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E-NOTICE

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ABSTRACT

Social media platforms and smartphone manufacturers face class action lawsuits, but how open are federal courts to using these very technologies to notify members of a class action? This Article details the results from an empirical analysis of over 2700 federal class notice decisions. It finds class notice changing, but very slowly. Supreme Court precedent demands a dynamic standard for class action notice. However, fears of change, technology, and imprecision keep courts tethered to twentieth-century modes of communication. This judicial fear encumbers E-Notice—at a cost to the utility of class action procedures.

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INTRODUCTION

Each morning, you stumble down the steps, open the front door, and retrieve three national newspapers. While the coffee is brewing, you slip the first paper from its protective plastic and rustle it open. Your eyes start searching the freshly inked pages. No luck. Same result with the second paper. You pour a cup of coffee then pick up the third daily, flipping from page to page. On page D12, success. You tear out the phone number listed, saving it for later. Now onto that second cup of coffee, a reward for your daily search for class action notices that impact you.

The Supreme Court triggered this disconnect with reality in 1950.[1] In *Mullane v. Central Hanover*,[2] the Court held that the Fifth and Fourteenth Amendments mandate providing individuals notice and an opportunity to be heard in pending litigation.[3] Such procedural due process requirements are minimal: neither actual notice nor the best form of notice is necessary.[4] Rather than curtailing notice methods, the

1. Mullane v. Cent. Hanover Bank & Tr. Co., 339 U.S. 306, 314 (1950); *see also* Alexander W. Aiken, *Class Action Notice in the Digital Age*, 165 U. PA. L. REV. 967, 982 (2017) ("Courts have long recognized the problems inherent in this fiction, but as readership shrinks, that legal fiction diverges further from reality."); Brian Walters, *"Best Notice Practicable" in the Twenty-First Century*, 2003 UCLA J.L. & TECH. 4, 8 ("In [large consumer class actions], courts regularly rely on the legal fiction that publication in newspapers which class members are somewhat more likely to read is sufficient to put class members on notice of the pending action and their rights." (citation omitted)).

2. *Mullane*, 339 U.S. at 314.

3. The *Mullane* Court stated:

> Many controversies have raged about the cryptic and abstract words of the Due Process Clause but there can be no doubt that at a minimum they require that deprivation of life, liberty or property by adjudication be preceded by notice and opportunity for hearing appropriate to the nature of the case.

Id. at 313.

4. *Id.* at 317. In fact, the Court approves of newspaper notice, despite the unlikelihood of it providing actual notice:

> Chance alone brings to the attention of even a local resident an advertisement in small type inserted in the back pages of a newspaper, and if he makes his home outside the area of the newspaper's normal circulation the odds that the information will never reach him are large indeed.

Court opted for case-specific flexibility.[5]

As any first-year law student can recite, notice need only be "reasonably calculated, under all the circumstances, to apprise interested parties of the pendency of the action and afford them an opportunity to present their objections."[6] This standard applies to all life, liberty, and property interests[7]—including those implicated by class actions.[8] Despite this intended flexibility, though, many courts merely collapse the procedural due process inquiry into a pro forma requirement for mail and newspaper notice.[9]

Reliance on conscribed notice methods in class actions has become even more fantastical with the passage of time and the growth of new technologies.[10] The volume of first-class, single-piece mail has

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Id. at 315. Nor does procedural due process require actual notice in other common contexts, like eminent domain. *See, e.g.*, Jones v. Flowers, 547 U.S. 220, 226 (2006) ("Due process does not require that a property owner receive actual notice before the government may take his property."); Dusenbery v. United States, 534 U.S. 161, 162 (2002) (clarifying that procedural due process for a prisoner rights case merely requires the State "*attempt to provide* actual notice, not that it *must provide* actual notice").

5. *Mullane*, 339 U.S. at 317 ("Thus it has been recognized that, in the case of persons missing or unknown, employment of an indirect and even a probably futile means of notification is all that the situation permits and creates no constitutional bar to a final decree foreclosing their rights.").

6. *Id.* at 314.

