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NEGLECTED DISCOVERY

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ABSTRACT

In recent decades, many states have expanded discovery in criminal cases. These reforms were designed to make the criminal process fairer and more efficient. The success of these changes, however, depends on whether defense attorneys actually use the new discovery opportunities to represent their clients more effectively. Records from digital evidence platforms reveal that defense attorneys sometimes fail to carry out their professional duty to review discovery.

Analyzing a novel dataset we obtained from digital evidence platforms used in Texas, we found that defense attorneys never accessed any available electronic discovery in a substantial number of felony cases between 2018 and 2020. We also found that the access rate varied by county, year, offense type, attorney category, attorney experience, and file type.

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To better understand when and why attorneys neglect the available discovery, we supplemented the analysis of digital platform data with interviews of more than three dozen Texas criminal defense attorneys. We learned that defense attorneys were aware that many of their peers fail to review discovery in felony criminal cases. Our interviewees identified several explanations for the failure to access evidence. These include a lack of technological skills and support; the overwhelming volume of digital discovery; the client's desire for fast resolution of the case; the lesser gravity of some cases; high caseloads; low compensation; and, in some cases, simple lack of diligence. We consider the implications of these attorney practices for ineffective assistance of counsel litigation, effective supervision of defense attorneys, and criminal law reform.

TABLE OF CONTENTS

Introduc	tion	1175
I. Legal	Framework for Discovery in Criminal Cases	1180
II. Prior	Research on Defense Incentives and Discovery	
Pr	actices	1184
III. Dire	ct Evidence of Neglected Discovery	
A.	Quantitative Analysis	1189
B.	Qualitative Analysis	1198
	1. Technological Difficulties	
	2. Redundant or Irrelevant Evidence	1204
	3. Mismatch Between Client's Objectives and Discove	ery
	Review	1207
	4. Gravity of the Charge	1209
	5. Experience and Age of Attorney	1210
	6. Inadequate Pay and High Caseloads	1212
	7. Lack of Diligence	1215
	Mixed-Method Insights	
IV. Lega	al and Policy Implications	1217
A.	Constitutional and Professional Deficiencies	1217
B.	Implications for Criminal Law Reform	1223
	1. Technological and Administrative Solutions	1223
	2. Training and Paying Attorneys to Manage Digital	
	Discovery	1226
	3. Addressing Serious Individual Failures	
Conclusi	on	1228

INTRODUCTION

Expanded discovery opportunities play a central role in many recent criminal-law-reform initiatives. In the last decade, state courts and legislatures in New York, Virginia, California, Texas, Louisiana, and elsewhere moved toward earlier and broader discovery in criminal cases. These reforms give criminal defense lawyers more access to the evidence that the government has collected against their clients. Some statutes and court rules go well beyond the traditional criminal discovery model and mandate "open-file" discovery in criminal cases, requiring prosecutors to disclose virtually all evidence relevant to the case. The nationwide trend toward liberal discovery has been lauded for improving the fairness and efficiency of the criminal process.

The early empirical evidence about the effects of these new discovery rules, however, is mixed. A study of open-file-discovery laws in two states found that these laws did not lead to charging, plea bargaining, or sentencing outcomes that were more favorable to defendants. One possible reason could be that many defense attorneys ignore the expanded discovery that the law allows them to see. If defense attorneys in fact fail to review discovery in criminal cases, this would represent a neglect of their professional duties. It would also

^{1.} See Discovery Reform Legislative Victories: Summary of Recent Discovery Reforms Adopted by States, NAT'L ASS'N OF CRIM. DEF. LAWS. (May 21, 2020), https://www.nacdl.org/Content/DiscoveryReformLegislativeVictories [https://perma.cc/95KG-PKHU] (listing New York, Virginia, California, Texas, and Louisiana); N.Y. CRIM. PROC. LAW § 245.20 (McKinney 2022); VA. SUP. CT. R. 3A:11.

^{2.} See, e.g., Ariz. R. Crim. P. 15.1; Colo. R. Crim. P. 16; Ohio R. Crim. P. 16.

^{3.} See N.J. CT. R. 3:13-3; N.C. GEN. STAT. § 15A-903(a)(1)(a) (2011); TEX. CODE CRIM. PROC. ANN. art. 39.14 (West 2017); Michael Morton Act, S.B. 1611, 83d Leg., Reg. Sess. (Tex. 2013).

^{4.} See, e.g., Riley E. Clafton, A Material Change to Brady: Rethinking Brady v. Maryland, Materiality, and Criminal Discovery, 110 J. CRIM. L. & CRIMINOLOGY 307, 343 (2020); Janet Moore, Democracy and Criminal Discovery Reform After Connick and Garcetti, 77 BROOK. L. REV. 1329, 1334 (2012); Jenia I. Turner & Allison D. Redlich, Two Models of Pre-Plea Discovery in Criminal Cases: An Empirical Comparison, 73 WASH. & LEE L. REV. 285, 307 (2016).

^{5.} See Ben Grunwald, *The Fragile Promise of Open-File Discovery*, 49 CONN. L. REV. 771, 777 (2017) (analyzing new discovery laws and data from Texas and North Carolina).

^{6.} See id. at 825.

^{7.} MODEL RULES OF PRO. CONDUCT r. 1.1 cmt. 5 (AM. BAR ASS'N 1983) (stating that competent representation includes "inquiry into and analysis of the factual . . . elements of the problem"); CRIM. JUST. STANDARDS: DEF. FUNCTION § 4-4.1 (AM. BAR ASS'N 2017) (noting that defense lawyers have a duty to investigate the facts and should "commence promptly" to collect relevant information "in the possession of the prosecution, law enforcement authorities, and others").

raise constitutional questions about the fairness of the process and the validity of any convictions following such neglect.⁸

In a world of paper files, it is impractical to monitor defenseattorney efforts to review discovery on a large scale. But the recent adoption of digital evidence platforms in many district attorney's offices creates a digital record of discovery activity. These systems allow us to investigate whether—and, if so, when and why—defense attorneys fail to download evidence after the prosecution makes it available on the platform.

To pursue this inquiry, we obtained case-level data in felony cases from the digital evidence platforms used by prosecutors and defense attorneys in four Texas counties from 2018 to 2020.9 Analysis of the data reveals that defense attorneys failed to download any discovery at all in a substantial number of cases—27 percent of the felony cases in one county. 10 And the true failure rate of defense counsel is likely much higher than this topline number suggests. Our data reveal cases where the defense attorneys failed to access any electronic documents whatsoever, even though they had no meaningful access to hard copies of the evidence through other avenues. A much larger number of attorneys downloaded some documents but left others in the same case folder untouched on the electronic platform. And of course, we have no way to know if an attorney actually read or viewed a downloaded document. Thus, the untouched discovery we found in the data likely represents only the most extreme example of a larger failure by criminal defense attorneys.

We wanted to get behind the case statistics, hoping to understand when and why attorneys might neglect the discovery that prosecutors

^{8.} See Strickland v. Washington, 466 U.S. 668, 687–88 (1984) (holding that the Sixth Amendment right to counsel is violated where defense "representation fell below an objective standard of reasonableness" and that defendant is entitled to a remedy if counsel's failure prejudices the outcome in the case); Kimmelman v. Morrison, 477 U.S. 365, 386 (1986) (holding that counsel's failure to obtain discovery constituted deficient performance); United States v. Myers, 892 F.2d 642, 649 (7th Cir. 1990) ("A failure to read documents, not voluminous, that the government has disclosed pursuant to its duty to reveal potentially exculpatory materials is a sure sign of professional incompetence"). See generally Eve Brensike Primus, Disaggregating Ineffective Assistance of Counsel Doctrine: Four Forms of Constitutional Ineffectiveness, 72 STAN. L. REV. 1581, 1613–26 (2020) (discussing and endorsing the revival of structural ineffectiveness claims in Sixth Amendment litigation).

^{9.} See infra Part III.A. Our data set contains more than 63,000 felony cases from these counties. See infra Table 1.

^{10.} See infra Part III.A & Table 1.

^{11.} See infra Part III.A & Table 6.

made available to them. To do so, we conducted semistructured interviews with thirty-eight defense attorneys practicing in five Texas counties that use the same digital evidence platform that generated the download data. We asked what attorneys do (or do not do) and why. ¹³

The qualitative data, as detailed in Part III, offer several insights. First, many of our interviewees were aware of the problem that our quantitative data revealed. When defense attorneys take over a case from another attorney, they can see whether the preceding attorney accessed evidence files on the platform. Several interviewees reported that they had seen no effort to review discovery by some of their colleagues.¹⁴

Defense attorneys' explanations for neglected discovery were broadly consistent with our quantitative findings. Many of our interviewees suggested that technological shortcomings in the discovery platform (such as slow download speeds) might influence some attorneys to avoid their discovery duties.¹⁵ They also speculated that attorneys with inadequate office support for the discovery platform might have skipped the downloads for some clients.¹⁶ Over time, both of these problems receded as counties addressed the technical problems with the platform and attorneys improved their office equipment and support staff.¹⁷ This was consistent with our analysis of the platform data showing that the discovery access rate generally improved over time.¹⁸

Another observation about the download data confirms the problem of technological hurdles that many of our interviewees raised.¹⁹ We found that more voluminous file types—such as audio and

^{12.} See infra Part III.B.

^{13.} This Article relies on descriptive statistics to understand the court data; in a separate article, we turn to Bayesian statistical analysis to explore the correlation between the discovery access choices of defense attorneys and the various attorney and case characteristics that tend to be present when attorneys fail to access any discovery. That Bayesian analysis appears in Michael Braun, Ronald F. Wright & Jenia I. Turner, Defense Use of Digital Discovery in Criminal Cases: A Quantitative Analysis (Aug. 24, 2023) (unpublished manuscript) (on file with authors).

^{14.} See infra note 126 and accompanying text.

¹⁵ See infra Part III.B.1.

¹⁶ See infra Part III.B.1.

^{17.} See infra Part III.B.1.

^{18.} See infra Part III.A & Table 3 (showing that between 2018 and 2020, the case access rate improved in all counties, and the share of attorneys with at least one unaccessed case decreased in three counties and increased in one).

^{19.} See infra Part III.B.1.

video—were less likely to be downloaded than smaller document files.²⁰ In addition, the more evidence files uploaded for a particular case, the less likely that an attorney would view or download any single file in that case.²¹ These findings echo insights from recent scholarship discussing how the rapid expansion of digital discovery in criminal cases is straining defense attorneys' ability to review the evidence.²²

The experience levels of defense lawyers also caught our interviewees' attention. Less experienced attorneys, they said, are generally younger and more capable of dealing with the technological hurdles of the digital platform.²³ Newer attorneys also might prove more risk averse and less confident in their ability to evaluate cases quickly and therefore might be less willing to move ahead without consulting the discovery.²⁴ Again, the download data confirm this insight: the least experienced attorneys were generally the most likely to access evidence from the platform.²⁵

The rate of access also varied by the seriousness of the offense charged. The platform data show that attorneys downloaded evidence more frequently in the most serious felony cases.²⁶ This was, again, consistent with the observations of our interviewees, who suggested that attorneys might skip review when the stakes were lower.²⁷ They also noted situations when the client might prefer that the attorney bypass discovery, hoping for a quick guilty plea to a minor charge rather than a more thorough review of the evidence.²⁸

- 20. See infra Part III.A & Table 6.
- 21. See infra Part III.A.

- 23. See infra Part III.B.5.
- 24. See infra Part III.B.5.
- 25. See infra Part III.A & Table 5.
- 26. See infra Part III.A & Table 4.
- 27. See infra Part III.B.4.

^{22.} See Darryl K. Brown, Disclosure, Security, Technology: Challenges in Pre-Trial Access to Evidence, in The Oxford Handbook of Prosecutors and Prosecution 101, 112 (Ronald F. Wright, Kay L. Levine & Russel M. Gold eds., 2021); Amy F. Kimpel, Violent Videos: Criminal Defense in a Digital Age, 37 Ga. St. U. L. Rev. 305, 381–83 (2021); Jenia I. Turner, Managing Digital Discovery in Criminal Cases, 109 J. Crim. L. & Criminology 237, 254–56 (2019); 2017 Report of the Ad Hoc Committee To Review the Criminal Justice Act 227–29 (2018) [hereinafter 2017 Report] https://cjastudy.fd.org/sites/default/files/public-resources/Ad%20Hoc%20Report%20June%202018.pdf [https://perma.cc/8B95-8FYV].

^{28.} See infra Part III.B.3. These findings fall in line with prior research showing that detained defendants in less serious cases are more likely to plead guilty quickly in order to be released from jail, and they may not be interested in having their attorneys examine discovery. Paul Heaton, Sandra Mayson & Megan Stevenson, *The Downstream Consequences of*

We also analyzed the download data to determine how the rate of access varied by defense-attorney payment method: retained, appointed, or public defender.²⁹ Our interviewees suggested that financial incentives could explain some of the cases in which discovery was never accessed. In general, interviewees imagined that low compensation rates and high caseloads would result in some defense lawyers ignoring the available discovery.³⁰ Therefore, they reasoned, appointed counsel would be less likely to access evidence than retained counsel because retained counsel would earn more legal fees for the time spent downloading and reviewing the discovery. Our quantitative case-level data, however, do not confirm this broad-brush hypothesis: retained attorneys did not download discovery at a higher rate than public defenders or appointed attorneys.³¹

A few of our interviewees, however, offered a more specific hypothesis. They speculated that appointed counsel who are paid a flat rate for each case would be less likely to access discovery, while those paid by the hour would be more likely to do so.³² Our access data are consistent with this explanation. The counties that relied more heavily on flat-fee compensation for appointed counsel yielded the lowest access rates.³³

Misdemeanor Pretrial Detention, 69 STAN. L. REV. 711, 711 (2017) (finding that detained defendants are "25% more likely than similarly situated releasees to plead guilty"); Alisa Smith & Sean Maddan, Misdemeanor Courts, Due Process, and Case Outcomes, 31 CRIM. JUST. POL'Y REV. 1312, 1334 (2020) (finding that "in-custody defendants were two and a half times more likely to enter a plea" in the misdemeanor courts studied).

- 29. See infra Part III.A & Table 2.
- 30. See infra Part III.B.6. As we discuss at greater length in Part II, a sizeable literature supports these hypotheses. See, e.g., Aaron Gottlieb & Kelsey Arnold, The Effect of Public Defender and Support Staff Caseloads on Incarceration Outcomes for Felony Defendants, 12 J. SOC'Y FOR SOC. WORK & RSCH. 569, 571 (2021) (finding that high caseloads of public defender attorneys and support staff had a negative effect on felony defendants' pretrial detention rate and incarceration length); Radha Iyengar, An Analysis of the Performance of Federal Indigent Defense Counsel 23 (Nat'l Bureau of Econ. Rsch., Working Paper No. 13187, 2007), http://www.nber.org/papers/w13187 [https://perma.cc/2D5T-2XT6] (finding that low wages relative to other market options likely explained the worse performance of assigned counsel compared to public defenders in federal cases); James M. Anderson & Paul Heaton, How Much Difference Does the Lawyer Make? The Effect of Defense Counsel on Murder Case Outcomes, 122 YALE L.J. 154, 200 (2012) (finding that "extremely limited compensation" is an important factor explaining why appointed counsel performed worse than public defenders).
 - 31. See infra Part III.A & Table 2.
 - 32. See infra Part III.B.0.
- 33. See infra Part III.A & Tables 1 & 2. This finding is consistent with recent research showing that a switch from hourly to flat-rate payments in appointed cases resulted in diminished effort by defense attorneys. Andrew J. Lee, Flat Fee Compensation, Lawyer Incentives, and Case

This Article proceeds in four parts. Part I outlines the legal framework for discovery in criminal cases. In Part II, we summarize the legal scholarship examining defense-attorney discovery practices and incentives. We then describe our quantitative and qualitative research and findings in Part III. Our findings confirm the insights of prior scholarship that certain characteristics often present in indigent defense—low compensation, heavy caseloads, and pressure to resolve cases quickly—can impede effective representation.³⁴ Yet our qualitative analysis also suggests that at least some of the failures to review discovery are due to individual oversight and must be addressed accordingly.³⁵ While further study may help pinpoint the contributions that different factors make to some defense attorneys' neglect of discovery, this much is clear: new criminal discovery tools are only as meaningful as the willingness to make use of them.

After discussing our findings, we argue in Part IV that failure to access discovery often amounts to a failure by defense attorneys to carry out their constitutional and ethical duties to their clients.³⁶ We analyze the implications of this proposition for ineffective assistance of counsel litigation. We also suggest strategies for more effective training and supervision of defense attorneys.³⁷ We recommend better education in digital discovery, more appropriate pay structures for reviewing voluminous discovery (including a rejection of flat-rate payments for appointed counsel), and disclosing to defendants whether their attorneys properly accessed the available discovery.

I. LEGAL FRAMEWORK FOR DISCOVERY IN CRIMINAL CASES

The rules of discovery define the types of information that litigants must provide to their opponents during the pretrial process. In a series

Outcomes in Indigent Criminal Defense 24, 28 (Dec. 23, 2021) (unpublished manuscript), https://andrewlee543.github.io/files/AndrewLee_JMP.pdf [https://perma.cc/Y89J-6A2W] (finding that North Carolina appointed counsel who were paid a flat fee "on average spent less time on indigent cases, disposed of indigent cases more quickly, and were more likely to dispose of a case on the same day as their first meeting with the defendant," resulting in worse outcomes for defendants); Benjamin Schwall, *More Bang for Your Buck: How To Improve the Incentive Structure for Indigent Defense Counsel*, 14 OHIO ST. J. CRIM. L. 553, 554 (2017) (finding that when South Carolina switched from hourly to flat-rate compensation of appointed counsel, "the mean number of hours reported [by appointed counsel] dropped by more than 50%"); *see also infra* Part II.

