI that conforms to self-selected parameters should pay for the other party’s compliance. The district court’s ability to consider the losing party’s choices when determining cost shifting should discipline litigants (both plaintiffs and defendants) to consider thoughtfully the evidence needed to establish a claim or defense and then tailor their discovery requests accordingly.

Alternatively, the parties may exercise their autonomy by agreeing to greater (or lesser) cost shifting than might otherwise be allowed. Crawford Fitting Co. v. J.T. Gibbons, Inc. endorses such arrangements and allows the parties to decide their fate with respect to cost shifting. Litigants with roughly equal volumes of potentially relevant ESI (and correspondingly equivalent discovery burdens and expenses) may choose

[71] See, e.g., Plantronics, Inc. v. Aliph, Inc., No. C 09-01714, 2012 WL 6761576, at *15 (N.D. Cal. Oct. 23, 2012) (“An ESI world permits many different formats, and what the parties ask for and agree to regarding the form of production affects not only the utility of the production but also the costs attributable to it (and hence the taxable costs under section 1920(4)).”).

The choices made by the parties can have financial consequences. One observer calculated a seven-fold increase in cost to the requesting party when it asked the producing party to deliver ESI in TIFF format rather than native format. Craig D. Ball, Don’t Let Plaintiffs’ Lawyers Read This!!, CRAIGBALL: BALL IN YOUR COURT (Jan. 13, 2020), https://craigball.net/2020/01/13/dont-let-any-plaintiffs-lawyers-read-this [https://perma.cc/CR2A-4UB2].

Agreements (whether or not incorporated in a court order) regarding the form and format for the production of ESI would operate in the same fashion. If the parties agree to produce ESI in one format rather than another (e.g., TIFF format rather than native format), then the losing party should be required to reimburse the prevailing party the cost of producing the ESI in the agreed-upon format.

See Crawford Fitting Co. v. J.T. Gibbons, Inc., 482 U.S. 437, 444 (1987); see also In re Ricoh Co. Pat. Litig., 661 F.3d 1361, 1366 (Cir. 2011) (“If parties can exceed the allowable costs under section 1920 by contract, we see no reason why in light of Crawford they cannot likewise limit the allowable costs under section 1920 by contract.”).
to forego cost shifting to limit risk or, alternatively, agree to full cost shifting to ensure the prevailing party is made whole. Either way, the parties should retain the ability to establish private rules for cost shifting, and the district courts should enforce them.\textsuperscript{267}

\textbf{b. The Losing Party’s Willingness to Reduce the ESI Subject to Discovery}

[72] The proposed amendment would allow the district court to consider the extent to which the losing party cooperated with the prevailing party to reduce the volume of ESI the prevailing party was required to collect, process, and produce. A losing party should receive credit for making the discovery process less burdensome. For example, a downward adjustment may be appropriate, for example, when the losing party: (a) limited the custodians from whom ESI would be collected to those most likely to possess relevant information rather than those who may possess such information; (b) agreed to aggressive data processing to reduce volume or, when appropriate, further reductions through keyword searches prior to technology-assisted review\textsuperscript{268} to better isolate the most likely relevant documents; (c) tailored its discovery requests to exclude marginally relevant material; or (d) acquiesced to less-exacting standards for recall or

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\textsuperscript{267} This portion of the proposed amendment would impact cases involving “symmetrical discovery” in which both litigants have equivalent burdens and expenses and potentially similar interests in a private arrangement regarding cost shifting.

\textsuperscript{268} In re Diisocyanates Antitrust Litig., No. 18-1001, 2021 WL 4295729, at *5 (W.D. Pa. Aug. 23, 2021) (Technology-assisted review “is a process for ranking – from most to least likely to be responsive – or for classifying – as responsive or nonresponsive – a document collection, using computer software that learns to distinguish between responsive and non-responsive documents based on coding decisions made by one or more knowledgeable reviewers on a subset of the document collection. The software then applies what it has learned to the remaining documents in the collection.”). \textit{The Sedona Conference TAR Case Law Primer, Second Edition}, 24 SEDONA CONF. J. 1, 7 (2023) (stating that the district courts have “generally accepted the use of Technology Assisted Review (TAR) to search for electronically stored information (ESI) responsive to requests for production.”).
precision. A downward adjustment would be appropriate because the losing party voluntarily limited its access to potentially probative information (or agreed to shoulder increased responsibility to locate such information) and, in so doing, reduced the burden and expense imposed on the prevailing party.