7. *See* U.S. CONST. amend. V (guaranteeing "[n]o person shall . . . be deprived of life, liberty, or property, without due process of law"); *id.* amend. XIV, § 1 ("[N]or shall any State deprive any person of life, liberty, or property, without due process of law . . . .").

8. Soon after *Mullane*, Congress codified amendments to Federal Rule of Civil Procedure 23, which governs class action procedures. FED. R. CIV. P. 23 (1966); *see also* DEBORAH R. HENSLER ET AL., CLASS ACTION DILEMMAS: PURSUING PUBLIC GOALS FOR PRIVATE GAIN 12–14 (2000) (describing the 1966 amendments); Stephen B. Burbank, *The Class Action Fairness Act of 2005 in Historical Context: A Preliminary View*, 156 U. PA. L. REV. 1439, 1488 (2008) (same). These amendments clarify when litigants must provide notice in class actions. FED. R. CIV. P. 23(c)(2), (d)(2), (e).

9. *See, e.g.*, Klein v. O'Neal, Inc., 705 F. Supp. 2d 632, 640 (N.D. Tex. 2010) (approving a notification plan without analysis of alternative methods of notice); Smith v. Ajax Magnethermic Corp., No. 4:02CV0980, 2007 WL 3355080, at *7 (N.D. Ohio Nov. 7, 2007) (same).

10. *See, e.g.*, MICHAEL CREW, PIER LUIGI PARCU & TIMOTHY BRENNAN, THE CHANGING POSTAL AND DELIVERY SECTOR: TOWARDS A RENAISSANCE 2 (2017) (detailing the decline of correspondence by mail); Randolph E. Schmid, *You Never Write Anymore; Well, Hardly Anyone Does*, WASH. TIMES (Oct. 4, 2011), https://www.washingtontimes.com/news/2011/oct/4/you-never-write-anymore-well-hardly-anyone-does [https://perma.cc/69ZY-AXCS] ("[P]ersonal letters—as well as the majority of bill payments—largely have been replaced by email, Twitter, Facebook and the like."); *see also* Elizabeth M.C. Scheibel, *#rule23 #classaction #notice: Using Social Media, Text Messaging, and Other New Communications Technology for Class Action Notice and Returning to Rule 23(c)(2)(B)'s "Best Notice Practicable" Standard*, 42 MITCHELL HAMLINE L. REV. 1331, 1346 (2016) ("Weekday newspaper circulation has dropped significantly in the last decade . . . .").

dropped by half over the last decade.[11] Mail is increasingly limited to packages from online purchases, the occasional political flyer, and weekly sales circulars. So in decline it faces bankruptcy,[12] the United States Postal Service struggles for its continued existence, facing renewed proposals to curtail service[13] despite ever-rising postal rates.[14] Meanwhile, new communication technologies flourish. More than 84 percent of Americans now have home computers.[15] An even greater number own cell phones.[16] From 1997 to 2003, alone, internet use more than tripled.[17]

Given the purpose of class notice is to "maximize delivery of relief to class members,"[18] a seismic shift from mail and newspaper notice to new methods would seem like a natural evolution. Yet such change has not fully materialized. Even worse, the failure of courts to update notice requirements in an era of smartphones and Snapchat has gone unstudied. While previous articles have addressed specific types of

11. USPS, *A Decade of Facts & Figures*, https://facts.usps.com/table-facts [https://perma.cc/VW8T-BSC3] (showing 35.4 billion in single piece first class mail in 2008 and 18.5 billion in 2017).

12. Emily Stephenson & Cezary Podkul, *Factbox: Why the Postal Service is Going Bankrupt*, REUTERS (Feb. 14, 2012), http://www.reuters.com/article/us-usa-postal-decline-idUSTRE81D0OO20120214 [https://perma.cc/3D2B-7E86]. Renewed efforts to cut expenses during the Obama administration did little to assist the USPS's long-term viability. *See* OFFICE OF INSPECTOR GENERAL, MAIL PROCESSING AND TRANSPORTATION OPERATIONAL CHANGES AUDIT REPORT (Sept. 2, 2016) (discussing how changes to mail service productivity did not result in the projected realized savings).