- 34. See infra Part II.
- 35. See infra Part III.B.7.
- 36. See infra Part IV.A.
- 37. See infra Part IV.B.

of cases beginning with *Brady v. Maryland*,³⁸ the U.S. Supreme Court held that due process requires prosecutors to disclose material exculpatory and impeachment evidence to the defense before trial.³⁹ The constitutional mandate, however, has large gaps in the protection it offers.⁴⁰ Studies of exonerations reveal that the failure of prosecutors to disclose exculpatory evidence is a leading cause of wrongful convictions.⁴¹

Fortunately, the federal Constitution is not the only relevant source of law at work in criminal-case discovery. State governments over the last two decades have expanded prosecutorial discovery obligations through statutes and rules of criminal procedure. The law in most states today mandates that the prosecution disclose key categories of evidence, including witness names, witness statements, and police reports, regardless of their exculpatory value. More than a dozen states have gone further and adopted a form of "open-file" discovery, requiring prosecutors to disclose to the defense virtually all evidence relevant to the case. Even in jurisdictions where statutes and statewide rules retain a narrower approach to discovery, local rules, standing court orders, and internal prosecutorial office policies frequently require prosecutors to produce entire categories of evidence early in the process.

- 38. Brady v. Maryland, 373 U.S. 83 (1963).
- 39. *Id.* at 87; Giglio v. United States, 405 U.S. 150, 154–55 (1972).
- 40. Jonathan Abel, Brady's Blind Spot: Impeachment Evidence in Police Personnel Files and the Battle Splitting the Prosecution Team, 67 STAN. L. REV. 743, 755–56 (2015); Alafair S. Burke, Revisiting Prosecutorial Disclosure, 84 IND. L.J. 481, 489–90 (2009); Daniel S. Medwed, Brady's Bunch of Flaws, 67 WASH. & LEE L. REV. 1533, 1540–42 (2010).
- 41. See, e.g., JON B. GOULD, JULIA CARRANO, RICHARD LEO & JOSEPH YOUNG, PREDICTING ERRONEOUS CONVICTIONS: A SOCIAL SCIENCE APPROACH TO MISCARRIAGES OF JUSTICE 19 (2012); EMILY M. WEST, COURT FINDINGS OF PROSECUTORIAL MISCONDUCT CLAIMS IN POST-CONVICTION APPEALS AND CIVIL SUITS AMONG THE FIRST 255 DNA EXONERATION CASES 4 (2010); Brandon L. Garrett, Judging Innocence, 108 COLUM. L. REV. 55, 96 (2008).
- 42. See Darryl K. Brown, Discovery, in 3 REFORMING CRIMINAL JUSTICE: PRETRIAL AND TRIAL PROCESSES 147 (Erik Luna ed., 2017); Turner & Redlich, supra note 4, at 288–89, app. B.
 - 43. See Turner & Redlich, supra note 4, at 304–05, app. B.
- 44. Id. at app. B (listing seventeen states that now require some form of "open-file" discovery).
- 45. See Daniel S. McConkie, The Local Rules Revolution in Criminal Discovery, 39 CARDOZO L. REV. 59, 61 (2017); Mary Prosser, Reforming Criminal Discovery: Why Old Objections Must Yield to New Realities, 2006 WIS. L. REV. 541, 593.

Broad and early discovery in criminal cases is supposed to promote fairness in criminal cases. Defense attorneys who see the strengths and weaknesses of the prosecutor's evidence can take realistic positions during plea negotiations and can prepare more fully to answer that evidence at trial. Even in cases where guilt is not in question, an informed guilty plea is essential to just dispositions. A clear-cut requirement to disclose all evidence also reduces the chances that individual prosecutors will use their discretion in illegitimate or unfair ways.

The free flow of information between the parties prior to trial is also said to promote more efficient criminal proceedings. ⁴⁹ In an open-file-discovery regime, defense attorneys do not have to request specific items of evidence, and they avoid some disputes with prosecutors over what evidence is discoverable. ⁵⁰ When the defense understands the prosecution's case earlier in the process, the attorneys can also exchange viable plea offers more speedily. ⁵¹ Finally, advocates of open-file rules maintain that such rules make discovery more predictable and consistent across counties and among individual prosecutors. ⁵²

Defense attorneys predictably advocate for changes to traditional narrow discovery laws. Whether the questions arise in state legislatures, in statewide procedure rules committees, or in front of local judges during revisions of local rules, public defenders and private

^{46.} See Stephanos Bibas, Plea Bargaining Outside the Shadow of Trial, 117 HARV. L. REV. 2464, 2495 (2004).

^{47.} See, e.g., Darryl K. Brown, The Decline of Defense Counsel and the Rise of Accuracy in Criminal Adjudication, 93 CALIF. L. REV. 1585, 1624 (2005); R. Michael Cassidy, Plea Bargaining, Discovery, and the Intractable Problem of Impeachment Disclosures, 64 VAND. L. REV. 1429, 1466 (2011); Daniel S. McConkie, Structuring Pre-Plea Criminal Discovery, 106 J. CRIM. L. & CRIMINOLOGY 1, 4 (2017); Moore, supra note 4, at 1372; Eleanor J. Ostrow, Comment, The Case for Preplea Disclosure, 90 YALE L.J. 1581, 1583 (1981).

^{48.} See WILLIAM F. McDonald, Plea Bargaining: Critical Issues and Common Practices 51 (1985) (reporting a study finding that "prosecutors will make the discovery procedure more cumbersome for certain defense attorneys whom they disliked or distrusted"); Prosser, *supra* note 45, at 600 (explaining that removing prosecutorial discretion will "equalize the disclosure of information among all defendants").

^{49.} Turner & Redlich, *supra* note 4, at 290.

^{50.} See Rodney J. Uphoff, Criminal Discovery in Oklahoma: A Call for Legislative Action, 46 OKLA. L. REV. 381, 405 (1993).

^{51.} See Burke, supra note 40, at 516; Medwed, supra note 40, at 1560.

^{52.} See Tex. Defender Serv. & Tex. Appleseed, Improving Discovery in Criminal Cases in Texas: How Best Practices Contribute to Greater Justice 5 (2013).

defense attorneys usually ask for earlier access to broader categories of evidence from the government.⁵³

Defense lawyers take this posture regarding broader access because they know that review of discovery is critical to their ability to prepare the case. Indeed, lawyers have constitutional obligations to review discovery as part of their clients' Sixth Amendment right to effective assistance of counsel.⁵⁴ Professional standards also specify the duties to "[i]nvestigate defense attorney's and [e]ngage [i]nvestigators."55 Under the American Bar Association's Criminal Justice Standards on the Defense Function, the lawver should "commence promptly" to collect relevant information "in the possession of the prosecution, law enforcement authorities, and others."56 These rules and standards affirm the basic point that investigation of the facts-including review of discovery-is an essential element of effective representation in criminal cases.

^{53.} See, e.g., Vincent Stark, New York Discovery Reform Proposals: A Critical Assessment, 79 ALB. L. REV. 1265, 1265 (2015); Beth Schwartzapfel, Undiscovered, MARSHALL PROJECT (Aug. 7, 2017 10:00 AM), https://www.themarshallproject.org/2017/08/07/undiscovered [https://perma.cc/V8HV-32CZ]; Record Number of Advocates To Fill the Halls of the Virginia General Assembly in Support of Criminal Justice Reform, JUSTICE FORWARD VA. (Jan. 15, 2020), https://justiceforwardva.com/blog/record-setting-lobby-day [https://perma.cc/Z6GF-YKAU]; Brian M. Heberlig, Bruce C. Bishop & Nicholas P. Silverman, The Due Process Protections Act: A New Opportunity for Defense Counsel To Advocate for Broad and Meaningful Brady Orders in Criminal Cases, STEPTOE (Jan. 27, 2021), https://www.steptoe.com/en/news-publications/the-due-process-protections-act-a-new-opportunity-for-defense-counsel-to-advocate-for-broad-and-mea ningful-brady-orders-in-criminal-cases.html [https://perma.cc/K4J6-H3VF].

^{54.} The defendant's right to counsel is violated where "representation fell below an objective standard of reasonableness," and the defendant is entitled to a remedy if counsel's failure prejudices the outcome in the case. Strickland v. Washington, 466 U.S. 668, 688, 692 (1984). It can be difficult, however, to prove that a defendant suffered prejudice. *See* Bustamante v. United States, No. 08 C 3508, 2009 WL 1444716, at *2 (N.D. Ill. May 21, 2009), *aff'd*, 367 Fed. App'x. 708 (7th Cir. 2010) (holding that when a party alleges ineffective assistance of counsel based on a failure to review discovery, the party must identify specific evidence overlooked by counsel in failing to review the case file); Hardamon v. United States, 319 F.3d 943, 951 (7th Cir. 2003).

^{55.} CRIMINAL JUSTICE STANDARDS: DEFENSE FUNCTION § 4-4.1 (AM. BAR ASS'N 2017); MODEL RULES OF PRO. CONDUCT r. 1.1 & cmt. 5 (competent representation includes "inquiry into and analysis of the factual... elements of the problem").

^{56.} Criminal Justice Standards: Defense Function § 4-4.1 (Am. Bar Ass'n 2017).

II. PRIOR RESEARCH ON DEFENSE INCENTIVES AND DISCOVERY PRACTICES

While U.S. jurisdictions have adopted broader discovery laws over the last two decades, it remains an open question whether these laws actually deliver greater fairness in criminal cases. Scholars who study practices in the criminal courts have detailed the strong incentives for defense attorneys to ignore some of the discovery that the government offers.⁵⁷ They have also noted the weak enforcement mechanisms available to ensure that defense attorneys make full and proper use of available evidence.⁵⁸ Finally, a few observers of criminal courts have uncovered indirect evidence that poor incentives and weak enforcement regimes have combined to produce incomplete discovery.⁵⁹

The discovery system envisioned by legislators and rule drafters assumes a prosecutor who promptly makes available all the case evidence falling within the coverage of the rule and a defense attorney who promptly reviews that evidence and immediately translates that knowledge into more effective representation for the defendant. In reality, there is slippage on both ends of this idealized transaction.

On the prosecutor's side of the transaction, many scholars, judges, defense attorneys, and managers in prosecutor offices have noted the delays that are common in delivering discovery. They have also documented examples of prosecutors who never learned about evidence in the possession of the police or failed to deliver the known evidence that fell within the bounds of the discovery laws.

On the defense side of the transaction, there are many practical limits on defense counsel's ability to discharge the obligation to investigate. These include overwhelming caseloads and financial

^{57.} See infra notes 62–73 and accompanying text.

^{58.} See infra notes 74–75 and accompanying text.

^{59.} See infra notes 76–79 and accompanying text; note 230 and accompanying text (discussing enforcement challenges under a constitutional standard); Grunwald, *supra* note 5, at 825 (noting relatively low levels of funding that create poor incentives for attorneys).

^{60.} See United States v. Ruiz, 536 U.S. 622, 623 (2002) (stating that the Constitution does not require disclosure of material impeachment evidence prior to entry of a guilty plea); Miriam H. Baer, *Timing* Brady, 115 COLUM. L. REV. 1, 31–43 (2015) (describing common dilatory tactics); Turner & Redlich, *supra* note 4, at 294 (exploring the viability of rules that require prosecutors to deliver the relevant discovery prior to entry of a guilty plea).

^{61.} See Connick v. Thompson, 563 U.S. 51, 51 (2011); GOULD, supra note 41, at 19; WEST, supra note 41, at 4; Garrett, supra note 41, at 96.

incentives that reward quick evaluation and disposition of cases. ⁶² For many decades, scholars in fields such as law, criminal justice, data management, and economics have studied whether compensation rates and methods, caseload levels, and attorney characteristics affect the quality of criminal defense representation in predictable ways. ⁶³ These studies have not produced specific findings related to discovery, but they have identified the general conditions that tend to influence the effectiveness of criminal defense. They offer indirect evidence of the likely stress points for discovery practice.

Research has found that high caseloads—a significant problem for public defenders and appointed counsel in many jurisdictions—hamper defense attorneys' investigative and legal efforts.⁶⁴ Other structural factors, such as the frequent use of pretrial detention and the pressure to resolve cases quickly, also affect the ability of defense attorneys to provide high-quality representation. Of particular relevance to discovery review, detained defendants in less serious cases may feel compelled to plead guilty quickly to be released from jail on time served.⁶⁵ These defendants may not be interested in having their attorneys spend significant time reviewing discovery or pursuing investigative leads because the time spent investigating facts by the attorneys is time spent behind bars in pretrial detention for the clients.

More recently, enriched court data have made it possible to study specific phases of criminal proceedings and particular types of defense-

^{62.} See Brown, supra note 47, at 1606 (anticipating failure of defense counsel to investigate cases adequately); Thea Johnson, What You Should Have Known Can Hurt You: Knowledge, Access, and Brady in the Balance, 28 GEO. J. LEGAL ETHICS 1, 23–24 (2015) (noting how resource constraints make defense investigation difficult and thus render discovery an even more essential source of information for defense attorneys); Kate Weisburd, Prosecutors Hide, Defendants Seek: The Erosion of Brady Through the Defendant Due Diligence Rule, 60 UCLA L. REV. 138, 158, 172–73 (2012) (same).

^{63.} See Ronald F. Wright & Jenny Roberts, Expanded Criminal Defense Lawyering, 6 ANN. REV. CRIMINOLOGY 241, 255–57 (2023) (surveying empirical studies of defense-attorney performance).

^{64.} See, e.g., Gottlieb & Arnold, supra note 30, at 571 (finding that high caseloads of public defender attorneys and support staff had a negative effect on felony defendants' pretrial detention rate and incarceration length); Richard Klein, The Emperor Gideon Has No Clothes: The Empty Promise of the Constitutional Right to Effective Assistance of Counsel, 13 HASTINGS CONST. L.Q. 625, 666 (1986); Iyengar, supra note 30, at 4, 22–24 (finding that high caseloads likely contributed to worse performance of assigned counsel as compared to public defenders in federal cases).

^{65.} See Heaton, Mayson & Stevenson, supra note 28, at 711 (finding that "detained defendants are 25% more likely than similarly situated releasees to plead guilty"); Smith & Maddan, supra note 28, at 1334 (finding that "in-custody defendants were two and a half times more likely to enter a plea" in the misdemeanor courts studied).

attorney activity. Such studies can pinpoint lawyers' work during the pretrial detention process, plea negotiation, trial preparation, trial, and sentencing.⁶⁶ Recent studies also managed to track the total hours devoted to each case: one such study found less effort by defense attorneys in appointed cases, particularly when work is reimbursed at a flat rate.⁶⁷ Finally, some research has examined how attorney characteristics, such as the experience level of the attorney or the quality of the law school from which the attorney graduated, may affect outcomes for defendants.⁶⁸

^{66.} See Carlos Berdejó, Gender Disparities in Plea Bargaining, 94 IND. L.J. 1247, 1250 (2019) (studying the role of gender in prosecutors' approaches to plea negotiations); Alexander Testa & Brian D. Johnson, Paying the Trial Tax: Race, Guilty Pleas, and Disparity in Prosecution, 31 CRIM. JUST. POL'Y REV. 500, 503 (2019) (studying racial disparities in guilty pleas); Thomas W. Frampton, For Cause: Rethinking Racial Exclusion and the American Jury, 118 MICH. L. REV. 785, 790 (2020) (analyzing the use of challenges for cause by prosecutors and defense attorneys during jury selection); Anne Metz, John Monahan, Luke Siebert & Brandon L. Garrett, Valid or Voodoo? A Qualitative Study of Attorney Perceptions of Risk Assessment in Sentencing and Plea Bargaining, 48 J. CMTY. PSYCH. 2053, 2055 (2020) (assessing prosecutors' and defense attorneys' approach to risk during sentencing).

^{67.} See, e.g., Lee, supra note 33, at 24, 28 (finding that North Carolina appointed counsel who were paid a flat fee "on average spent less time on indigent cases, disposed of indigent cases more quickly, and were more likely to dispose a case on the same day as their first meeting with the defendant," resulting in worse outcomes for defendants); Schwall, supra note 33, at 554 (finding that when South Carolina switched from hourly to flat-rate compensation of appointed counsel, "the mean number of hours reported [by appointed counsel] dropped by more than 50%"); Amanda Agan, Matthew Freedman & Emily Owens, Is Your Lawyer a Lemon? Incentives and Selection in the Public Provision of Criminal Defense, 103 REV. ECON. & STAT. 294, 306 (2021) (finding that "lawyers' behavior is responsive to changes in the compensation structure" from hourly to flat-fee); Iyengar, supra note 30, at 28 (finding that low wages partially explained worse performance of assigned counsel compared to public defenders in federal cases); Anderson & Heaton, supra note 30, at 200 (finding that "extremely limited compensation" is an important factor explaining why appointed counsel performed worse than public defenders); Thomas H. Cohen, Who is Better at Defending Criminals? Does Type of Defense Attorney Matter in Terms of Producing Favorable Case Outcomes, 25 CRIM. JUST. POL'Y REV. 29, 29 (2014) ("[P]rivate attorneys and public defenders secure similar adjudication and sentencing outcomes for their clients. Defendants with assigned counsel, however, receive less favorable outcomes compared to their counterparts with public defenders.").