[73] In contrast, this factor would allow an upward adjustment in cases like CBT Flint Partners, LLC v. Return Path, Inc. in which the district court specifically found that plaintiff’s discovery requests “essentially called for every document at [Defendant’s company]” and that plaintiff “engaged in no substantive discussion whatsoever about what discovery it really needed.”

A losing party’s cavalier attitude toward the burden imposed on the prevailing party, or its dogged insistence on receiving “each and every electronic document” regarding a claim or defense, would justify an adjustment to compensate the prevailing party for the expense that would have been avoided if the losing party acted more judiciously. The district courts do not expect perfection during discovery—neither should a party seeking it.

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269 Da Silva Moore v. Publicis Groupe, 287 F.R.D. 182, 189–90 (S.D.N.Y. 2012) (“Recall is the fraction of relevant documents identified during a review; precision is the fraction of identified documents that are relevant. Thus, recall is a measure of completeness, while precision is a measure of accuracy or correctness.”); In re Diisocyanates Antitrust Litig., 2021 WL 4295729, at *8 (“High recall suggests that substantially all responsive documents have been found; high precision suggests that primarily responsive documents have been found.”); In re Bair Hugger Forced Air Warming Prods. Liab. Litig., No. 15-2666, 2016 WL 3702959, at *8 (D. Minn. July 8, 2016).


271 See, e.g., Pension Comm. of the Univ. of Montreal Penson Plan v. Bank of Am. Secs., LLC, 05 Civ. 9016, 2010 U.S. Dist. LEXIS 4546, at *1 (S.D.N.Y. Jan. 15, 2010) (“In an era where vast amounts of electronic information is available for review, discovery in certain cases has become increasingly complex and expensive. Courts cannot and do not expect that any party can meet a standard of perfection.”).
c. The Prevailing Party’s Success at Producing What the Losing Party Wanted

[74] The proposed amendment would allow the district court to consider the extent to which the prevailing party successfully limited its production to what the losing party wanted. A producing party has built-in incentives to limit its production to only the documents requested by an adversary. It reduces hosting costs over the remainder of the case and limits the possibility of telegraphing other unrelated claims (at least when the producing party is a defending party). But perfection is not attainable; relevant documents will evade detection, and irrelevant ones will seep through. An upward adjustment would, therefore, be appropriate when the prevailing party achieves high marks for both recall and precision unrelated to earlier efforts by the losing party to reduce volume. An upward adjustment is appropriate because the prevailing party’s heightened efforts lessened the losing party’s burden to sift through meaningless documents to find the probative ones, while simultaneously making it easier on both parties to focus on the documents that may determine the outcome of the case.

[75] In contrast, this factor would allow a downward adjustment when the prevailing party badly missed the mark regarding recall or precision, regardless of whether it did so intentionally to thwart the losing party’s ability to develop its case or unintentionally due to a flawed process. Either way, the prevailing party’s actions adversely impacted the litigation process and shifted to the losing party the burden and expense of isolating relevant documents. In re Domestic Airline Travel Antitrust Litigation, a case involving alleged price fixing, is instructive in this regard.272 One of the defendants (United Airlines) produced 3.5 million electronic documents that its e-discovery software classified as “responsive.”273 It turned out that

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273 Id. at *2, *4.
only about seventeen percent of the documents were actually responsive.\textsuperscript{274} United’s overproduction of meaningless documents resulted from its failure to incorporate human review of the software’s decisions prior to production, as well as certain arithmetic errors when validating the results.\textsuperscript{275} The case demonstrates the potential for flawed processes and underscores the utility of building a safety valve into the cost shifting statute to ensure the losing party is not required to pay for documents it did not want, especially when the percentage of nonresponsive documents is unusually high.\textsuperscript{276}

\textbf{d. The Losing Party’s Ability to Pay}

[76] The proposed amendment would allow the district court to consider the losing party’s ability to pay and adjust recoverable costs downward to avoid extreme financial hardship.\textsuperscript{277} Many district courts already consider

\textsuperscript{274} \textit{Id.} at *2.