13. *See, e.g.*, Paul Ziobro, *Trump's Fix for Post Office's Deep Losses: Cut Back Saturday Delivery*, WALL ST. J. (May 26, 2017), https://www.wsj.com/articles/trumps-fix-for-post-offices-deep-losses-cut-back-saturday-delivery-1495817168 [https://perma.cc/P3VC-RTCK\].

14. Between 1980 and 2007, the cost for first class mail increased roughly 3.6 percent. *See* Trent Hamm, *U.S.P.S. Announces the Forever Stamp: Is It Worth Your $0.39?*, SIMPLE DOLLAR (Feb. 27, 2007), https://www.thesimpledollar.com/usps-announces-the-forever-stamp-is-it-worth-your-039 [https://perma.cc/RZV4-JPRV]. From 2007 to 2017, though, the cost increased 19.5 percent. *Compare id.* (detailing a Forever stamp price of 39 cents in 2007), *with* USPS, *U.S. Postal Service Announces New Prices for 2018* (Oct. 6, 2017), https://about.usps.com/news/national-releases/2017/pr17062.htm [https://perma.cc/QH4R-5HTR] (announcing a Forever stamp price of 50 cents in 2018).

15. CENSUS BUREAU'S AMERICAN COMMUNITY SURVEY PROVIDES NEW STATE AND LOCAL INCOME, POVERTY, HEALTH INSURANCE STATISTICS, U. S. CENSUS BUREAU (Sept. 18, 2014) [hereinafter COMPUTER CENSUS], https://www.census.gov/newsroom/press-releases/2014/cb14-170.html [https://perma.cc/TQ3E-UUA3].

16. *Mobile Fact Sheet*, PEW RES. CTR. (Feb. 5, 2018), http://www.pewinternet.org/fact-sheet/mobile [https://perma.cc/7LTA-TMUD].

17. From 1997 (the first year in which the CPS collected information on Internet use) to 2003, use of the Internet among adults jumped from 22 percent to 60 percent. COMPUTER CENSUS, *supra* note 15, at 11.

18. Advisory Committee Notes, 39 F.R.D. 98, 105, 107 (1966).

notice via technology,[19] no article to date has comprehensively evaluated judicial response to these methods.[20]

This Article presents the first quantitative exploration of E-Notice, a term encompassing the extensive range of technological options for providing notice. E-Notice includes emails, text messages, website advertisements, banner ads, keyword ad campaigns, social media posts, and other digital–electronic communication. E-Notice also captures hypertargeting—the use of Big Data (Facebook likes, cookies, and other electronically stored information) to provide directed communications to class members.

The ripples from this lack of understanding of E-Notice are significant. Neither the Rule 23 Subcommittee to the Federal Advisory Committee on Civil Rules nor the Federal Judicial Center ("FJC") has studied E-Notice. Nonetheless, they articulate contrary positions on its use.[21] The Rule 23 Subcommittee assumes courts approve the use of such technology.[22] It proposes amending Rule 23 to codify judicial consideration of E-Notice.[23] Concurrently, though, the FJC advises

19. *See, e.g.*, Caley DeGroote, *Can You Hear Me Now? The Reasonableness of Sending Notice Through Text Messages and Its Potential Impact on Impoverished Communities*, 23 WASH. & LEE J. CIV. RTS. & SOC. JUST. 279, 280 (2016); Jennifer Mingus, *Email: A Constitutional (and Economical) Method of Transmitting Class Action Notice*, 47 CLEV. ST. L. REV. 87, 88 (1999) (discussing email class notice). *But see* Aiken, *supra* note 1 (discussing various modes of electronic notice, but focusing more on the method of notice than on the judicial justification for it).

20. The Federal Trade Commission recently authorized a study on class notice, but such research is still in its infancy. Moreover, the study focuses on response rates rather than a range of class notice methods. *See* Fed. Trade Comm'n, *FTC Seeks To Study Class Action Settlements* (Nov. 4, 2016), https://www.ftc.gov/news-events/press-releases/2016/11/ftc-seeks-study-class-action-settlements [https://perma.cc/7X3P-9TGD] (discussing the Agency's plan to "[a]nalyze the [e]ffectiveness of [c]lass [a]ction Settlement Notice Programs").