^{68.} See David S. Abrams & Albert H. Yoon, The Luck of the Draw: Using Random Case Assignment To Investigate Attorney Ability, 74 U. CHI. L. REV. 1145, 1145 (2007) (finding that length of experience, but not law school attended, affected outcomes for clients of public defenders in Las Vegas, Nevada); Iyengar, supra note 30, at 4 (finding that lack of experience and lower quality of law school attended, combined with lower wages and high caseloads, likely explained worse performance of assigned counsel as compared to public defenders in federal cases); Michael A. Roach, Indigent Defense Counsel, Attorney Quality, and Defendant Outcomes, 16 Am. L. & Econ. Rev. 577, 612 (2014) (finding that the lower quality of the law school attended is correlated with inferior outcomes for assigned counsel).

A more recent line of scholarship has highlighted the special challenges that voluminous digital discovery presents for effective representation in criminal cases.⁶⁹ Defense attorneys have encountered a range of technical difficulties when the government uses new or cumbersome electronic methods to deliver the discovery.⁷⁰ These challenges have been particularly acute for solo practitioners in appointed cases because they tend to lack the resources to hire the necessary experts to help them handle complex or voluminous discovery.⁷¹ The relative isolation of assigned counsel from peers may also explain why such counsel may be particularly "slow to adopt new strategies," including new technologies.⁷² By contrast, better training and better technology infrastructure likely position public defenders, despite their higher caseloads, to better handle digital discovery.⁷³

Many defense attorneys face these discovery disincentives alone: there is no effective monitoring or enforcement mechanism to check on their compliance. While public defender offices might audit the discovery efforts of their own attorneys, attorneys in private practice often operate within small law firms or in solo practice⁷⁴ and therefore may face no internal accountability for their discovery choices. In theory, judges could question attorneys about their discovery activity, or clients might ask their attorneys about the government's evidence. In practice, these checks do not happen often.⁷⁵

^{69.} See Brown, supra note 22, at 112–13; Kimpel, supra note 22, at 310–12; Turner, supra note 22, at 239–40.

^{70.} See Turner, supra note 22, at 251–56.

^{71.} Turner, supra note 22, at 293–94.

^{72.} See Anderson & Heaton, supra note 30, at 198.

^{73.} See, e.g., Cohen, supra note 67, at 31, 53 (identifying better training as an advantage of public defenders over assigned counsel); Turner, supra note 22, at 252 (noting that federal public defenders have better digital discovery infrastructure than appointed counsel).

^{74.} E.g., James R. Neuhard, The Right to Counsel: Shouldering the Burden, 2 T.M. COOLEY J. PRAC. & CLINICAL L. 169, 174 (1998) ("[M]ost criminal defense attorneys practice in solo or small firms."). A search at the Martindale website for law firms in "Criminal Law" practice in the United States produced 48,491 solo firms; 20,540 firms of 2–9 lawyers; 2,365 firms of 10–24 lawyers; 787 firms of 25–49 lawyers; 377 firms of 50–99 lawyers; and 429 firms of 100 or more lawyers. See Martindale, https://www.martindale.com (search "Criminal Law"; then select "Law Firms" category; then filter by firm size) (last visited Sep. 18, 2023) (September search results on file with authors).

^{75.} Judges in Texas occasionally ask if the attorney had access to discovery, but they do not ask if the attorney actually reviewed the discovery. We interviewed defense attorneys in different Texas counties and anonymized those interviews. In one such interview, the attorney explained: "In serious cases, I know [the judges will] say, 'Have you had access to it?' I've never heard a judge say, 'Have you viewed it?' ... Then the defendant himself or herself actually signs that

Existing studies on criminal-defense incentives and constraints do not directly measure discovery activity by defense lawyers; scholars have not yet produced rich evidence about how defense attorneys perform under open-file-discovery statutes. But the studies of attorney activity at other stages of the criminal process suggest that limited time and resources give defense attorneys powerful reasons to compromise—to cut corners, in other words. 76 One early study of the effects of open-file-discovery statutes offered intriguing results consistent with this prediction. Professor Ben Grunwald tested the operation of new open-file-discovery statutes in North Carolina and Texas and found "relatively little evidence that defendants fared significantly better in terms of charging, plea bargaining, and sentencing, or that the trial rate or time-to-disposition fell as a result of open-file."⁷⁷ Grunwald hypothesizes that heavy caseloads and lack of resources may explain defense attorneys' failure to review discovery.⁷⁸ He speculates that "many attorneys may have lacked the time and resources to examine the contents of discovery packages carefully" and to follow up on investigative leads.⁷⁹ To test this hypothesis, however, researchers would need to obtain records of attorneys' discovery practices – something that was impossible until recently, when counties began introducing digital evidence platforms.

release form, saying 'I've signed off, had access to all the discovery." Video Interview with F52, Att'y, Triangle Cnty. (Jan. 24, 2022). Another attorney added: "I have not, except in rare circumstances with one or two particular attorneys, I believe, seen where the judges inquired whether you reviewed particular pieces of evidence." Video Interview with F53, Att'y, Triangle Cnty. (Jan. 24, 2022).

^{76.} One of the few empirical studies of discovery activity is Turner & Redlich, *supra* note 4, at 294. Effective defense lawyering requires the evaluation of potential evidence once it arrives via discovery. Researchers have revealed the limited capacity of defense attorneys to evaluate possible confirmation bias in the opinions of forensic expert witnesses for the prosecution or to evaluate the likelihood that a defendant made a false confession. *See* Sara C. Appleby & Hadley R. McCartin, *Effective Assistance of Counsel: An Empirical Study of Defense Attorneys' Decision-making in False-Confession Cases*, 2019 CARDOZO L. REV. DE NOVO 123, 144; Nikoleta M. Despodova, Jeff Kukucka & Alexa Hiley, *Can Defense Attorneys Detect Forensic Confirmation Bias? Effects on Evidentiary Judgments and Trial Strategies*, 228 ZEITSCHRIFT FÜR PSYCHOLOGIE 216, 216 (2020).

^{77.} Grunwald, *supra* note 5, at 777.

^{78.} *Id.* at 825.

^{79.} *Id.* (noting further that indigent defense funding in both states was below the national average).

III. DIRECT EVIDENCE OF NEGLECTED DISCOVERY

A. Quantitative Analysis

As states broadened criminal-case discovery duties, prosecutors' offices began looking for electronic systems that would allow them to keep track of items they disclosed, protect them against unfounded claims of prosecutorial misconduct, and help them manage cases more effectively. Court systems around the country installed digital casemanagement platforms, many of which also allowed prosecutors to upload evidence and to share it with the defense through the click of a button.⁸⁰

Digital discovery applications record details and generate logs about the timing of file uploads by the prosecution, some characteristics of the files uploaded, the time of notification to the defense attorney, and the time of the defense lawyer's efforts to view or download each file. A jurisdiction that makes robust use of online file transfers creates a more detailed record than ever before about which types of files the defense lawyer accessed and when that access happened.⁸¹

We took advantage of the introduction of digital evidence platforms in multiple Texas counties to examine the rates of discovery access by defense attorneys. We submitted Public Information Act requests to seven Texas county prosecutor's offices for data concerning digital evidence in felony cases closed by those offices between January 1, 2018, and December 31, 2020. We received useable data from four counties: Pentagon, Rectangle, Triangle, and Circle. ⁸² Because of our

^{80.} See, e.g., TECHSHARE, https://techsharetx.gov [https://perma.cc/M929-XRNR]; PROSECUTOR BY KARPEL, http://www.prosecutorbykarpel.com [https://perma.cc/4R2T-9J5B]; Enterprise Attorney Manager: Powered by Odyssey, TYLER TECHS., https://www.tylertech.com/products/odyssey/attorney-manager [https://perma.cc/P52P-WPKY]; eProsecutor, J. TECHS., http://journaltech.com/eprosecutor [https://perma.cc/E9WY-S9AD]; see also ROBIN OLSEN, LEIGH COURTNEY, CHLOE WARNBERG & JULIE SAMUELS, URB. INST., COLLECTING AND USING DATA FOR PROSECUTORIAL DECISIONMAKING 10 (2018), https://www.urban.org/sites/default/files/publication/99044/collecting_and_using_data_for_prosecutorial_decisionmaking.pdf [https://perma.cc/34T6-UW74] ("Almost all offices report having at least one electronic case management system, except among the small offices, where 32 percent report they do not have one.").

^{81.} Because the system log only records information that is already visible to the prosecutor and the court, review of the data does not compromise confidential client information.

^{82.} All counties in our study use the same digital discovery platform. A fifth county, Line County, the smallest and only rural one in our group, shared incomplete data with us. As noted

confidentiality promise to our interviewees and some of our data providers, we use pseudonyms for the participating counties, assigning shapes with larger numbers of sides to counties with larger populations. Accordingly, Pentagon, Rectangle, and Triangle are large urban counties, with Pentagon being the most populous and Triangle being the least populous of the three. Circle is a midsized county.

Counties provided data about specific items of digital evidence and the cases associated with them.⁸³ We say that a case is *downloaded* or *accessed* whenever defense counsel views any evidence file associated with a case.⁸⁴ For example, if the prosecution made ten evidence files available for discovery and the defense attorney downloaded all, some, or one of the files, then the attorney accessed the case, regardless of the precise number of downloaded files. We analyzed access to cases with at least one evidence file that was made discoverable to the defense between 2018 and 2020.⁸⁵ Summary descriptive statistics reveal important patterns in the downloads.⁸⁶

in Part III.B, while we do not use Line County in our quantitative analysis, we did conduct interviews there because we were expecting that we would receive the complete data.

83. An *evidence file* is a computer file containing evidence related to a case. A *case* is comprised of one or more charges with a common state tracking number. Each tracking number ("TRN") is established at the time of initial arrest, so all related incidents, charges, and counts fall under it. For example, a domestic violence case might consist of incidents on multiple dates, with multiple offenses (for example, assault and a protective order violation), resulting in multiple charges under the same TRN.

Each case includes the incident date, an offense description, a unique identifier for the defense attorney, and the discovery year (the year the most recent evidence file for the case was made available by the prosecution). Although the counties use the same platform for digital discovery, each county configures the platform differently and decides on its own which data it retains and is willing to share. Some counties provided information outside of the definition of charge record we use for our analysis.

- 84. For our purposes, we define the term "download" to refer to any attempt to either save an evidence file to local storage or view it online. The system cannot distinguish between a successful download from a download that was initiated but interrupted. Nor can the system confirm if the defense physically viewed the contents of the file after saving it locally. Triangle County included the most recent download date for individual evidence files, but Pentagon, Rectangle, and Circle Counties provided download dates only at the case level.
- 85. We dropped records that indicate that the prosecution did not proceed with the charge (for example, no bill, waived, rejected); that likely do not refer to a unique charge (for example, consolidated, transfer, administrative closure); that refer to post-sentencing proceedings such as probation revocation or discharge; or that contain missing or ambiguous offense descriptions, attorney identifiers, or attorney category.
- 86. We discuss the quantitative data in greater detail, and we conduct a multivariate quantitative analysis that relies on Bayesian inference in Braun, Wright & Turner, *supra* note 13. In this Article, we briefly discuss the summary statistics to provide context for our interview findings.

First, the platform data show that attorneys failed to access cases in a significant proportion of cases. The percentage of felony cases in which *no evidence at all* was accessed by the attorney between 2018 and 2020 ranged from 4 percent in Rectangle County to 27 percent in Pentagon County.⁸⁷ Likewise, a substantial percentage of attorneys in the four counties, ranging from 36 percent in Rectangle County to 61 percent in Pentagon, had at least one felony case between 2018 and 2020 for which they never viewed or downloaded *any* of the files disclosed by the prosecution.⁸⁸

The case access rates were substantially different across counties. The two counties with the *lowest* rates of electronic access—Pentagon and Triangle—are both large urban areas. However, another large urban county—Rectangle—presented the *highest* level of discovery access.

	Pentagon	Rectangle	Triangle	Circle
Total cases	20,705	25,755	15,236	2,717
Percent of cases not accessed	27%	4%	19%	5%
Unique attorneys	840	785	511	86
Percent of attorneys with one or more unaccessed case		6%	61%	40%

Table 1: Aggregate Downloads by County⁸⁹

One possible explanation for this geographic variation is the method of payment for appointed counsel, who handle a large majority of felony cases. ⁹⁰ Specifically, while appointed counsel is paid per hour for handling felony cases in Rectangle County, where access rates are

^{87.} See infra Table 1.

^{88.} See infra Table 1.

^{89.} Starting with the data we received from the prosecutors in each county, as indicated in *supra* note 85, we removed data entries not relevant for filing new felony charges and calculated the number of remaining cases that indicated no attempted downloads by the attorney. For further details about our methodology, see Braun, Wright & Turner, *supra* note 13, at 10–12, 17–18.

^{90.} Between 2018 and 2020 in Texas, more than 80 percent of felony cases featured appointed counsel. TEX. INDIGENT DEF. COMM'N, ANNUAL REPORT FOR FISCAL YEAR 2021, at 18 (Sept. 2020–Aug. 2021), https://www.tidc.texas.gov/media/oxmjox34/tidc-annual-report-fy21_final.pdf [https://perma.cc/H7TE-T589].

highest, the presumptive payment method in appointed felony cases is flat rate in Pentagon and Triangle Counties, where rates are lowest.⁹¹ Prior studies have found less effort by defense attorneys when work in appointed cases is reimbursed at a flat rate.⁹²

The rate of compensation may also make a difference. In Triangle County, even when attorneys choose the hourly rate, that rate is substantially lower than the hourly rate for surrounding counties.⁹³ Conversely, in Circle County, which also sets a presumptive flat rate for appointed work, the flat rate is higher than the rate used by comparable counties in Texas.⁹⁴ This may encourage the higher discovery access rate we observe in Circle.

Analysis of caseloads of appointed counsel across Texas also found that in Circle County and Rectangle County, a smaller proportion of appointed attorneys are overburdened with cases than appointed counsel in Pentagon and Triangle. This may be another reason why Circle and Rectangle County attorneys are more diligent in accessing evidence files.

We further examined whether the rate of accessing evidence varies at the case level by attorney category: retained, appointed, or public defender. We found that attorney category did not appear to have a significant effect on whether a single case was accessed. However, appointed counsel were more likely than retained lawyers to have at least one unaccessed case. We have at least one unaccessed case.

^{91.} We obtained data on pay methods and rates from the Texas Indigent Defense Commission. Because a flat fee is merely the default, but not the exclusive, mode of payment for appointed counsel in Triangle, Pentagon, and Circle counties, further analysis of payment-voucher data would be necessary to analyze whether flat-fee payment is correlated with lower rates of accessing discovery among appointed counsel.

^{92.} See, e.g., Lee, supra note 33, at 3–4; Schwall, supra note 33, at 554; Agan, Freedman & Owens, supra note 67, at 297.

^{93.} Telephone Interview with F1, Att'y, Triangle Cnty. (Jan. 7, 2022).

^{94.} Telephone Interview with Dist. Ct. Judge, Circle Cnty. (Jan. 6, 2022).

^{95.} Nicholas T. Davis, George Naufal, Heather Caspers & Geoff Burkhart, Indigent Defense Caseloads in Texas: Assessing the Extent of High-Volume Practice (2018) (unpublished manuscript), http://www.nicholastdavis.com/wp-content/uploads/2018/08/caseload_draft.pdf [https://perma.cc/58QF-ZFB6].

^{96.} The data from Pentagon County did not contain a designation of the category of attorney. Consequently, we manually looked up the attorney category in the online system of the clerk of the court for a random subset of 4,943 cases. The percentages in Table 2 for Pentagon County are based on this subset.

^{97.} Braun, Wright & Turner, supra note 13, at 20–21.

^{98.} See infra Table 2.

	Percent	age of case	s not acce	Percentage of attorneys with one or more unaccessed case					
	Pentagon Rectangle Triangle		Pentagon Rectangle Triangle Circle		e Circle Pentagon Rectar		Rectangle	Triangle	Circle
	Flat fee ¹⁰⁰	Hourly	Flat fee	Flat fee	Flat fee	Hourly	Flat fee	Flat fee	
Appointed	28%	3%	18%	5%	66%	54%	75%	42%	
Retained	27%	6%	20%	4%	38%	25%	46%	16%	
PD	19%				48%				

Table 2: Non-Access Percentages by Attorney Category⁹⁹

In Pentagon County, we were also able to obtain data on the rate of access by public defenders. Public defenders were more likely than appointed counsel to access cases. ¹⁰¹ This was surprising, as Pentagon County's public defenders have higher-than-average caseloads among public defenders in the state and higher per-attorney caseloads than Pentagon County assigned counsel. ¹⁰² Our finding is thus contrary to predictions that high caseloads for public defenders would undermine the effectiveness of their representation. ¹⁰³ Better training and better technology infrastructure in a public defender's office might help explain why public defenders, despite high caseloads, do better than appointed counsel in their discovery access rates. ¹⁰⁴

We also examined the association between the year evidence was made discoverable and the rate of access. As Table 3 shows, we found

^{99.} For further detail on our data cleaning and selection, see Braun, Wright & Turner, *supra* note 13, at 10–12, 20.