\textsuperscript{276} A requesting party may be willing to accept a higher percentage of irrelevant documents to increase the likelihood it receives all the relevant ones. As a result, the court should consider whether the requesting party knew or should have known when it negotiated for a higher percentage of relevant documents that doing so came with an increased risk of receiving a higher percentage of irrelevant documents. \textit{See, e.g.}, Lawson v. Spirit AeroSystems, Inc., No. 18-1100, 2020 WL 1813395, at *7 (D. Kan. Apr. 9, 2020) (“Effectively, one can cast either a narrow net and retrieve fewer relevant documents, along with fewer irrelevant documents, or cast a broader net and retrieve more relevant documents, but at the expense of retrieving more irrelevant documents.”) (quoting The Sedona Conference, \textit{The Sedona Conference Best Practices Commentary on the Use of Search & Information Retrieval Methods in E-Discovery}, 15 SEDONA CONF. J. 217, 238 (2014)).

\textsuperscript{277} The losing party’s ability to pay should take into consideration not only its individual financial circumstance, but also any right to indemnification it may possess with respect to costs.
this factor when evaluating the propriety of cost shifting, and the suggested text would simply make this factor applicable in all cases. Such discretion should alleviate the frequently expressed concern that cost shifting will chill some litigants’ willingness to pursue a claim or defense—a concern that will become increasingly acute as e-discovery permeates more and more modestly-sized, moderately-complex cases.

### e. The Closeness of the Case

The proposed amendment would allow the district court to consider the substantive issues in the case and whether they were close on the merits.

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278 *In re Paoli R.R. Yard PCB Litig.*, 221 F.3d 449, 464 (3d Cir. 2000) (reversing district court’s decision regarding recoverable costs because it failed to consider the plaintiffs’ ability to pay); Jackson v. Crews, No. 4:13-CV-651, 2014 WL 4185145, at *2 (N.D. Fla. Aug. 22, 2014) (“It would be inequitable to awards costs if the losing party lacks the ability to pay such costs.”).

279 *Farmer v. Arabian Am. Oil Co.*, 379 U.S. 227, 235 (1964) (“Items proposed by winning parties as costs should always be given careful scrutiny. Any other practice would be too great a movement in the direction of some systems of jurisprudence, that are willing if not indeed anxious, to allow litigation costs so high as to discourage litigants from bringing lawsuits, no matter how meritorious they might in good faith believe their claims to be.”); *In re Paoli R.R. Yard*, 221 F.3d at 457 (“In keeping with the American, as opposed to the British, policy judgment that the imposition of costs should not act as a bar to meritorious litigation, the types of costs recoverable under Rule 54(d)(1) are circumscribed.”).

280 Some courts consider the disparity between the parties’ respective abilities to pay, in effect considering the losing litigant’s ability to pay costs and the prevailing party’s capacity to absorb those costs. See Rivera v. NIBCO, Inc., 701 F. Supp. 2d 1135, 1144 (E.D. Cal. 2010) (“The financial disparity between the parties is also a relevant consideration.”). Other courts disregard the prevailing party’s ability to absorb costs. See White & White, Inc. v. Am. Hosp. Supply Corp., 786 F.2d 728, 731 (6th Cir. 1986) (“The district court erred in considering AHSC’s ability to bear its own expenses without hardship . . . .”). Consideration of the prevailing party’s financial circumstance tips the balance unnecessarily against well-heeled litigants who prevail against less well-heeled, but financially solvent, litigants. Put differently, consideration of the losing party’s ability to pay should fully protect the interests of those of limited means without unnecessarily also protecting the interests of those who can pay costs.
Many district courts already consider whether the case was a “close, competitive, hard fought” battle and often reduce recoverable costs when it was.281 While every case is different (and there can be exceptions), a litigant who loses after a trial in which they produced considerable evidence supporting a claim or defense, or in which the jury deliberated long and hard before reaching a verdict,282 should be treated differently from one who could not cobble together sufficient evidence to defeat a motion for