21. The Federal Judiciary Center data on E-Notice is scant and outdated. *See, e.g.*, THOMAS E. WILLGING, LAURAL L. HOOPER & ROBERT J. NIEMIC, FED. JUDICIAL CTR., EMPIRICAL STUDY OF CLASS ACTIONS IN FOUR FEDERAL DISTRICT COURTS: FINAL REPORT TO THE ADVISORY COMMITTEE ON CIVIL RULES 7 (1996) (discussing class notice in four circuits over twenty years ago).

22. The Rule 23 Subcommittee's working assumption is that "courts and counsel have begun to employ new technology to make notice more effective." REPORT OF ADVISORY COMMITTEE ON CIVIL RULES 97 (Nov. 5–6, 2015) [hereinafter ADVISORY COMMITTEE 2015 REPORT ON RULE 23], http://www.uscourts.gov/sites/default/files/2015-11-civil-agenda_book.pdf. [https://perma.cc/Z5A5-5R74].

23. COMM. ON THE RULES OF PRACTICE & PROC., SUMMARY OF THE REPORT OF THE JUDICIAL CONFERENCE COMMITTEE ON RULES OF PRACTICE & PROCEDURE 22–24 (Sept. 2016); Memorandum from Hon. John D. Bates, Advisory Comm. on Civil Rules, to Hon. Jeffrey S. Sutton, Chair, Comm. on Rules of Practice & Proc. (May 12, 2016) (on file with *Duke Law Journal*) [hereinafter Advisory Committee Memo]. The public comment period ended February 15, 2017. If approved, the changes will go into effect December 1, 2018.

against E-Notice methods. In its Judges' Class Action Notice and Claims Process Checklist, the FJC equates mail notice with the ideal notice,[24] going so far as to caution judges against approving E-Notice.[25]

Similarly, scholarship on E-Notice has often traded on generalities.[26] One line of scholarship characterizes the judiciary as woefully behind in embracing E-Notice's cost-saving and increased notice potential.[27] Another line summarily concludes courts now prefer E-Notice to more traditional forms.[28] One practitioner even contends she uses E-Notice in close to 50 percent of her cases, suggesting the scholarly cry for change is stale.[29]

The judiciary, practitioners, and scholars have been working in an empirical vacuum. This Article provides much-needed data. It synthesizes the analysis of over 2700 federal class actions—thirteen years of notice decisions. It reveals slow change. Technological options for approved class notice are expanding.[30] Yet the judiciary remains

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24. FED. JUDICIAL CTR., JUDGES' CLASS ACTION NOTICE AND CLAIMS PROCESS CHECKLIST AND PLAIN LANGUAGE GUIDE 2 (2010) [hereinafter CHECKLIST] ("If names and addresses are reasonably identifiable, Rule 23(c)(2) requires individual notice. Be careful to look closely at assertions that mailings are not feasible.").

25. *Id.*

26. For example, one article hypothesizes only 15 to 20 percent of class notices utilize E-Notice, but the article bases that figure on limited anecdotal research. *See, e.g.*, Erin Coe, *Social Media Class Notices Gain Traction But Carry Risks*, LAW 360 (Apr. 24, 2015), https://www.law360.com/articles/647414/social-media-class-notices-gain-traction-but-carry-risks [https://perma.cc/QMN8-UXB4] (quoting a law firm partner saying she used social media for class notice in over half of the settlements in the past five years).