^{100.} In all counties labeled as "flat fee," a flat fee was the default method of payment for appointed attorneys in 2018–2020, but attorneys could request to be paid per hour. In Rectangle, the only method of compensation was "hourly."

^{101.} See supra Table 2. The platform retains attorney category information only for Rectangle, Circle, and Triangle Counties. For Pentagon County, we manually looked up the attorney category in the court database for a random sample of 24 percent of cases.

^{102.} Davis et al., supra note 95.

^{103.} See, e.g., Gottlieb & Arnold, supra note 30, at 571 (theorizing that public defenders with smaller caseloads "are likely to be able to put forth a more thorough defense because they have more time to devote to each individual case").

^{104.} See supra note 73 and accompanying text.

increases in case access over time in all counties.¹⁰⁵ The trend over time was not as clear with respect to the percentage of attorneys who had one or more unaccessed cases in the different counties.

	Percent	age of case	es not acc	essed	Percentage of attorneys with one o more unaccessed case			
	Pentagon	Rectangle	Triangle	Circle	Pentagon	Rectangle	Triangle	Circle
2018	30%	5%	20%	7%	58%	27%	56%	34%
2019	29%	4%	19%	4%	61%	30%	55%	27%
2020	22%	3%	17%	3%	56%	28%	54%	30%

Table 3: Non-Access Percentages by County and Year¹⁰⁶

We then explored the association between case access and offense type. Rates of accessing the evidence were associated with the seriousness of the felony offense. Specifically, we observed that the most serious offenses—homicide and sexual offenses—were the most likely to be accessed. We list the offenses in Table 4 in descending order of their seriousness.¹⁰⁷

Although there were some exceptions to this pattern, in general, as the stakes of the case increased, attorneys were more diligent about downloading evidence disclosed by the prosecution.

^{105.} See infra Table 3.

^{106.} For details about our methodology and data selection, see Braun, Wright & Turner, *supra* note 13, at 10–12.

^{107.} Cases with more than one charge are classified with the most serious charge in the case file. We ranked offense seriousness based on the severity of the authorized sentences, making a few adjustments for crimes that typically result in sentences at one end or the other of the authorized range. The particular statutory sections that map into each of these offense types are available at https://drive.google.com/drive/folders/1q5wsDlus1BiwM4dRd52N_33loJbO4qiP [https://perma.cc/RN53-U9GJ].

Table 4: Non-Access Percentages by County and Offense Type¹⁰⁸

	Percenta	ge of cases	not acce	Percentage of attorneys with one or more unaccessed case				
Offense Type	Pentagon	Rectangle	Triangle	Circle	Pentagon	Rectangle	Triangle	Circle
Homicide	4%	0%	4%	0%	6%	0%	5%	0%
Sex offenses, child	8%	1%	6%	3%	12%	3%	9%	6%
Other sex offenses	17%	1%	9%	8%	17%	2%	10%	10%
Agg. person crimes	21%	3%	11%	4%	47%	14%	27%	17%
Robbery	20%	3%	10%	4%	42%	9%	20%	9%
Burglary	27%	4%	14%	5%	48%	13%	34%	11%
Person crimes	25%	2%	13%	4%	50%	11%	37%	16%
DWI, other traffic	22%	2%	8%	3%	30%	8%	21%	8%
Theft or fraud	30%	4%	22%	7%	67%	30%	54%	38%
Property damage	29%	4%	7%	0%	36%	6%	11%	0%
Weapons	25%	3%	21%	5%	40%	8%	35%	10%
Drug violations	32%	5%	24%	4%	63%	31%	63%	25%
Evid. tampering	26%	5%	24%	0%	28%	9%	33%	0%
Evading arrest	31%	5%	22%	8%	47%	11%	32%	17%
Other offenses	28%	5%	27%	6%	39%	8%	32%	10%

Pentagon, Rectangle, and Circle Counties provided us with the names and Texas State Bar identification numbers for the attorneys in the platform data, so we were able to collect a limited set of

^{108.} For further information about our data selection and the categorization of offenses, see Braun, Wright & Turner, *supra* note 13, at 24–26.

demographic information for each attorney: gender, law school ranking, and years of experience. This allowed us to examine the potential effects of these factors on the rate of accessing discovery. Triangle County used attorney identifiers without names, so we excluded that county from this analysis. Of the demographic variables at our disposal, only years of experience had notable associations.

We found that in two out of the three counties, the rate of case access was lower for attorneys with 20–60 years of experience, as shown in Table 5.¹¹⁰ In all three counties, the rate of access was highest for attorneys with the least experience, 0–4 years. In other words, our analysis revealed an interesting pattern of more experienced attorneys being less likely to access evidence.

Table 5: Non-Access Percentages by County and Attorney Experience¹¹¹

	Percentage of cases not accessed			cases not accessed Percentage of attorneys with or more unaccessed case		
Years	Pentagon	Rectangle	Circle	Pentagon	Rectangle	Circle
0–4	21%	3%	1%	39%	31%	14%
4–10	21%	4%	4%	54%	34%	45%
10–20	28%	3%	7%	70%	35%	41%
20–60	28%	5%	4%	61%	38%	41%

^{109.} The Texas Bar data provide the license date. Years of experience is the number of years between the license date and January 1, 2018. This simple transformation makes the variable more understandable, but it means that an attorney handling a case in 2020 will have had two more years of experience than stated.

^{110.} See infra Table 5.

^{111.} For further information about our age categories, see Braun, Wright & Turner, *supra* note 13, at 26–28.

While most of the download data recorded information only at the case level, Triangle County provided us with the most recent download dates for each *file* made available for discovery within a single case. We were therefore able to examine download rates for specific evidence files, the nature of the evidence contained in those files, and characteristics of the case. 112

We found that attorneys in Triangle County were significantly more likely to ignore video files than other types. ¹¹³ We also found that files of all types from cases for the most serious offenses were less likely to be neglected. For example, Table 6 shows comparatively low non-access rates for files connected with the most serious crimes: homicide (41 percent), child sex offenses (40 percent), and other sexual offenses (40 percent). Non-access rates for image files in sex-offense cases are strikingly low at 22 percent and 17 percent. On the other end of the spectrum, non-access rates were higher for most of the less serious offenses: theft or fraud (66 percent), drug violations (64 percent), and evading arrest (58 percent). With the exception of homicide cases, attorneys for cases of all offense types were most likely to ignore video files.

Although the names of the files were not standardized and did not always clearly indicate the type of evidence they contained, we reduced the 126 file extensions to six file types: document, image, video, audio, archive, and other. We categorized the types of files based on their extension (for example, .docx, .jpg). Document files included the extensions .docx, .pdf, .txt, .ppt, and .xlsx, with typical content such as printed evidence, warrants, notices, motions, and call logs. Image files included the extensions .jpg, .tiff, and .png, with typical content such as photos of injuries. Video files included the extensions .mp4, .mov, .avi, and proprietary formats, with typical content such as surveillance video, police body cameras, and interviews. Audio files included the extensions .mp3 and .way, with typical content such as 911 calls, witness interviews, and jail calls. Archive files included the extension .zip. Files classified as "Other" included the extensions .xml, .eml, and .asx, with typical content such as applications, metadata, email mailboxes, cell phone logs, and music playlists. We doubt the "Other" files are meant to be downloaded individually since they are mainly components of applications needed to view other pieces of evidence. For example, if viewing a set of proprietary video files requires a special application, all the files that comprise that application would appear in the file list. We cannot determine the exact purpose of each of these files.

^{113.} See infra Table 6.

Offense Type	Document	Audio	Image	Video	All File Types
All	55%	59%	56%	78%	60%
Homicide	36%	58%	55%	48%	41%
Sex offenses, child	40%	39%	22%	57%	40%
Other sexual offenses	38%	36%	17%	65%	40%
Theft or fraud	59%	70%	73%	85%	66%
Drug violations	58%	69%	61%	84%	64%
Evading arrest	53%	56%	59%	74%	59%
DWI and other traffic	43%	52%	34%	65%	47%

Table 6: Non-Access Percentages by File Type and Offense¹¹⁴

Finally, we found that when the prosecution made more files discoverable in a case, the defense was less likely to download one of those files. The larger the number of files uploaded by the prosecution in a case, the lower the probability that counsel would take the time to open and review any digital discovery item in that case.¹¹⁵

In sum, our quantitative analysis found that attorneys failed to access any evidence files at all in a substantial portion of cases, with non-access rates ranging from 4 percent to 27 percent of felony cases in the counties we studied. More serious offenses tended to generate higher levels of discovery activity. Attorneys with the fewest years of experience were generally the most diligent in accessing discovery. Another driver of case access rates—across all counties, attorney types, and case types—was time. Our data confirmed that the number of cases showing at least some discovery access improved over time from 2018 to 2020 in all but one county. We also found that video files were much less likely to be downloaded than other files.

B. Qualitative Analysis

To better understand when and why defense attorneys might neglect to access discovery in criminal cases, we paired our quantitative analysis with a qualitative approach. We conducted phone and video interviews with criminal defense attorneys in counties that provided

^{114.} For further information about our file type categories, see Braun, Wright & Turner, *supra* note 13, at 28–32.

^{115.} See id. at 30 (using Bayesian analysis to estimate these probabilities).

discovery data. We sent invitations to 288 attorneys in five Texas counties and interviewed thirty-eight attorneys in those counties. 116 As explained earlier, to preserve our interviewees' anonymity, we designated the counties as shapes: Pentagon, Rectangle, Triangle, Circle, and Line. 117 The shapes with more corners represent larger urban counties, while Circle is substantially smaller than the other three, and Line County is the smallest and most rural.

The attorneys we interviewed included twenty-five men and thirteen women. Their experience ranged from three to fifty years, with a median of thirteen years. The group included four assistant public defender interviewees, although only one of our five counties (Pentagon) operated a public defender's office during the relevant period. 119

We followed a consistent topic guide in these semistructured interviews, which is available online. ¹²⁰ Our questions touched on the nature of the attorneys' practices and their typical experiences with electronic discovery. To explore whether any of the lack of discovery access was due to discovery being provided off the platform, we asked attorneys what percentage of discovery in their jurisdictions was provided via the digital platform as opposed to in another format.

- 117. See supra note 82 and accompanying text.
- 118. We did not collect race or ethnicity information from our interviewees.

^{116.} As noted earlier in note 82, we conducted interviews in one additional county, Line County, which shared incomplete platform data with us. While we did not use Line County in our quantitative analysis, we did conduct interviews there because we were expecting that we would receive the complete data.

In Pentagon County, we sent invitations to 53 attorneys; in Rectangle, we sent 102 invitations; 65 invitations in Triangle; 35 in Circle; and 33 in Line. Although we generally tried to select a randomized group of attorneys to invite for an interview, we oversampled among attorneys with local experience with criminal cases. In Circle (the mid-size county), we focused on attorneys who handled at least three felony cases in 2018–2020, and in Line (the rural county), we focused on those who handled at least two felony cases in 2018–2020. Our invitations yielded a 13.2 percent response rate. Interviews typically lasted ten to fifteen minutes.

^{119.} Consistent with our IRB protocol, we promised confidentiality to our interviewees, so we identify the interviewees by number and type of county only. We asked the interviewees for permission to audio- or video-record the interviews, which ensured accuracy of our transcriptions. In the few cases where we did not obtain such permission, we relied on notes of our interviews.

^{120.} Our interview guide is available at Interview Guide, https://drive.google.com/drive/fold ers/1q5wsDlus1BiwM4dRd52N_33loJbO4qiP [https://perma.cc/Q35M-N46C]. We used standard practices for qualitative interviewing. *See* Svend Brinkmann, *Unstructured and Semi-Structured Interviewing*, *in* THE OXFORD HANDBOOK OF QUALITATIVE RESEARCH 277 (Patricia Leavy ed., 2014).

We then inquired about the attorneys' typical approaches to discovery: Do they view files directly on the platform, or do they download them? We also asked about their timing in accessing discovery and whether the timing differs depending on whether the client is detained or not. We asked attorneys whether they had experienced any problems accessing discovery on the platform. This question allowed us to explore whether technological or other logistical problems could explain the lack of discovery access.

Next, we asked whether our interviewees thought their discovery practices differed from those of other attorneys in their offices or their jurisdictions and, if so, how. After discussing these various questions, we told our interviewees that our preliminary data indicated that some defense attorneys in their jurisdictions had not viewed or downloaded electronic discovery uploaded by the prosecution in some cases. We asked them whether they had any thoughts about why defense attorneys might have failed to do so. We inquired about types of cases in which the interviewees expected discovery access would be highest or lowest and what types of files would be most or least likely to be accessed. We coded the interview transcripts, using qualitative research software, to facilitate the sorting of statements into thematic categories. 121

Our interviewees confirmed that prosecutors in their counties generally provide discovery via the digital evidence platform and do not create a paper-based alternative. ¹²² Interviewees mentioned only three rare exceptions to this practice: (1) child pornography cases, in which the law requires the attorney to review the evidence in the prosecutor's or law enforcement agency office; ¹²³ (2) cases in which the evidence is so voluminous that it cannot be uploaded on the platform; ¹²⁴ and (3) cases in which the defense attorney encounters

^{121.} We used the Text Analysis Markup System ("TAMS"), an open-source qualitative coding and analysis program. For a description of a "grounded theory" method of developing thematic categories when reading interview transcripts, see JOHN W. CRESWELL, QUALITATIVE INQUIRY AND RESEARCH DESIGN: CHOOSING AMONG FIVE TRADITIONS 55–56 (1998).

^{122.} E.g., Video Interview with A3, Att'y, Pentagon Cnty. (Aug. 2, 2021); Telephone Interview with F1, Att'y, Triangle Cnty. (Jan. 7, 2022); Video Interview with F4, Att'y, Triangle Cnty. (Jan. 24, 2022).

^{123.} E.g., Telephone Interview with A2, Att'y, Pentagon Cnty. (Aug. 4, 2021); Video Interview with D5, Att'y, Rectangle Cnty. (Aug. 20, 2021).

^{124.} *E.g.*, Telephone Interview with F1, Att'y, Triangle Cnty. (Jan. 7, 2022) ("I only recall one case where I had to physically pick up documents in the last three years, and that was a murder charge . . . I think it had to do with the volume.").

trouble downloading the evidence from the platform and requests that it be provided on a flash drive. ¹²⁵ Apart from those exceptional cases, attorneys in all five counties rely entirely on the digital evidence platform to review materials in the case.

Many of the respondents were aware that some of their colleagues do not download all the evidence in a case or do not download it in a timely manner. As some explained, from time to time they would inherit a case from another lawyer and would see that "files haven't been opened at all." Some admitted that they themselves had delayed and even occasionally failed to download digital files. We asked our respondents to explain why such delays and omissions might occur. Several themes emerged.

1. Technological Difficulties. The first explanation provided by our interviewees as a reason for failing to view or download discovery concerns technological difficulties in accessing certain files or the platform as a whole. Most of our attorney respondents had experienced problems with the digital platform when downloading large files, typically videos. They agreed that downloading video files can be a slow and arduous process. 128 As one explained, "It takes a long time to download videos. A looong time [And] it's a frequent timeout

^{125.} We note that in only one of these scenarios—the third one—would evidence be available on the platform and thus potentially considered as "unaccessed" for purposes of our quantitative analysis in Part III.A. In the first and second scenario, no evidence would be uploaded to the platform, so there would also be no data for us to count as accessed or unaccessed. Our interviews suggested that the third scenario is extremely rare; therefore, this scenario is unlikely to affect the results in Part III.A.

^{126.} E.g., Video Interview with D15, Att'y, Rectangle Cnty. (Aug. 12, 2021); Telephone Interview with A2, Att'y, Pentagon Cnty. (Aug. 4, 2021) ("[T]here have been a number of occasions when I have looked, and the files have not been accessed at all, or just limited files have been accessed, and often, unfortunately, that was in the case where they were court-appointed attorneys"); Video Interview with F4, Att'y, Triangle Cnty. (Jan. 24, 2022) ("[Upon inheriting a case from another counsel, we] ... could see that the other attorney the entire year he had that case had never opened or downloaded."); Telephone Interview with B2, Att'y, Pentagon Cnty. (July 30, 2021).

^{127.} See, e.g., Video Interview with F4, Att'y, Triangle Cnty. (Jan. 24, 2022); Video Interview with B8, Att'y, Pentagon Cnty. (Aug. 18, 2022).

^{128.} This was a common response, with more than half of our interviewees mentioning technical barriers to access. *See, e.g.*, Telephone Interview with B7, Att'y, Pentagon Cnty. (Aug. 12, 2021) ("[A] lot of the people complain."); Video Interview with A4, Att'y, Pentagon Cnty. (Aug. 11, 2021) (noting that DWI cases present access problems "where there would be 1 GB or 2 GB video, car dash cam or from the body cams. And you'll go through three or four dozen attempts to try to download when you keep getting kicked off and kicked off").

thing Sometimes it's three or four hours to download videos." ¹²⁹ The interview findings on this point were consistent with our quantitative analysis results, which show that video files were the least likely to be accessed. ¹³⁰

Two years ago, the problem with downloading media files was significant enough that attorneys in Pentagon County signed a petition calling on the county and the digital platform provider to improve the service. But several interviewees noted that the platform has improved its technological performance over time, and they encounter fewer problems today than they did in previous years. Once again, this explanation reflected our quantitative findings, which showed an increase in the rate of access over time in the three-year period studied. 133

Another technical barrier to downloading videos is that some defense attorneys do not buy sufficient storage space for voluminous digital files.¹³⁴ Even if attorneys have enough space on their computer, the size of the files is so large that it clogs the computers and slows them down.¹³⁵ At the same time, the platform allows attorneys to bypass storage problems by viewing the files on the platform itself without downloading them. Although most attorneys consider this option to be

^{129.} Video Interview with D23, Att'y, Rectangle Cnty. (Aug. 26, 2021).