282 See Mann v. CSX Transp., Inc., No. 1:07-CV-3512, 2012 WL 12285296, at *2 (N.D. Ohio Mar. 2, 2012) (“The cases found to be ‘close and difficult’ have involved lengthy trials and addressed unsettled areas of law.”).
summary judgment\textsuperscript{283} or cause the trier of fact to think twice.\textsuperscript{284} Likewise, a litigant with a flimsy claim or defense, but who possesses the acumen to plead around the deficiency and defeat a motion to dismiss or for judgment on the pleadings (or who skillfully avoids summary judgment, notwithstanding threadbare evidence, by emphasizing all the benefits of the doubt given the nonmoving party), should be held accountable at the end of the case for the burden and expense imposed on the other party. The specter of cost shifting should animate all parties, plaintiff and defendant, to

\textsuperscript{283} See Rodriguez v. N.H. Ball Bearings, Inc., No. 2:18-CV-03876, 2019 WL 6711685, at *3 (C.D. Cal. Aug. 30, 2019) (granting summary judgment ruling this case was not close due to plaintiff’s inability to produce evidence supporting essential elements of her claims); Moore v. Weinstein Co., 40 F. Supp. 3d 945, 949 (M.D. Tenn. 2014) (deciding that the case was not close because “the plaintiffs brought a litany of claims, all of which were found to be insufficient to survive either the Rule 12 or Rule 56 standards.”); Mann, 2012 WL 12285296, at *2 (“Cases decided at the summary judgment stage . . . tend not to be considered ‘close and difficult.’”); Franklin v. Greenheck Fan Corp., No. 3:04-CV-13, 2005 WL 8165591, at *1 (E.D. Ky. Oct. 3, 2005) (“Plaintiff has not shown that the legal and factual issues in this case – a case that was disposed of by way of summary judgment – were complex or close and difficult to decide.”).

\textsuperscript{284} See United Biologics, L.L.C. v. Allergy & Asthma Network/Mothers of Asthmatics, Inc., No. 5:14-CV-35, 2021 WL 1968294, at *6 (W.D. Tex. May 17, 2021) (deciding this case was not close because plaintiff failed at trial to produce evidence supporting the essential elements of her claim; “the undersigned personally witnessed the defendants win the case hands-down.”); Smith v. Joy Techs., Inc., Civ. No. 11-270, 2015 WL 428115, at *3 (E.D. Ky. Feb. 2, 2015) (“The plaintiffs’ case was certainly worthy of trial, but trial worthiness does not automatically make a close case.”); Mam v. City of Fullerton, No. CV 11-1242, 2014 WL 12573550, at *3 (C.D. Cal. July 24, 2014) (“[A]fter an eight day trial, the jury spent only approximately two hours deliberating before reaching a unanimous verdict in favor of Defendants on all counts. . . . As such, this is not a basis to deny costs.”); Phillips v. Morbark, Inc., 519 F. Supp. 2d 598, 601 (D.S.C. 2007) (“[T]he fact that the case was submitted to the jury does not, in the court’s opinion, mean the case was ‘a very close case.’”); Hildebrandt v. Hyatt Corp., No. 1:02-CV-0003, 2006 WL 8441512, at *3 (S.D. Ohio Aug. 24, 2006) (case was not close given that jury deliberated verdict for only a few hours spread over two days; “[i]n addition, the Court’s observations of the trial proceedings indicate that the Defense presented credible witnesses to support their reasons for terminating Plaintiff’s employment and that the case was not particularly close and difficult.”).
evaluate the strength of their respective cases and adjust their litigation strategy (and range of acceptable outcomes) accordingly.

**CONCLUSION**

[78] Congress’s failure to provide meaningful guidance regarding which aspects of e-discovery are eligible for cost shifting has resulted in disagreement and dissatisfaction. To ameliorate this situation, Congress should revisit this issue and provide specific, detailed guidance about which aspects of e-discovery are eligible for cost shifting and under what circumstances. As advocated in this article, Congress should amend Section 1920 so that prevailing parties can recover the proportionate costs of collecting, processing, and hosting ESI prior to production, together with all the cost of producing ESI to the other parties, as may be adjusted taking into consideration: (a) any applicable discovery request, agreement, or court order regarding the production of electronically-stored information; (b) the extent to which the losing party cooperated with the prevailing party to reduce the volume of electronically-stored information subject to discovery; (c) the extent to which the prevailing party limited its production to the electronically stored information requested by the losing party; (d) the losing party’s ability to pay; and (e) the closeness of the case on the merits. In so doing, Congress would more fairly compensate prevailing parties for their e-discovery outlays while providing the district courts with sufficient discretion to achieve equitable outcomes in individual cases.