27. *See, e.g.*, Aiken, *supra* note 1, at 970 (arguing "courts and parties can do more" to use technology in class notice); Philip P. Ehrlich, *A Balancing Equation for Social Media Publication Notice*, 83 U. CHI. L. REV. 2163, 2166 (2016); Deborah R. Hensler, *Bringing* Shutts *into the Future: Rethinking Protection of Future Claimants in Mass Tort Class Actions*, 74 UMKC L. REV. 585, 611 (2006) (arguing that "notice of a pending settlement should be given in print and broadcast media and on the Internet" for mass tort actions). *See generally* Robert H. Klonoff, Mark Herrmann & Bradley W. Harrison, *Making Class Actions Work: The Untapped Potential of the Internet*, 69 U. PITT. L. REV. 727 (2008) (discussing the ability of the internet to foster participation by absent class members and noting ways that notice may be provided over the internet).

28. *See, e.g.*, Klonoff, Herrmann & Harrison, *supra* note 27, at 733–34 ("Indeed, courts are beginning to embrace the belief that internet notice may be preferable to traditional methods of publication notice.").

29. *See, e.g.*, Coe, *supra* note 26 (quoting a partner at BakerHostetler who attests that, in about half of those cases, social media is added as a component of the notification program).

30. *Accord* LESLIE P. FRANCIS & JOHN G. FRANCIS, PRIVACY: WHAT EVERYONE NEEDS TO KNOW 37 (2017) ("'Big Data' is a loose term used to refer to the vast data sets being collected by many different kinds of entities all over the world today. 'Big Data' may be collected by governments . . . , data analytics firms, search engines, websites, and many, many other types of entities."); VICTOR MAYER-SCHÖNBERGER & KENNETH CUKIER, BIG DATA 6–7 (2013) (describing the growth of Big Data).

deeply divided. While some courts embrace these technological advances,[31] the dominant approach is anachronistic. Many courts still treat mail and publication as the gold standards of notice—newspaper notice, let alone E-Notice, is considered too radical.[32] Even the use of email notice is presumed too risky.[33] In fact, some courts treat mailed notice as so essential that they deny class certification when mail is impracticable.[34] When technology is used, it is generally limited to settlement websites.[35] However, such websites are primarily passive resources that class members can search out after learning about pending litigation. Rather than notice per se, they provide supplemental appendices of material about the case and claims process.

This Article's empirical data provides the required foundation for a greater understanding of judicial attitudes towards E-Notice. It goes beyond facts and figures to explore the breadth of, barriers to, and reliance on alternative forms of class notice. Rather than advancing the flexibility intended by the Supreme Court, fear of change, imperfection, and technology leave some courts clinging to mail and publication notice as the primary means of satisfying procedural due

31. *See, e.g.*, *In re* LinkedIn User Privacy Litig., 309 F.R.D. 573, 586 (N.D. Cal. 2015) (using email and settlement website notice); Chimeno–Buzzi v. Hollister Co., No. 14-23120-CIV, 2015 WL 9269266, at *3 (S.D. Fla. Dec. 18, 2015) (approving a plan that would include "an E-mail Notice, a Double Post Card Notice, a Publication Notice, and Banner Advertisements"); *In re* HP Inkjet Printer Litig., No. C05-3580 JF, 2010 WL 11488941, at *3 (N.D. Cal. Oct. 1, 2010) (approving notice through email, publication, and a settlement website).

32. *See infra* Part II (detailing findings of this empirical study).

33. *See, e.g.*, Lewis v. Huntington Nat'l Bank, No. C2-11-CV-0058, 2011 WL 8960489, at *2 (S.D. Ohio June 20, 2011) (refusing to approve email notice for fear of forwarding); Reab v. Elec. Arts, Inc., 214 F.R.D. 623, 630–31 (D. Colo. 2002).

34. *See, e.g.*, Marcus v. BMW of N. Am., LLC, 687 F.3d 583, 592–93 (3d Cir. 2012) (denying certification, in part, because of obstacles to individualized notice); Randolph v. J.M. Smucker Co., 303 F.R.D. 679, 689 (S.D. Fla. 2014) (same); Hoge v. Parkway Chevrolet, Inc., No. CIV.A. H-05-2686, 2007 WL 3125298, at *19 (S.D. Tex. Oct. 23, 2007) (same); *see also* Daniel Luks, *Ascertainability in the Third Circuit: Name That Class Member*, 82 FORDHAM L. REV. 2359, 2361 (2014) (detailing the growing ascertainability split and its impact on certification).