^{130.} See supra note 113 and accompanying text.

^{131.} Telephone Interview with B2, Att'y, Pentagon Cnty. (July 30, 2021); see also Telephone Interview with A2, Att'y, Pentagon Cnty. (Aug. 4, 2021) (noting that, in the first year of the platform's introduction, there were serious problems downloading media files and that "it would take up an entire day and lock up our entire system trying to download the media files for one single case").

^{132.} *E.g.*, Telephone Interview with F6, Att'y, Triangle Cnty. (Jan. 27, 2022) ("I haven't seen any complaints about [the digital evidence platform] recently."); Video Interview with B1, Att'y, Pentagon Cnty. (Aug. 2, 2021) (conveying the same idea).

^{133.} See supra note 105 and accompanying text.

^{134.} See Video Interview with B8, Att'y, Pentagon Cnty. (Aug. 18, 2021) (noting "the difficulties of download and bandwidth and storage space, when I've got fourteen body cameras at the exact same event"); Video Interview with G1, Att'y, Circle Cnty. (Aug. 26, 2021) ("[W]e have huge terabyte servers that hold all this stuff, and those are not cheap."); Video Interview with F55, Att'y, Triangle Cnty. (Jan. 26, 2022) (citing lack of storage space as a "non-cynical" reason why attorneys might not access discovery files).

^{135.} Video Interview with A1, Att'y, Pentagon Cnty. (Aug. 4, 2021) ("It's a large number of files and it's a lot of gigabytes. . . . [I]t slows down our computers technically, and then it kind of slows down the viewing process for us as well").

somewhat more cumbersome,¹³⁶ a few did tell us they view files directly on the platform.¹³⁷ Yet our data reveal that a sizeable portion of attorneys neither view *nor* download files.¹³⁸

Even when the digital platform itself does not hinder downloads, the lack of technological skills or resources by some attorneys prevents them from using the software adequately. As one attorney explained, some defense attorneys "don't know how to use it, because they're not tech savvy." Further, defense attorneys who do not commonly practice in the counties with a digital evidence platform may "have no idea what [the digital platform] is and how to get to it." A few interviewees noted that older attorneys are more likely to experience such challenges with digital discovery. In addition, some criminal defense attorneys struggle with digital discovery because they do not have the resources to hire IT staff or to pay for top quality internet service. In some locations, sufficient internet bandwidth may not be available. These responses echo concerns raised in the literature that

^{136.} See, e.g., Telephone Interview with A2, Att'y, Pentagon Cnty. (Aug. 4, 2021) (expressing a preference for downloads because it allows the attorney to maintain easy access to the file, even after the case is over). Another attorney added:

I rarely view it in the platform. I find it very frustrating [I]f the video requires a lot of bandwidth or something, I may be easier off just putting it on my desktop, actually downloading it, and just saving it in a cloud, because, like, then you can just slow down your computer where you can't even view it.

Video Interview with D5, Att'y, Rectangle Cnty. (Aug. 20, 2021).

^{137.} See Telephone Interview with F3, Att'y, Triangle Cnty. (Jan. 11, 2022) ("I will just access it on [the digital evidence platform] and let it eat their space."); Video Interview with F53, Att'y, Triangle Cnty. (Jan. 24, 2022) ("I could see people wanting to do that if they don't want to pay for the hard drive space.").

^{138.} See supra notes 87–88 and accompanying text.

^{139.} Video Interview with A3, Att'y, Pentagon Cnty. (Aug. 2, 2021).

^{140.} Id.

^{141.} E.g., Video Interview with A1, Att'y, Pentagon Cnty. (Aug. 4, 2021) ("I think there's a lot of older criminal defense attorneys which don't even know how to access, don't have that sort of technical knowledge.").

^{142.} See Telephone Interview with E2, Att'y, Rectangle Cnty. (Nov. 10, 2021) (noting that "they don't have the support staff"); Video Interview with F4, Att'y, Triangle Cnty. (Jan. 24, 2022) (noting that, before COVID, prosecutors sometimes oriented defense attorneys who were new to the county about how to use the system).

^{143.} E.g., Telephone Interview with B2, Att'y, Pentagon Cnty. (July 30, 2021) ("I am in an area of town where the internet sucks. We don't have fiber. I cannot download a file over 4GB. That's kind of my limit.").

criminal defense attorneys often lack the resources, training, and know-how to adequately manage and review digital evidence.¹⁴⁴

2. Redundant or Irrelevant Evidence. Another common explanation for ignoring discovery was that reviewing the digital files was not always material to the outcome of the case or that the discovery did not reveal any new facts about the case. Respondents pointed to examples of files disclosed by the prosecutor—such as audit files, certain jail calls, or the 911 call sheet—as examples of files that are often not relevant to the case and might not be reviewed. Laplace Explanations of this sort do not address an attorney's failure to download any files at all, but they could shed some light on why attorneys might download some files and ignore others.

Some interviewees suggested that videos from police body or dash cameras may be redundant or irrelevant—as where an in-car video shows the defendant being driven to jail by the police or where a police officer waiting for the tow truck has his body camera recording as he is waiting. ¹⁴⁶ Interviewees noted further that it is not uncommon to have

Video Interview with B6, Att'y, Pentagon Cnty. (Aug. 23, 2021) (noting also that audit files might not be reviewed); Video Interview with B8, Att'y, Pentagon Cnty. (Aug. 18, 2022) ("Jail calls are insanely tedious and probably get skipped frequently."); Video Interview with B1, Att'y, Pentagon Cnty. (Aug. 2, 2021) (noting that review of audit files might be skipped).

^{144.} See Brown, supra note 22, at 112; Kimpel, supra note 22, at 379; Turner, supra note 22, at 237–43; 2017 REPORT, supra note 22, at 227–29.

^{145.} E.g., Video Interview with D15, Att'y, Rectangle Cnty. (Aug. 12, 2021) (noting that 911 calls in certain minor cases might not be reviewed). Regarding jail calls, one attorney noted:

Sometimes I would say jail calls might be something that you may not want to listen, because you know they get 15 minutes each call and they can't subpoena just some calls and not other calls, so they end up supporting all of the calls, and then there's 100 hours of client communication. . . . And so I can see how maybe those kinds of files, you may not be wanting to spend your time, unless your client says, "on such and such a date at such and such a time, I made this phone call, and this is what it's about, and you should hear it." You know, but other than that, I may not listen to each and every single one of these jail calls.

^{46.} When asked about the relevance of such video evidence, one attorney noted: [S]ome of those videos were . . . it was just irrelevant, it was a video of just them driving to the location to join up with another officer that completed the reasonable suspicion, the *Terry* stop. So if they're calling for backup or something like that, maybe the officer will turn on his dash cam and then just film himself, from the road . . . just driving to meet up with the other officer. And . . . that's not a relevant video And then, other times, it will be a video of just defendant sitting in after he's been arrested and all of, Mirandized and everything And it's just a defendant sitting there the whole video.

Video Interview with A1, Att'y, Pentagon Cnty. (Aug. 4, 2021). Another attorney added: I've had DWI cases where four cops showed up, and so there's four different body cams. I only need to really watch the body cam where they are interacting with the client [S]ometimes the videos are just not really relevant, like it's a guy who's just

a dozen or more police videos of the same incident.¹⁴⁷ As one explained:

If you've got six cops and three dash cams and six body cams, there are a lot of duplicative videos. And there's no one in the police station that puts it all \dots [n]ot like Hollywood where you can give it to Ron Howard to put down to a thirty-minute DVD \dots They basically give us the raw footage. So as a lawyer you have to sit there and figure out what's important, what you can fast-forward through, what's duplicative. 148

Because of the length and potential redundancy and irrelevance of police videos, one respondent noted that, in many cases, he would simply rely on what the client tells him occurred and what the police report says, rather than reviewing all the videos:

[If] the police report is going to say what's in the video . . . I'll ask my client, "Did you say that to the police?" And if they say no, then I'll go over the video with them if they want to see it If they say "Yes, I said that" . . . I'm not going to view it. 149

Attorneys from other jurisdictions have reported similar problems with discovery of large numbers of body camera videos. For instance, a survey by Virginia's indigent defense commission found that most

going to stand with the car while it waits for the tow truck.... I don't need to watch him while he's chillin [sic] sitting by himself waiting for a tow truck

Video Interview with B6, Att'y, Pentagon. Cnty. (Aug. 23, 2021).

147. An attorney explained:

And for these ... DWIs ... it's like, fifty officers will pull this person over and conduct the field sobriety tests, and, not fifty, but just a lot. Sometimes even if there's a language barrier, they'll need to bring a Spanish speaking officer, so that body cam will be available as well. So you're just kind of trying to piece together all of these officers' dash cam videos and their body cam videos

Video Interview with A1, Att'y, Pentagon Cnty., (Aug. 4, 2021); Telephone Interview with A2, Att'y, Rectangle Cnty. (Aug. 4, 2021) ("If you look at the typical DWI case . . . because of the proliferation of body cam[s] . . . it's not unusual to have twenty hours' worth of videos to watch."); see also Sarah Peters, Surge in Police Body Cam Video Brings Need for More Employees, PALM BEACH POST (Sep. 16, 2018, 9:21 PM), https://www.palmbeachpost.com/story/news/crime/2018/09/16/surge-in-police-body-cam/7086217007 [https://perma.cc/685P-TZDX] ("It's usually not just one or two officers who respond, however, and for a major event, it could be 20.").

148. Telephone Interview with E3, Att'y, Rectangle Cnty. (Nov. 10, 2021).

149. Video Interview with D23, Att'y, Rectangle Cnty. (Aug. 26, 2021). As other defense attorneys note, however, "[c]lients under the stress of being arrested may remember the scenario differently.... The video allows [a defense attorney] to see what happened and pick up on details that didn't seem important at first." Peters, *supra* note 147 (citing Angie Pagán, president of the Palm Beach Association of Criminal Defense Lawyers).

defense attorneys struggled to review police videos.¹⁵⁰ More recently, reports on New York's new discovery law have found that some defense attorneys experience problems reviewing voluminous digital evidence, especially when it features multiple body camera videos.¹⁵¹ Such videos are likely to proliferate even more as new laws, aimed to ensure police transparency and accountability, require police officers to keep their cameras on throughout their investigations.¹⁵²

The failure to view or download videos is especially hard to justify when files are not labeled in a way that reveals their content. Several of our interviewees complained that files frequently have no revealing titles and are instead labeled with random numbers. These uninformative labels make it impossible to determine whether a video file is relevant without first downloading and viewing at least some of it. 153 A recent survey of New York defense attorneys likewise found

^{150.} Marie Albiges, *Police Body Cameras Are Capturing So Much Footage It's Driving Some Defense Attorneys To Quit*, VIRGINIAN-PILOT (Sept. 08, 2019, 12:00 PM), https://www.pilotonline.com/2019/09/08/police-body-cameras-are-capturing-so-much-footage-its-driving-some-defense-attorneys-to-quit [https://perma.cc/7YPS-M59N] (finding that 93 percent of public defenders who responded reported difficulty in finding time to watch all body cam videos and that 85 percent of court-appointed attorneys responded the same way).

^{151.} See CHIEF DEFENDERS ASS'N OF N.Y., N.Y. STATE DEFENDERS ASS'N, NYS ASS'N OF CRIM. DEFENSE LAWS., & NYS OFF. OF INDIGENT LEGAL SERVS., THE IMPACT OF DISCOVERY REFORM IMPLEMENTATION IN NEW YORK 21–22, 25 (2022) (discussing responses to a survey of New York defense attorneys in which many attorneys noted that electronic discovery has increased the amount of time they spend on cases); HANNAH E. MEYERS, DESTROYED BY DISCOVERY: HOW NEW YORK STATE'S DISCOVERY LAW DESTABILIZES THE CRIMINAL JUSTICE SYSTEM 5, 31 (Manhattan Inst. Jan. 2023), https://media4.manhattan-institute.org/sites/default/files/how-new-york-discovery-law-destabilizes-criminal-justice-system.pdf [https://perma.cc/ZD92-3DMD].

^{152.} See, e.g., Tex. H.B. 929 (2021) (amending TEX. OCC. CODE § 1701.655). More broadly, digital evidence from cell phones, computers, surveillance cameras, and other electronic devices is rapidly increasing in criminal cases and imposing a heavy burden on defense attorneys to store and review. See Turner, supra note 22, at 239–40 (arguing that the increased availability of digital evidence is creating novel problems in criminal cases).

^{153.} Video Interview with A4, Att'y, Pentagon Cnty. (Aug. 11, 2021) ("There'll be like a one letter title for the document."); see also Video Interview with B9, Att'y, Pentagon Cnty. (Aug. 20, 2021) (noting that body cam recordings are "labeled very general. It's like, 'Axon 17.9.0,' so I'm like, 'Well, which officer is this?'"); Telephone Interview with E1, Att'y, Rectangle Cnty. (Nov. 8, 2021) ("I feel as though the state's attorneys just kind of throw everything in there and let the defense counsel sort it out and that adds time to reviewing. Files are not labeled properly . . . "). But see Video Interview with B4, Att'y, Pentagon Cnty. (Aug. 6, 2021) (noting that one can usually tell by the labels what the file is, or at least what type of file it is—for example, body cam, interrogation, or phone capture).

that the lack of organization and proper labeling of files produced through digital discovery is a major concern for attorneys.¹⁵⁴

Our quantitative analysis yielded results consistent with the redundant-evidence theme emerging from the interviews. Video files are the most likely to be ignored. The more files that the prosecution uploaded in a particular case, the less likely it was for the defense attorney to open any one particular file. These findings are also consistent with concerns raised in the literature that attorneys are less likely to find time to view individual files in cases with voluminous evidence.

3. Mismatch Between Client's Objectives and Discovery Review. Some of our respondents explained that attorneys might skip the downloading of discovery in another situation—when the client insists on pleading guilty and resolving the case promptly. When detained clients are brought from the jail to the courtroom and they receive an offer to time served in exchange for a guilty plea, some want to resolve the case as quickly as possible.¹⁵⁸ The speed of this process does not give attorneys in those cases the time to review discovery before exploring a plea agreement with the prosecutor.¹⁵⁹ One attorney described this possibility as follows:

Let's say, for instance, if I have a client in custody and they are insistent that they want to plead The first thing I am going to ask

^{154.} See CHIEF DEFENDERS ASS'N OF N.Y. ET AL., supra note 151, at 21–22.

^{155.} See supra note 113 and accompanying text.

^{156.} Braun, Wright & Turner, supra note 13, at 30.

^{157.} See Brown, supra note 22, at 112 (observing that prosecutors "may share large volumes of data... burdening defense teams with the laborious task... of searching for the small, relevant, needle in a haystack of data"); Kimpel, supra note 22, at 308–13 (arguing that the increase in digital video evidence is creating new problems for defense attorneys, including time-management issues); Turner, supra note 22, at 247–53 (arguing that defense attorneys in particular often lack the resources to adequately store and review voluminous digital evidence); 2017 REPORT, supra note 22, at 227–29.

^{158.} During an interview, an attorney explained:

So in [Pentagon] County we call it a jail chain. And so, where the inmate, our client, is brought from the local jail to the courtroom. So you know, nine times out of ten, ... the client tells us, "Hey, I just want, if you can work out time served, I'm good [with] that." And so just that speed, it hasn't given, especially for those kind of attorneys, the time to look at [the discovery].

Video Interview with A3, Att'y, Pentagon Cnty. (Aug. 2, 2021).

^{159.} *Id.*; Telephone Interview with F3, Att'y, Triangle Cnty. (Jan. 11, 2022) ("Sometimes cases, particularly appointed cases, can get resolved so quickly that it wasn't necessary for them to download.").

them is, "Hey, I've got discovery here that needs to be reviewed The officer maybe shouldn't have stopped you. They maybe shouldn't have searched. They maybe shouldn't have done this or that Do you want me to review this, which is going to take a little bit more time, or do you want to waive your right and potentially miss something and plead?" . . . In certain circumstances, they will waive review of it because they want to get out. And they are like, "No, I 100 percent did this, I just want it done." Then, okay, that's your decision. ¹⁶⁰

A majority of our interviewees mentioned the possibility that limited client objectives might explain some failures to download discovery. 161

Likewise, some attorneys suggested that attorneys might not review evidence if a case is selected for pretrial diversion. Pretrial diversion programs allow first-time offenders charged with misdemeanors or low-level felonies to have their charges dismissed if the defendants admit guilt and successfully complete a program that

160. Telephone Interview with A2, Att'y, Pentagon Cnty. (Aug. 4, 2021). Another interviewee reported:

I'm willing to admit that when I did court appointed work, I didn't download hardly any of it, unless my client put up a fit and was like, "I didn't do it." But most of them, I was like, "Looks like you're guilty," and they're like, "I kind of am."