35. *See, e.g.*, Dewey v. Volkswagen of Am., 909 F. Supp. 2d 373, 379 (D.N.J. 2012), *aff'd sub nom.* Dewey v. Volkswagen Aktiengesellschaft, 558 F. App'x 191 (3d Cir. 2014) ("Specifically, pursuant to the Amended Preliminary Approval Order, notice to those class members of the settlement has been provided by: (1) mail and publication; (2) the establishment of a toll-free telephone number providing settlement information; and (3) the maintenance of a website containing notice and settlement documents."); Montoya v. PNC Bank, N.A., No. 1:14-CV-20474, 2015 WL 11216718, at *4 (S.D. Fla. Sept. 30, 2015) (approving mailed and settlement website notice plan); Wilson v. EverBank, N.A., No. 14-CIV-22264, 2015 WL 10857344, at *3 (S.D. Fla. Aug. 31, 2015) (same).

process.[36] Until these fears are recognized and addressed, E-Notice growth will stagnate, sacrificing the effectiveness of class actions and the enforcement of a constitutional right.[37]

This Article proceeds as follows. Part I describes the statutory requirements and relevant jurisprudence for class notice. As this background is already well known, it is intentionally abbreviated to provide a foundation for the material that follows. Part II, the empirical core of this piece, sorts through myth and conjecture to expose current trends in class action notice. It details notice methods over time, by circuit, by procedural context, and by substantive claim at issue. It then builds on these findings to demonstrate and debunk the fear-based barriers to E-Notice. Part III then returns to the fundamental principles from *Mullane* to offer solutions for overcoming judicial fears. It outlines pragmatic, workable alterations to the class notice process to ensure outdated approaches do not compromise class actions.

I. CLASS NOTICE: ORIGIN AND DEVELOPMENT

Class action notice has two sources: constitutional procedural due process requirements and the statutes codifying them.[38] While scholars have painstakingly detailed the development of procedural due process,[39] this Part focuses squarely on due process in class actions. It connects notice jurisprudence to class action requirements under Federal Rule of Civil Procedure 23 and, in doing so, provides the requisite background to evaluate class notice.

A. Pragmatism and Procedural Due Process

As far back as the late 1800s, the judiciary has emphasized pragmatic flexibility in defining due process requirements.[40] When pending litigation impacts individuals' rights, the Constitution requires

36. *See infra* Part II (discussing these obstacles to E-Notice).

37. *See infra* Part III (discussing the importance of creative notice plans).

38. *See* U.S. CONST. amend. V.; *id.* amend. XIV, § 1; FED. R. CIV. P. 23.

39. *See, e.g.*, JOHN V. ORTH, DUE PROCESS OF LAW: A BRIEF HISTORY (2003); E. THOMAS SULLIVAN & TONI M. MASSARO, THE ARC OF DUE PROCESS IN AMERICAN CONSTITUTIONAL LAW (2013) [hereinafter ARC]; RHONDA WASSERMAN, PROCEDURAL DUE PROCESS: A REFERENCE GUIDE TO THE UNITED STATES CONSTITUTION (2004).

40. ARC, *supra* note 39, at 22 (discussing the history of procedural due process); Matthew J. Steilen, *Due Process As Choice of Law: A Study in the History of A Judicial Doctrine*, 24 WM. & MARY BILL RTS. J. 1047, 1051 (2016) (same).

notice and an opportunity to be heard.[41] Rather than a checklist fixed in time, "standards of due process should be determined and adjusted according to the customs of the age."[42] Notice need only be reasonably calculated to reach the intended audience; actual notice is not necessary.[43]

Perhaps an apt description of notice requirements is simply "do your best under the circumstances."[44] *Mullane v. Central Hanover*,[45] the seminal case for notice,[46] illustrates the Court's pragmatic approach. The case involved a New York banking law that permitted the defendant bank to aggregate assets from multiple trusts into a single, common trust.[47] The defendant had the mailing address for a portion of the affected beneficiaries.[48] However, banking law only required the defendant to provide notice by publication in a local newspaper.[49]