Video Interview with H2, Att'y, Line Cnty. (Sept. 1, 2021); see also Telephone Interview with B6, Att'y, Pentagon Cnty. (Aug. 23, 2021) ("Like if everybody's cool with it and everybody understands that you're just going to take this year of probation and be done and that's what you want, then okay, great."); Video Interview with F57, Att'y, Triangle Cnty. (Jan. 27, 2022) ("The client says get me out, take a deal. In that setting, there is less need for downloads."). Yet another attorney put it this way:

I would think where your client admits it, wants to do something quick to get it over with, and there's four gigabytes worth of . . . hours and hours and hours' worth of video to watch over something that's pretty well established. I have a feeling that there's a number of lawyers [who] would hesitate to download all that information.

Video Interview with A4, Att'y, Pentagon Cnty. (Aug. 11, 2021).

161. We coded comments related to this theme from twenty-four of our thirty-eight interviewees.

162. Telephone Interview with F1, Att'y, Triangle Cnty. (Jan. 7, 2022) ("[Our] county has a really good pretrial diversion program. So if the attorney has a large caseload of misdemeanors, and they can just put twenty of their cases through pretrial diversion, and they are not looking at the evidence, which is not great. But that could be a reason."); Video Interview with F4, Att'y, Triangle Cnty. (Jan. 24, 2022) ("If my clients get into diversion, again, it might be a file this thick in [the digital evidence platform] that I don't need"); Video Interview with B5, Att'y, Pentagon Cnty. (Aug. 16, 2021) (noting that attorneys are less likely to view discovery when a case is eligible for diversion "[b]ecause there's a timeline on the diversion programs"); cf. Video Interview with F55, Att'y, Triangle Cnty. (Jan. 26, 2022) ("[A]n example might be if they have an ICE hold and they are wanting to resolve their criminal charges more quickly so that they can get on with the ICE proceeding.").

may include community service, drug testing, counseling, and reporting to a probation officer. Prosecutors tend to make early and favorable offers to defendants eligible for pretrial diversion, and the clients may want to accept the offer promptly and have the attorney skip the discovery review. In agreeing to forgo discovery review, however, the attorney assumes that the defendant is guilty of the charges, which may not be verified without reviewing the discovery. As one attorney opined, "That's not how you should practice law, but I can also see how a lot of people don't have the time and the bandwidth to do that much work." 165

These interview comments, while concerning, are not surprising. Prior scholarship has documented the pressures that detained defendants in minor cases feel to plead guilty quickly and to be released on time served or probation. ¹⁶⁶ As our interviews confirm, this pressure can translate into instructions to the attorney to forego investigations or review of discovery to obtain a seemingly attractive plea bargain.

4. *Gravity of the Charge.* Defense attorneys also speculated that their colleagues were less likely to access discovery when the charges against the defendant were not especially serious.¹⁶⁷ As we just saw, the

^{163.} See Lee v. State, 560 S.W.3d 768, 770 (Tex. App. 2018) (defining pretrial diversion); Hon. Clifford A. Brown, 147th Dist. Ct., Felony Pretrial Diversion, TRAVIS CNTY., TEX., https://www.traviscountytx.gov/courts/criminal/specialty/fpd [https://perma.cc/G2KZ-BQGS].

^{164.} See Video Interview with F53, Att'y, Triangle Cnty., (Jan. 24, 2022) ("The issue becomes what you're forfeiting with that, which is sometimes, you know, a suppression issue that's viable, where they never would have gotten a conviction. But you know what? While I say I don't condone it, I get it....").

^{165.} Telephone Interview with F1, Att'y, Triangle Cnty. (Jan. 7, 2022).

^{166.} See, e.g., Heaton, Mayson & Stevenson, supra note 28, at 711 (finding that "detained defendants are 25 percent more likely than similarly situated releasees to plead guilty"); Smith & Maddan, supra note 28, at 1334 (finding that "in-custody defendants were two and a half times more likely to enter a plea" in the misdemeanor courts studied).

^{167.} Video Interview with D23, Att'y, Rectangle Cnty. (Aug. 26, 2021) ("[T]he more serious the case, the more likely [attorneys would be to review discovery]."); Video Interview with D17, Att'y, Rectangle Cnty. (Sept. 3, 2021) ("In more serious offenses, it's more likely to be reviewed. But if you have someone not reviewing files in misdemeanors, I think that's a problem."); Video Interview with A3, Att'y, Pentagon Cnty. (Aug. 2, 2021) (noting that discovery is more likely to be accessed in more serious cases such as DWIs, assaults, and deadly conduct and less likely in misdemeanor cases); Video Interview with B4, Att'y, Pentagon Cnty. (Aug. 6, 2021) (stating that attorneys are least likely to review discovery in misdemeanor cases); Telephone Interview with F1, Att'y, Triangle Cnty. (Jan. 7, 2022) ("I would imagine that would be lower-level felonies, like a DWI that is only a felony because it has been enhanced with priors. Or some possession cases

least serious cases are most likely to involve an offer of diversion or release from detention on time served or probation, leading clients to choose more limited objectives that might not require full effort in discovery review. Prosecutors are also more inclined to treat the less serious cases categorically, meaning that the particular facts from the investigative file matter less. For charges such as "theft in a shopping mall or something like that," one interviewee said, "nine times out of ten I know what the prosecutors are going to offer me because, again, the elected DA is trying to alleviate these kind of charges." Because lower-level charges have fewer long-term consequences for defendants, some attorneys view fulsome discovery in those cases as less pressing. In the same vein, interviewees either observed or hoped that discovery access was most vigorous in capital cases.

Our quantitative analysis likewise found a strong and consistent association between the gravity of the case and the rate of access. More serious offenses generated higher levels of discovery activity.¹⁷¹

5. Experience and Age of Attorney. Several interviewees also suggested that the age and experience of the attorney may affect how frequently attorneys access the evidence. First, as we have noted, younger attorneys are more likely to be technically proficient and be better able to overcome the challenges of the digital discovery platform.¹⁷² By contrast, some interviewees noted that older attorneys

that [are] felon[ies] because of the amount. Lower-level stuff that is more likely to get into diversion program, more likely to plead.").

^{168.} Video Interview with A3, Att'y, Pentagon Cnty. (Aug. 2, 2021).

^{169.} See, e.g., Video Interview with B9, Att'y, Pentagon Cnty. (Aug. 20, 2021) (noting that attorneys are more likely to review evidence in "aggravated cases, higher-level felonies, definitely your sex cases, your sexual abuse cases, [and] sex assault [cases]").

^{170.} Video Interview with D5, Att'y, Rectangle Cnty. (Aug. 20, 2021) ("[A]ttorneys get compensated a higher hourly rate to look at the capital stuff. But more than that, the judges are less reluctant to pay your bill when it's a capital case."); Interview with F1, Att'y, Triangle Cnty. (Jan. 7, 2022) ("Where I would think someone would be more likely to view discovery... I would hope more complicated sexual assault or assault or your capital murder; but I also know that capital murder has just terabytes of discovery.").

^{171.} See supra Tables 4 & 6.

^{172.} See supra note 141 and accompanying text (discussing "older" attorneys and their difficulty with technology).

often "don't have that sort of technical knowledge" and "struggle navigating th[e] format" of the digital platform. 175

Less experienced attorneys are also less likely to be overconfident about their ability to evaluate a case without discovery. As one experienced attorney explained:

I have been doing this long enough, you know. I don't have to look at all that stuff to know what's important. I will look at more things if I think there's a problem there. But if I don't see a problem, then I will just look at a few things.¹⁷⁶

Another interviewee likewise opined that:

Senior attorneys... maybe have been a little jaded or have gone full cynical and don't think the evidence matters because if the client wants to take their time served, which, if they're in jail, right, they really do want to just get out, they're going to plead to it, no matter what.¹⁷⁷

A third attorney elaborated on the same theme, noting that more experienced attorneys are more likely to find certain evidence unnecessary to review:

I could imagine that . . . if I have been doing these cases for longer, then I would have an awareness at least of what the evidence is generally going to say, and I would know what to say to my clients, and I would know how to get this done quicker. I would know how to close out cases without really looking at the discovery much. . . . [The more advanced attorneys] know that some items are going to be irrelevant videos, like of the defendant sitting in the backseat of the police car. They know what to look for, so they know that some of it's going to be just a lot of smoke and mirrors, just a lot of puff. They know where to exactly find the pieces that they need in order to just talk to the DA a little bit, you know, get the negotiation going. You

^{173.} Video Interview with A1, Att'y, Pentagon Cnty. (Aug. 4, 2021).

^{174.} Video Interview with B4, Att'y, Pentagon Cnty. (Aug. 6, 2021).

^{175.} Telephone Interview with F6, Att'y, Triangle Cnty. (Jan. 27, 2022) (noting various technical problems he, an older attorney, experienced, such as learning that "I have to punch a button called 'View'"); Video Interview with B1, Att'y, Pentagon Cnty. (Aug. 2, 2021) (noting that older attorneys have more technical issues with the platform); Telephone Interview with F1, Att'y, Triangle Cnty. (Jan. 7, 2022) (noting that some older attorneys "don't like using [the digital evidence platform], so they are asking for paper").

^{176.} Telephone Interview with Attorney F6, Att'y, Triangle Cnty. (Jan. 27, 2022).

^{177.} Video Interview with A5, Att'y, Pentagon Cnty. (Aug. 13, 2021).

know they've been doing it long enough to where they can fly with that. 178

Our quantitative analysis also yielded a notable association between experience and rate of access. We found that attorneys with the fewest years of experience tended to be the most diligent in accessing discovery. By contrast, access rates generally went down for attorneys with more than four years of practice experience. This finding is potentially at odds with broader findings in the scholarship that attorneys with more significant experience deliver better outcomes for their clients.

6. *Inadequate Pay and High Caseloads*. Among the various reasons that our interviewees cited for failures to access discovery, money was the most common. Many attorneys noted that compensation for attorneys was bound to affect their discovery behavior. In particular, some noted that public defenders and attorneys who are privately retained have stronger incentives to download and review the discovery. Court-appointed attorneys, on the other hand, face financial pressures to resolve cases quickly, which might lead them to skimp on discovery.

^{178.} Video Interview with A1, Att'y, Pentagon Cnty. (Aug. 4, 2021).

^{179.} See supra Table 5.

^{180.} See, e.g., Abrams & Yoon, supra note 68, at 1150 (finding that, in Las Vegas, Nevada, public defenders' length of experience, but not the caliber of law school they attended, affected clients' outcomes); Iyengar, supra note 30, at 4 (finding that lack of experience and lower quality of law school attended—combined with lower wages and high caseloads—likely explained worse performance of assigned counsel as compared to public defenders in federal cases).

^{181.} We coded fifty-two comments from twenty-two different attorneys related to this theme. *See infra* notes 182–87 and accompanying text.

^{182.} See Video Interview with G2, Att'y, Circle Cnty. (Aug. 27, 2021) ("[O]n the appointment stuff that's going on here, I don't have a great deal of confidence that they're doing that.... The answer is to have a formal public defender system where people can be professional."); Video Interview with A5, Att'y, Pentagon Cnty. (Aug. 13, 2021) ("[T]he ones that I expect them the most to review, the most would be DWIs and assault family violence because, again, there's a high chance that they're going to get paid and paid well.").

^{183.} See e.g., Telephone Interview with A2, Att'y, Pentagon Cnty. (Aug. 4, 2021) ("[T]here have been a number of occasions when I have looked, and the files have not been accessed at all, or just limited files have been accessed, and often, unfortunately, that was in the case where they were court-appointed attorneys"); Telephone Interview with E1, Att'y, Rectangle Cnty. (Nov. 8, 2021) (stating that appointed attorneys "are less incentivized to spend a lot of time looking at the evidence versus someone who is retained"); Telephone Interview with F2, Att'y, Triangle Cnty. (Jan. 11, 2022) (suggesting that appointed counsel would be less likely to download discovery and that high caseloads help explain this); Video Interview with F56, Att'y, Triangle

Other defense attorneys were more specific, distinguishing among different compensation structures for appointed attorneys. They noted that when counties pay a flat fee for defending an indigent client, that fee may not adequately compensate for reviewing voluminous digital discovery. An hourly compensation scheme, on the other hand, should lead attorneys to download and review the discovery more thoroughly. Among the counties we studied, only one, Rectangle County, reimbursed appointed counsel in all felony cases based on an hourly rate. In the rest, a flat fee was the default unless the defense attorney requested an hourly rate (often reserved for more complex cases).

Even when discovery review was reimbursed as part of an hourly rate, one interviewee noted that courts tended to resist reimbursing for all the time that it takes to download discovery. A 2018 study of appointed counsel in Texas found that "the modal attorney taking indigent cases is not getting rich, and, if anything, is severely undercompensated. . . . [Attorneys made] \$237/case for misdemeanors and \$588/case for felonies. . . . equivalent to hourly rates of \$18/hour and \$37/hour for misdemeanor and felony cases, respectively."

Likewise, our interviewees observed that many defense attorneys, whether public defenders or court-appointed, are overwhelmed with

Cnty. (Jan. 26, 2022) ("I would be interested to find out if there was any correlation between the numbers that you're seeing and whether those attorneys are appointed....").

^{184.} One attorney noted that court-appointed attorneys are less likely to review discovery, saying: "[T]hey do not feel like they are getting paid enough to [review discovery]. They are paid a flat rate. . . . [I]t's not unusual to have twenty hours' worth of videos to watch. . . . And yet you're only getting paid \$750." Telephone Interview with A2, Att'y, Pentagon Cnty. (Aug. 4, 2021); see also Video Interview with F53, Att'y, Triangle Cnty. (Jan. 24, 2022) ("[I]f they're getting \$400, and it happens to be a DWI video, and five officers show up, and they all have body cameras. Yeah, there's a problem with that compensation structure."); Telephone Interview with E3, Att'y, Rectangle Cnty. (Nov. 10, 2021) (noting that the flat-fee system "basically incentivizes [defense attorneys] to do as little as possible and basically to move the case"); Telephone Interview with F2, Att'y, Triangle Cnty. (Jan. 11, 2022) (noting that, as a matter of logic, "[i]f they're just giving a flat fee, they're less incentivized to download the evidence").

^{185.} See Video Interview with F56, Att'y, Triangle Cnty. (Jan. 26, 2022) ("[B]efore [the] county went to an hourly pay scale, I would have thought there'd be a lot of it, frankly, because at that point you're running a sort of churn and burn practice."); Video Interview with F53, Att'y, Triangle Cnty. (Jan. 24, 2022) ("[F]or the hourly it gives every incentive to download.").

^{186.} See Video Interview with D15, Att'y, Rectangle Cnty. (Aug. 12, 2021) ("The downloading of the [discovery]... sometimes takes a lot of time that we don't get reimbursed for").

^{187.} Davis et al., supra note 95, at 27.

high caseloads and cannot provide adequate attention to each case. ¹⁸⁸ While the volume of digital discovery has increased significantly, rates of compensation have not caught up, and caseloads for appointed counsel, including public defenders, remain very high. ¹⁸⁹ Between 2014 and 2017 in Texas, "more than 40% of all cases annually were defended by an attorney who is statistically over [the] standard, full-time equivalencies" measure of an acceptable caseload. ¹⁹⁰ The problem is not unique to Texas—similar concerns have been raised in other jurisdictions. ¹⁹¹

Our quantitative analysis partially confirmed the hypotheses of our interviewees. Appointed lawyers did not systematically access discovery at a lower rate than other attorneys, but they did perform slightly worse than retained attorneys in two counties (Pentagon and Circle), where the courts relied mostly on flat-fee payments. On the other hand, in one county that paid appointed lawyers on an hourly basis (Rectangle), appointed attorneys performed better. While we do not have adequate case-level data about flat-fee versus hourly compensation to confirm this finding in a robust way, the differences among counties suggest that the use of flat-fee payments has a negative impact on discovery performance. This explanation would also be consistent with scholarship finding less effort by defense attorneys in appointed cases when work is reimbursed at a flat rate. 192

^{188.} Video Interview with D15, Att'y, Rectangle Cnty. (Aug. 12, 2021) ("Some of them, maybe they just don't have the time, and they have too many court appointments or too many cases and don't have the time."); Telephone Interview with F2, Att'y, Triangle Cnty. (Jan. 11, 2022) ("They've got way too many cases, they're overworked, they're looking at the probable cause, the affidavit and then taking a statement from the client and then just making a plea. You can get the PC affidavit at the clerk's office ").

^{189.} Davis et al., *supra* note 95, at 11–12 (reporting that the total case volume of appointed cases in Texas has gone up about 20 percent between the early 2000s and 2017 and that cases per attorney have also gone up).

^{190.} Id. at 24.

^{191.} In Virginia, court-appointed defense attorneys are typically paid \$250 per case, "a fee schedule based on the assumption that it takes about three days for an attorney to prepare a case. But reviewing video evidence has bumped the average case preparation time to a week or more," raising concerns that lawyers will refuse to take court-appointed cases. Kimberly Kindy, *Some U.S. Police Departments Dump Body-Camera Programs amid High Costs*, WASH. POST (Jan. 21, 2019), https://www.washingtonpost.com/national/some-us-police-departments-dump-body-came ra-programs-amid-high-costs/2019/01/21/991f0e66-03ad-11e9-b6a9-0aa5c2fcc9e4_story.html [htt ps://perma.cc/MF5G-K93Z].

^{192.} See, e.g., Lee, supra note 33, at 3–4; Schwall, supra note 33, at 554; Agan, Freedman & Owens, supra note 67, at 294, 306 (finding that "lawyers' behavior is responsive to changes in the compensation structure" from hourly to flat fee); Iyengar, supra note 30, at 4, 20–21 (finding that

7. Lack of Diligence. While many respondents gave explanations that at least partly justified failures to download discovery, some respondents acknowledged that failures were at times the result of incompetence or simple lack of diligence. As one explained, in some cases originally assigned to a different attorney where files were never opened before the court reassigned the case to our interviewee, I look at the former lawyer, and I go, Oh, okay, that makes sense, I know their reputation. Several just chalked up the poor discovery practices to attorney laziness.

C. Mixed-Method Insights

Our qualitative and quantitative analyses work together to support several findings about defense-attorney use of digital evidence. It is striking to us that each of our quantitative findings also find support in the qualitative data. As several of our interviewees anticipated, attorneys in the four counties whose records we analyzed failed to access evidence files in a substantial portion of cases, with non-access rates ranging from 27 percent in Pentagon County to 4 percent of felony cases in Rectangle County. 196

The clearest reason for different access rates is the nature of the offense charged. More serious offenses generated higher levels of discovery activity.¹⁹⁷ By contrast, as some of our interviewees explained, in minor cases, particularly if defendants are detained,

low wages relative to other market options likely explained worse performance of assigned counsel compared to public defenders in federal cases); Anderson & Heaton, *supra* note 30, at 200 (finding that "extremely limited compensation" is an important factor explaining why appointed counsel performed worse than public defenders).

^{193.} *E.g.*, Telephone Interview with F1, Att'y, Triangle Cnty. (Jan. 7, 2022) (noting that negligence may explain some of the failures to download discovery); Video Interview with F4, Att'y, Triangle Cnty. (Jan. 24, 2022) (same); Video Interview with F5, Att'y, Triangle Cnty. (Jan. 27, 2022) (same).

^{194.} Video Interview with D15, Att'y, Rectangle Cnty. (Aug. 12, 2021); Video Interview with A3, Att'y, Pentagon Cnty. (Aug. 2, 2021) (opining that this is "something that we should not be doing").

^{195.} Video Interview with F52, Att'y, Triangle Cnty. (Jan. 24, 2022) ("You know, laziness."); Video Interview with B4, Att'y, Pentagon Cnty. (Aug. 6, 2021) ("I would say lazy would be [the] number one [reason for failing to access discovery]. I hate saying that."). Six interviewees in total mentioned this theme.

^{196.} See supra Part III.A & Table 1.

^{197.} See supra Part III.A & Table 4.

defendants themselves may prefer for counsel to forgo time-consuming discovery review in favor of a quick disposition.¹⁹⁸

Second, our data also confirm that rates of discovery access generally improved over time from 2018 to 2020. 199 This is consistent with interviewee comments that low access rates in the first years of the digital platform's operation were likely related to lack of familiarity with the platform and technological issues arising during the initial implementation. Early technological problems apparently faded as defense attorneys improved their own skills and technology infrastructure. 200

Third, attorneys with the fewest years of experience tended to be the most diligent in accessing discovery. By and large, access rates go down for attorneys with more than four years of practice experience.²⁰¹ This might reflect less technological skill among older lawyers or greater confidence—whether warranted or not—that attorneys with more experience can evaluate cases and represent some clients' interests without opening the electronic files at all.²⁰²

Fourth, video files, which are significantly larger, were less likely to be accessed, confirming interviewees' hypotheses that technical difficulties prevented some attorneys from downloading videos. 203 More generally, as prior research has discussed, and our interviewees agreed, the rapidly increasing volume and complexity of digital evidence make it impractical for defense attorneys to open each file in every case. 204

Finally, our evidence points to the different methods of attorney payment in different counties as one possible explanation for variation between counties. Some interviewees guessed that flat-fee payments for appointed lawyers would produce lower rates of discovery access, while hourly payments for appointed lawyers would lead to rates of

^{198.} See supra Part III.B.3 & B.4; Heaton et al., supra note 28, at 717; Smith & Maddan, supra note 28, at 1333–34.

^{199.} See supra Part III.A & Table 3 (showing that between 2018 and 2020, the percentage of unaccessed cases decreased in all four counties, and the percentage of attorneys with at least one unaccessed case decreased in three counties but increased in one).

^{200.} See supra Part III.A & Table 3.

^{201.} See supra Part III.A & Table 5.

^{202.} See supra Part III.B.5.

^{203.} See supra Part III.A, Part III.B.1 & Table 6.

^{204.} See supra Part III.B.2; notes 69-70 and accompanying text.

access closer to the performance of retained lawyers.²⁰⁵ The quantitative analysis of case-level data supports this idea, showing that in two counties (Pentagon and Circle) where the courts relied mostly on flat-fee payments, appointed attorneys performed slightly worse than retained attorneys.²⁰⁶ Moreover, in one county that paid appointed lawyers on an hourly basis (Rectangle), appointed attorneys performed better.²⁰⁷

While our interviews uncovered factors that may explain and, at times, justify the failure to access discovery by defense attorneys, interviewees themselves conceded that lack of diligence is a contributing factor for discovery neglect in some cases.²⁰⁸ Because discovery neglect may constitute both an ethical and a constitutional problem, it is critical to understand when and why it occurs. The next Part analyzes the legal and policy implications of discovery neglect and provides some guidance on how to reduce its frequency.

IV. LEGAL AND POLICY IMPLICATIONS

In this Part, we measure the failure of some defense attorneys to view or download evidence against the relevant legal and ethical standards. We also propose several ideas to minimize discovery neglect by defense attorneys.

A. Constitutional and Professional Deficiencies

Some of our respondents suggested that reviewing discovery may not be necessary in certain cases, either because the evidence is irrelevant or redundant or because review would interfere with the client's wish to plead guilty promptly (typically to be released from jail or to enter a pretrial diversion program). Cases in which discovery review is not necessary, however, are exceptional. As this Section elaborates, in most cases, forgoing review of discovery—especially review of all the available discovery in a case—conflicts with a lawyer's constitutional and ethical duty to provide effective representation. Such neglect disserves clients and can result in wrongful convictions or disproportionately harsh sentences.

^{205.} See supra Part III.B.6.

^{206.} See supra Part III.A & Table 2.

^{207.} See supra Part III.A & Table 2.

^{208.} See supra Part III.B.7.

Lawyers themselves acknowledge the importance of discovery review to effective representation. Most of our respondents did so, even as they provided a range of possible explanations for failures to review digital discovery in some unusual cases.²⁰⁹ Statements from attorneys from other jurisdictions affirm the same point—the presumption in every case is that a defense attorney will want to review each piece of evidence disclosed by the prosecution.²¹⁰ For example, more than 90 percent of New York defense attorneys surveyed about the effects of a recent law expanding pretrial discovery in the state affirmed that the law "improved their ability to evaluate cases and develop case strategies"; "improved their ability to investigate their cases"; and improved their ability to advise clients "about the charges, the case against them, and whether to accept a plea offer."²¹¹ Eighty percent of those surveyed also thought that the expanded discovery made the proceedings fairer.²¹² In a survey of Virginia and North Carolina defense attorneys, "[o]ne of the two most frequently noted advantages of open-file discovery was that the practice ensures better informed decisions and more effective assistance of the client. The other was that open-file discovery promotes fairness transparency."²¹³ A large majority of defense attorneys thus believe that access to discovery is critical to their ability to represent their clients effectively.

Studies of wrongful convictions show that attorneys' failure to review discovery in a case can have grave consequences for defendants. Inadequate legal defense was a contributing factor to the wrongful conviction of defendants in 27 percent of all National Registry of Exonerations ("NRE") recorded exonerations and in about 15 percent

^{209.} See, e.g., Telephone Interview with A2, Att'y, Pentagon Cnty. (Aug. 4, 2021) ("At [a] minimum, we should always look at the offense report."); Video Interview with D23, Att'y, Rectangle Cnty. (Aug. 26, 2021) ("I can't think of any reason not to read all the police reports or any the other law enforcement documents.").

^{210.} *E.g.*, Peters, *supra* note 147 ("Defense attorneys said they'd be remiss not to ask for all of the possible evidence in their cases."); Don Pumphrey, Jr., *How Do Police Body Cameras Impact a Criminal Defense Case*?, PUMPHREY LAW (July 16, 2020), https://www.pumphreylawfir m.com/blog/how-do-police-body-cameras-impact-a-criminal-defense-case [https://perma.cc/BW6 5-6XUR] ("[B]ody worn footage, when viewed by a shrewd criminal defense attorney can reveal the basis for dismissal of criminal charges.").

^{211.} See CHIEF DEFENDERS ASS'N OF N.Y. ET AL., supra note 151, at 7–8, 16–18.

^{212.} *Id.* at 11, 13–16.

^{213.} Turner & Redlich, supra note 4, at 356-57.

of plea-based exonerations.²¹⁴ A qualitative study of exonerations involving inadequate legal defense found that failure to investigate was "far more frequent than other types of legal inadequacies in the NRE's [inadequate legal defense] cases, appearing in 80.6 percent of cases, while trial errors were found in just 50.8 percent of these wrongful convictions."²¹⁵ Discovery review is an essential element of any factual investigation and must be undertaken diligently to prevent such miscarriages of justice.²¹⁶

Reviewing evidence relevant to the case is also constitutionally required. Courts have held that an attorney has a duty to investigate the merits of the client's case.²¹⁷ Defense counsel's complete failure to review discovery represents deficient representation that may tarnish the verdict and provide grounds for a new trial.²¹⁸

ABA Standards and rules of professional responsibility likewise provide that defense attorneys have a duty to investigate the case,

^{214.} NAT'L REGISTRY OF EXONERATIONS, https://www.law.umich.edu/special/exoneration/Pages/browse.aspx [https://perma.cc/2E8Q-GYQB] (last updated Dec. 13, 2023) (providing raw data from which we made this calculation).

^{215.} Rosa Greenbaum, Investigating Innocence: Comprehensive Pre-Trial Defense Investigation To Prevent Wrongful Convictions (2019) (M.A. dissertation, University of California, Irvine) (eScholarship).

^{216.} See, e.g., DOTTIE CARMICHAEL, AUSTIN CLEMENS, HEATHER CASPERS, MINER P. MARCHBANKS III & STEVE WOOD, GUIDELINES FOR INDIGENT DEFENSE CASELOADS: A REPORT TO THE TEXAS INDIGENT DEFENSE COMMISSION, at xvi (2015) ("[L]ike their colleagues responding to the Time Sufficiency Survey, Delphi members agreed the greatest time increment is needed the area of [discovery and] investigation. Delphi members supported at least a five-fold increase in attorney discovery and investigation and a twenty-fold increase in non-attorney investigator's time.").

^{217.} Strickland v. Washington, 466 U.S. 668, 691 (1984) ("[C]ounsel has a duty to make reasonable investigations or to make a reasonable decision that makes particular investigations unnecessary."); Rolan v. Vaughn, 445 F.3d 671, 682 (3d Cir. 2006) ("Failure to conduct any pretrial investigation is objectively unreasonable."); Richards v. Quarterman, 566 F.3d 553, 571 (5th Cir. 2009) (holding that counsel provided ineffective assistance because she failed to conduct adequate pretrial investigation). See generally Jenny Roberts, Too Little, Too Late: Ineffective Assistance of Counsel, the Duty To Investigate, and Pretrial Discovery in Criminal Cases, 31 FORDHAM URB. L.J. 1097, 1106 (2004) ("[T]o provide effective assistance of counsel consistent with the Sixth Amendment, defense counsel has an independent duty to investigate the case.").

^{218.} See, e.g., Kimmelman v. Morrison, 477 U.S. 365, 385 (1986) (holding that counsel's failure to obtain discovery constituted deficient performance); United States v. Myers, 892 F.2d 642, 649 (7th Cir. 1990) ("A failure to read documents, not voluminous, that the government has disclosed pursuant to its duty to reveal potentially exculpatory materials is a sure sign of professional incompetence."); Randall v. United States, No. 3:13-cv-00154-MOC, 2014 WL 4311043, at *6 (W.D.N.C. Sept. 2, 2014) (holding that an attorney's failure to review discovery was deficient performance that prejudiced the outcome of the case); State v. Thiel, 665 N.W.2d 305, 317 (same); Ervin v. State, 423 S.W.3d 789, 794 (Mo. Ct. App. 2013) (same).

including efforts "to secure relevant information in the possession of the prosecution."²¹⁹ The standards expressly state that a defendant's decision to accept a plea offer does not necessarily absolve counsel from reviewing discovery; rather,

defense counsel... should not recommend to a client acceptance of a disposition offer unless and until appropriate investigation and study of the matter has been completed. Such study should include discussion with the client and an analysis of relevant law, *the prosecution's evidence*, and potential dispositions and relevant collateral consequences.²²⁰

Because the digital platform allows the prosecutor to see whether the defense attorney has downloaded files, the failure to download certain files undermines the defense attorney's leverage in negotiations with the prosecution.²²¹ Even if the prosecutor has not seen the status of discovery downloads in the digital platform, conversations with the defense attorney about the case may reveal any discovery neglect. As one attorney explained in our interview:

[Y]ou're not going to be a good negotiator on a plea bargain agreement if you haven't reviewed discovery. You're going to look kind of like dumb talking to them and being like, "What? No, you don't even know what your client has against them so don't even talk to me about this, or you need to look at discovery first and have a 'come to Jesus' talk with your client."²²²

^{219.} ABA STANDARDS FOR CRIMINAL JUSTICE: DEFENSE FUNCTION §§ 4–4.1 (4th ed. 2017).

^{220.} *Id.* §§ 4–6.1(b) (emphasis added); *see also* MODEL RULES OF PRO. CONDUCT r. 1.1 & cmt. 5 (AM. BAR ASS'N) (competent representation includes "inquiry into and analysis of the factual . . . elements of the problem"); MODEL RULES OF PRO. CONDUCT r. 1.3 & cmt. 1 (AM. BAR ASS'N) (diligent representation requires a lawyer to "pursue a matter on behalf of a client despite opposition, obstruction or personal inconvenience").

^{221.} In an interview, one attorney explained the effect on credibility:

I have seen prosecutors, because I'm friendly with them, right. I'm a public defender. I mean they see me every day. We're going to be friendly with each other. You know I'll walk in, and I'll listen in on a conversation that to me seems like the defense attorneys being very reasonable. And then, one day, as soon as the . . . defense attorney, always a private defense attorney, walks out of there, like "Can you believe that joker I saw? He hasn't reviewed [the digital discovery], you know he doesn't know what he's talking about." I think that hurts that attorney's credibility significantly. And I've seen it over the years several times in the in the work room.

Video Interview with A5, Att'y, Pentagon Cnty. (Aug. 13, 2021).

^{222.} Video Interview with A1, Att'y, Pentagon Cnty. (Aug. 4, 2021).

Notably, the attorney's constitutional and ethical duty to review discovery exists regardless of the seriousness of the case. The law does not excuse failure to review discovery in misdemeanor cases or low-level felonies.²²³

There are two situations in which discovery neglect might not constitute deficient representation. First, if a defense attorney knows that certain evidence disclosed by the prosecution is irrelevant or redundant, the decision not to review it could in some instances be excused as reasonable.²²⁴ Since a label on an evidence file is not likely to reveal much about the substance of the file, however, defense attorneys' claims that they knew a piece of evidence was irrelevant, even without opening it, should be reviewed critically.²²⁵

Second, if a client insists he is guilty and wants to accept a particular plea offer so he can be released from pretrial detention, the client could waive the right to review discovery.²²⁶ But for the waiver to be valid, it has to be voluntary and informed.²²⁷ In other words, at the very least, the defense attorney must explain to the client the potential risks of pleading guilty without viewing the discovery. It is

^{223.} See Argersinger v. Hamlin, 407 U.S. 25, 33 (1972) (holding that the Sixth Amendment right to counsel applies to any offense, including misdemeanors, the conviction for which results in actual imprisonment); MARC L. MILLER, RONALD F. WRIGHT, JENIA I. TURNER & KAY L. LEVINE, CRIMINAL PROCEDURES: PROSECUTION AND ADJUDICATION 8 (7th ed. 2023) (discussing state provisions that provide broader access to counsel than the constitutional minimum). As the Supreme Court has made clear, "the right to counsel is the right to the effective assistance of counsel." Strickland v. Washington, 466 U.S. 668, 686 (1984) (quoting McMann v. Richardson, 397 U.S. 759, 771 n.14 (1970)). Likewise, neither the ABA Criminal Justice Standards nor the Model Rules of Professional Conduct are limited to serious felonies. See supra notes 219–20 and accompanying text. But see supra Part III.A & Table 4 (finding that defense attorneys are less likely to access discovery in less serious felony cases).

^{224.} See, e.g., Strickland, 466 U.S. at 691 ("[C]ounsel has a duty to make reasonable investigations or to make a reasonable decision that makes particular investigations unnecessary."); MODEL RULES OF PRO. CONDUCT r. 1.2(c) (AM. BAR ASS'N) ("A lawyer may limit the scope of the representation if the limitation is reasonable under the circumstances and the client gives informed consent.").

^{225.} See supra Part III.B.2.

^{226.} See, e.g., Darryl K. Brown, Executive Branch Regulation of Criminal Defense Counsel and the Private Contract Limit on Prosecutor Bargaining, 57 DEPAUL L. REV. 365, 385 (2008) ("Defendants can waive all trial rights and are also permitted to waive most other entitlements, including constitutional rights to appeal and to receive discovery from the government."); Nancy Jean King, Priceless Process: Nonnegotiable Features of Criminal Litigation, 47 UCLA L. REV. 113, 148 (1999); Erica G. Franklin, Note, Waiving Prosecutorial Disclosure in the Guilty Plea Process: A Debate on the Merits of "Discovery" Waivers, 51 STAN. L. REV. 567, 568 (1999).

^{227.} See Brady v. United States, 397 U.S. 742, 748 (1970) (saying that the waiver of the right to a jury trial must be voluntary and informed).

questionable, however, whether a waiver of pretrial discovery review can ever be fully informed.²²⁸

In brief, failure to review discovery in most cases likely represents deficient performance by counsel and can give rise to ineffective assistance of counsel claims if a defendant can show that he was prejudiced by the failure.²²⁹ In some cases, defendants may not even need to show prejudice.²³⁰ The Supreme Court has held that an ineffective assistance claim can succeed without a prejudice showing if the defendant demonstrates that the lawyer "entirely" failed to "subject the prosecution's case to meaningful adversarial testing." ²³¹ Under this jurisprudence, failure to open discovery may well count as structural ineffective assistance. When a defense attorney fails to open discovery provided by the prosecution, it is difficult to see how that attorney could subject the case to adversarial testing.²³² In such cases, defendants may be able to show that the failures represent structural ineffectiveness, and if the problem is widespread in certain jurisdictions, civil lawsuits alleging structural ineffectiveness claims may also be successful.²³³

^{228.} See Franklin, supra note 226, at 582 ("A defendant waiving discovery rights has no way of knowing what he gives up as part of the waiver, since it has not been discovered, and he has no access to the information himself.").

^{229.} The prejudice requirement is quite demanding, however. *Strickland*, 466 U.S. at 687 (holding that a defendant must demonstrate prejudice, which "requires showing that counsel's errors were so serious as to deprive the defendant of a fair trial, a trial whose result is reliable"); *id.* at 694 (holding that a defendant must show "a reasonable probability that, but for counsel's unprofessional errors, the result of the proceeding would have been different"); *see also* Bustamante v. United States, No. 08 C 3508, 2009 WL 1444716, at *2 (N.D. Ill. May 21, 2009), *aff'd*, 367 F. App'x 708 (7th Cir. 2010) (holding that when a party alleges ineffective assistance of counsel through a failure to review the government's case file or review relevant documents, the party has the burden of making a "comprehensive showing of what the investigation would have produced" (quoting Hardamon v. United States, 319 F.3d 943, 951 (7th Cir. 2003))).

^{230.} Strickland, 466 U.S. at 692 ("In certain Sixth Amendment contexts, prejudice is presumed. Actual or constructive denial of the assistance of counsel altogether is legally presumed to result in prejudice. So are various kinds of state interference with counsel's assistance.").

^{231.} United States v. Cronic, 466 U.S. 648, 659 (1984).

^{232.} Cf. Wilbur v. City of Mount Vernon, 989 F. Supp. 2d 1122, 1131–32 (W.D. Wash. 2013) (granting relief to plaintiffs for structural ineffective assistance in their cases because most defendants were "going to court for the first time—and sometimes accepting a plea bargain—never having had the opportunity to meet with their attorneys in a confidential setting").

^{233.} See Primus, supra note 8, at 1613–26 (discussing and endorsing the revival of structural ineffectiveness claims in civil litigation seeking injunctive relief).

B. Implications for Criminal Law Reform

States can take several measures that help attorneys fulfill their duties to review digital discovery. These measures include training for attorneys who are struggling with the technology, technological solutions to make review of voluminous discovery easier, proper compensation for attorneys who review extensive discovery, and accountability for attorneys who unreasonably fail to fulfill their discovery duties.

1. Technological and Administrative Solutions. States, local authorities, and technology providers must ensure that the digital evidence platform used to share evidence with the defense does not cause regular delays or other difficulties with downloading large files. Our interviews revealed that some discovery platforms are seen by attorneys as more efficient and functional than others. And even the same platform worked more efficiently in some counties than in others, suggesting that server capacity also matters for a platform to handle frequent and large-volume downloads. Counties choosing which platforms to buy should consider not only platforms' price but also how each platform handles heavy traffic and large files and how user-friendly the platform is for all involved—defense attorneys as well as law enforcement and prosecutors.

To learn the shortcomings of existing platforms, local authorities and courts should also provide defense attorneys with a convenient forum for registering complaints. A discovery coordinator within the prosecutor's office, the courthouse, or the county auditor's office might collect these comments. To ensure that defendants' right to discovery is not compromised, local authorities must also address these complaints promptly. To the extent individual challenges are not addressed, prosecutors must be flexible in providing the discovery through other means, and courts must provide continuances or other remedies as needed to allow counsel to review the discovery.

^{234.} See, e.g., Video Interview with F5, Att'y, Triangle Cnty. (Jan. 27, 2022) (noting that the digital evidence platform in Triangle County is better than the platforms used by other counties); Video Interview with B6, Att'y, Pentagon Cnty. (Aug. 23, 2021) (same with respect to the platform used by Pentagon County).

^{235.} See, e.g., Video Interview with B4, Att'y, Pentagon Cnty. (Aug. 6, 2021) ("[Pentagon] is the worst. Better in [Rectangle]. [Pentagon] sometimes takes so long to download.... For some reason [Pentagon] is just much slower than [Rectangle], I don't know why.").

Counties should also heed broader concerns of defense attorneys about the configurations of the platform and work with platform developers to address these concerns. For example, several of our interviewees expressed concern that digital discovery review is not always reimbursed adequately in appointed cases. To facilitate proper compensation for counsel, developers should configure platforms to easily record time spent downloading and reviewing digital discovery. Some of our interviewees also expressed concern about the fact that prosecutors could see which documents the defense attorney has viewed or downloaded—and how many times, and at what times. This offers to prosecutors an unmerited tactical advantage for plea negotiations and trial preparation. Platform developers should therefore eliminate this feature.

In addition to ensuring that digital discovery technology is functional and responsive to reasonable defense concerns, state and local authorities and courts need to address the growing problem of voluminous digital discovery in criminal cases. The burden is particularly heavy on defense attorneys, who lack in-house IT support and have fewer financial resources than prosecutors to store and manage digital evidence.²³⁸ One way to reduce the burden on defense attorneys is quite simple. It requires law enforcement agencies and prosecutors to label files in a clear, descriptive fashion to make it easier for attorneys to prioritize important files to view first.

Another necessary step to address this problem is to provide defense counsel with easily available, low-cost software that can help them review digital discovery—particularly voluminous audio and video discovery—more efficiently.²³⁹ Some public defenders and

^{236.} See supra Part III.B.6.

^{237.} For instance, one attorney said:

[[]The prosecutor might view my access activity and conclude], 'Hey, he hasn't looked at the evidence since this date and maybe he doesn't know what's going on with the case.' . . . It's different if I show up to the office and sign a piece of paper that says on this date I accepted this evidence, that's different than them seeing every time I download something and every time I access the file.

Telephone Interview with F2, Att'y, Triangle Cnty. (Jan. 11, 2022).

^{238.} See Kimpel, supra note 22, at 382 ("Public defenders and court-appointed indigent defense lawyers are either working longer hours or failing to review this influx of evidence; neither response is sustainable."); Turner, supra note 22, at 249–56.

^{239.} As one of us has argued before:

[[]L]egislators ought to invest in a more robust digital discovery infrastructure for the criminal justice system, similar to the one already provided for federal prosecutors. This infrastructure would serve not only prosecutors' offices, but also the courts, public

indigent defense organizations have purchased this software for their attorneys.²⁴⁰ The software can "pinpoint[] specific words or phrases from data revealed in body camera footage and recorded jail calls, eliminating the need for attorneys to sit for hours plucking through evidence." ²⁴¹

Unfortunately, the cost remains out of reach for many solo practitioners in many states.²⁴² To ensure that the right to effective representation is fulfilled in cases with voluminous digital discovery, in states where the software is not available through an indigent defense association, courts should consider reimbursing appointed counsel for a portion of the costs for this type of software to facilitate adequate review of the evidence by defense counsel.²⁴³

Ensuring that digital evidence platforms can be used easily and effectively by all of their users—defense attorneys as well as prosecutors and law enforcement—can help avoid miscarriages of justice. And while discovery platforms and evidence review software that are easy to use for defense attorneys as well as prosecutors might cost more at the front end, local jurisdictions would benefit from adopting these tools over the long term as it could save them money by avoiding downstream criminal justice costs. Appointed counsel would bill less time trying to master the platform and combing through voluminous files for relevant evidence, defendants would file fewer claims of ineffective assistance resulting from inadequate discovery, and counties would incur fewer costs of wrongful convictions resulting from inadequate defense investigation.

defenders, court-appointed defense attorneys, and perhaps even retained counsel (the latter at a cost).

Turner, supra note 22, at 309.

^{240.} See, e.g., JusticeText Secures Statewide Contract with the Virginia Indigent Defense Commission, JUSTICETEXT (Sept. 1, 2021), https://justicetext.com/vidc [https://perma.cc/7KK9-4LYN].

^{241.} Katie Stancombe, Swifter Justice: AI Management Software for Public Defenders Tackles Media Evidence Faster, More Efficiently, IND. LAW. (Dec. 22, 2021), https://www.theindianalawy er.com/articles/swifter-justice-ai-management-software-for-public-defenders-tackles-media-evid ence-faster-more-efficiently [https://perma.cc/V4BP-WXVF]. The software also provides automatic transcription, keyword searches, the ability to annotate transcripts, "and a clip-making tool allows for precise video-clipping that can come in handy during jury trials or depositions." Id.

^{242.} Id.

^{243.} See Turner, supra note 22, at 309.

2. Training and Paying Attorneys to Manage Digital Discovery.

As our interviews confirmed, defense attorneys would also benefit from better education on digital discovery. Law schools can provide some of this education. Courses on e-discovery are still rare and, when offered, tend to focus on civil cases.²⁴⁴ Greater attention to the special demands of digital discovery can be incorporated into clinical training, advanced courses on criminal procedure, or seminars devoted to the topic of e-discovery in both civil and criminal cases.

State bar associations, public defender organizations, and defense attorney associations should also offer affordable continuing education on digital discovery for defense attorneys.²⁴⁵ Surveys and interviews of defense attorneys reveal broad interest in such training.²⁴⁶ And although we did not ask a question about the need for training, some of our interviewees raised it themselves in discussing digital discovery with us.²⁴⁷

I wish there was some sort of training [on the digital evidence platform] done for defense attorneys, that would be very helpful. You know, obviously, prosecutors, are very well versed in it, so I feel like we have a little bit of a disadvantage . . . So I would love, and I would attend it 100 percent, any sort of CLE, or whatever way for us to get better, and I would extend the invitation to paralegals for sure.

Video Interview with F5, Att'y, Triangle Cnty. (Aug. 27, 2022).

^{244.} A Google search yielded fewer than a dozen law school catalog entries describing a course on e-discovery, and most of these courses focused primarily or exclusively on civil cases. See, e.g., Course Schedule: Electronic Discovery and Digital Evidence, UNIV. OF TEX. AT AUSTIN SCH. OF L. (2024), https://law.utexas.edu/courses/class-details/20222/28910 [https://perma.cc/3YT J-R6DH] (e-discovery in civil cases); Courses Overview: Electronic Discovery, UNIV. OF FLA. LEVIN COLL. OF L., https://www.law.ufl.edu/courses/electronic-discovery [https://perma.cc/RWQ 8-RSC2] (same). For a course that covered both civil and criminal case e-discovery, see Course Guide: Digital Evidence and E-Discovery, UNIV. OF MINN. L. SCH. (2024), https://law.umn.edu/course/6876/spring-2013/digital-evidence-and-e-discovery/hannon-michael [https://perma.cc/WLZ4-9WV3].

^{245.} See MODEL RULES OF PRO. CONDUCT r. 1.1 cmt. 8 (competence includes keeping abreast of changing technology). As of February 3, 2022, forty states had adopted the comment to Rule 1.1 requiring lawyers to maintain technological competence. Robert Ambrogi, Tech Competence, LAWSITES BLOG, https://www.lawsitesblog.com/tech-competence [https://perma.cc/4MGK-BUY5].

^{246.} JOHN MCCLUSKEY, SHAKIERAH SMITH, ORAL ROBERTSON, CRAIG D. UCHIDA & DAMON MOSLER, THE EVIDENTIARY VALUE OF BODY-WORN CAMERA FOOTAGE: A SURVEY OF PROSECUTORS AND PUBLIC DEFENDERS 7 (Jan. 2019) (almost three-fourths of public defenders agreed that "[s]pecific training is needed in order to handle body-worn camera evidence"), https://bja.ojp.gov/library/publications/evidentiary-value-body-worn-camera-footage-survey-prosecutors-and-public [https://perma.cc/V9FP-WZP5]; Kimpel, *supra* note 22, at 379.

^{247.} One attorney lamented:

More broadly, states ought to ensure adequate pay for appointed counsel that does not disincentivize them from reviewing voluminous discovery. In this regard, our findings suggest that hourly pay may be an important way to encourage adequate rates of discovery review among appointed defense attorneys.²⁴⁸ With respect to public defenders, states ought to limit caseloads to ensure that defenders have the time to review voluminous digital discovery.²⁴⁹ Just as prosecutors have advocated for more staffing to address the heavier burdens of digital evidence, increases in staffing and restrictions on caseloads are also necessary to address digital discovery overloads for public defenders.²⁵⁰

3. Addressing Serious Individual Failures. States must also address serious individual failures by defense attorneys. Because the digital platforms track the attorney's discovery behavior, states should make the records available to courts or other institutions responsible for appointing counsel—but not to prosecutors, who are in an adversarial position to defense attorneys. Judges, clerks, and coordinators of appointed counsel systems can then develop standards that enable them to winnow lists of appointed counsel based on repeated failure to download discovery. Public defenders' offices would likewise have access to their employees' records and use them for internal supervision.

Because failure to download discovery occurs among retained counsel as well, measures are necessary to provide for accountability in that context too. One possible response would be to provide criminal defendants with a clear right of access to the download history of their attorney.²⁵¹ In theory, if a defendant successfully obtains this information and learns that their attorney has failed to access discovery

^{248.} See supra note 92 and accompanying text.

^{249.} See Kimpel, supra note 22, at 383–84.

^{250.} *Id.* at 384 (citing Melissa Labriola, Erin J. Farley, Michael Rempel, Valerie Raine & Margaret Martin, Indigent Defense Reforms in Brooklyn, New York: An Analysis of Mandatory Case Caps and Attorney Workload, at iii, vi (2015)).

^{251.} The Texas Public Information Act arguably already grants a right of public access when the information is kept by the county or the district attorney's office, but, as we found out in our research, the process of obtaining the information is arduous. We requested the data from seven counties but received complete data from only four. Although we could have litigated the matter, we did not have the time and resources to do so. Criminal defendants are less likely to be aware of their rights under the Public Information Act and even less likely to have the resources to litigate a denial of information. See Tex. Gov't Code Ann. § 552 (West 2023).

in their case, this could provide evidence to support a malpractice lawsuit or an ineffective assistance claim. But the law sets high thresholds for these claims to succeed, so these avenues are not likely to provide the needed accountability.²⁵² A more effective approach might be to enable the state bar, whether on an individual defendant's request or as part of regular systematic review, to obtain this information and initiate disciplinary proceedings if warranted.

CONCLUSION

Digital discovery platforms, in theory, could make defense attorneys better at their jobs. Unfortunately, our research of digital evidence data shows that, in too many cases, defense attorneys fail to view any files disclosed by the prosecution.

Our qualitative and quantitative findings help explain why this happens. Attorneys are most likely to skip access in their least serious cases, even though their duties extend to all their clients. Years of experience also lead some attorneys to go forward without discovery, either because of technological challenges or overconfidence. Finally, low pay for appointed counsel in flat-fee jurisdictions, high caseloads for public defenders, and a deluge of (often repetitive) digital discovery limit attorneys' capacity to review evidence.

Some of these problems appear to become less serious over time. But state courts, legislatures, and bar associations can do more than just wait and hope for better. They can improve training and pay for defense review of digital discovery, facilitate the use of new technology that would help attorneys review digital discovery more efficiently, and provide transparency and accountability for repeated failures by some attorneys to fulfill their professional responsibility to review discovery. Such measures would not only strengthen the enforcement of the right to counsel but would also help fulfill the promise of open-file-discovery laws to improve fairness in the criminal process.

^{252.} For a discussion of the difficulty of prevailing in malpractice lawsuits against criminal defense attorneys, see Meredith J. Duncan, *The (So-called) Liability of Criminal Defense Attorneys: A System in Need of Reform*, 2002 BYU L. REV. 1, 21–22. For a discussion of the difficulty of prevailing on an ineffective assistance claim, see, for example, Richard Klein, *The Constitutionalization of Ineffective Assistance of Counsel*, 58 MD. L. REV. 1433, 1445–77 (1999).