41. *See* U.S. CONST. amend. V (guaranteeing "[n]o person shall . . . be deprived of life, liberty, or property, without due process of law"); *id.* amend. XIV, § 1 ("[N]or shall any State deprive any person of life, liberty, or property, without due process of law . . . ."); *see also* Phillips Petroleum Co. v. Shutts, 472 U.S. 797, 807 (1985) (holding, in a class action, that a "chose in action" qualifies as a constitutionally recognized property interest for purposes of procedural due process); Logan v. Zimmerman Brush Co., 455 U.S. 422, 428 n.4 (1982) (concluding that, although not a traditional property right and thus not subject to takings analysis, a state tort-law claim is a species of property protected by procedural due process); A.H. Robins Co. v. Piccinin, 788 F.2d 994, 1014 (4th Cir. 1989) (accepting, for purposes of procedural due process and change of venue analysis, that a tort claim is a "'species of property' in the constitutional sense"); Ryland v. Shapiro, 708 F.2d 967, 972–73 (5th Cir. 1983) (recognizing a wrongful death action as property for procedural due process purposes because state law defined such action as a property right). While this characterization is long settled in the courts, some scholars continue to argue class claims are more properly characterized as collective rights than as individual rights. *See, e.g.*, J. Maria Glover, *A Regulatory Theory of Legal Claims*, 70 VAND. L. REV. 221, 228 (2017) (setting "forth the long-standing conceptual debate about the nature of class members and class actions").

42. ARC, *supra* note 39, at 22 (discussing Justice Matthews' opinion in Hurtado v. California, 110 U.S. 516 (1884)).

43. *See, e.g.*, *Phillips Petroleum Co.*, 472 U.S. at 812 (1985); Eisen v. Carlisle & Jacquelin, 417 U.S. 156, 174–75 (1974); Mullane v. Cent. Hanover Bank & Tr. Co., 339 U.S. 306, 314–15 (1950); Hecht v. United Collection Bureau, Inc., 691 F.3d 218, 224 (2d Cir. 2012) (internal citation omitted); *In re* Orthopedic Bone Screw Prods. Liab. Litig., 246 F.3d 315, 327 (3d Cir. 2001) (internal citation omitted).

44. Or, to adopt Ninth Circuit Judge Hufstedler's more colorful refrain, "[p]rocedural due process is flexible, but it is not flaccid." Geneva Towers Tenants Org. v. Federated Mortg. Invs., 504 F.2d 483, 498 (9th Cir. 1974).

45. *Mullane*, 339 U.S. at 314.

46. WASSERMAN, *supra* note 39, at 131 (2004) ("Fifty years after it was decided, *Mullane* continues to be the leading case on the constitutionally required form and extent of notice.").

47. *Mullane*, 339 U.S. at 307.

48. *Id.* at 310.

49. N.Y. BANKING LAW § 100-c(12) (2014).

Mullane, a court appointed special guardian for the trusts, challenged the method and content of the notice.[50]

The Court began by rejecting personal service for unnamed parties affected by pending litigation.[51] Instead, notice satisfies procedural due process, so long as the "form chosen is not substantially less likely to bring home notice than other of the feasible and customary substitutes."[52] Emphasizing flexibility, the Supreme Court did not mandate a particular method of notice.[53] Instead, the Court adopted a two-tier standard for evaluating the best notice practicable.[54] First, individualized notice is required when realistic.[55] Thus, in the case at hand, the bank had to mail notice directly to any beneficiary for which it had an address or could obtain one through reasonable means.[56] Second, for all others, alternative or "constructive" notice sufficed.[57]

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50. *Mullane*, 339 U.S. at 310.

51. *Id.* at 313 ("Personal service of written notice within the jurisdiction is the classic form of notice always adequate in any type of proceeding.").

52. *Id.*

53. Morrissey v. Brewer, 408 U.S. 471, 481 (1972) ("[D]ue process is flexible and calls for such procedural protections as the particular situation demands."). As the Court explained in *Morrissey*, this proposition "has been said so often by this Court and others as not to require citation of authority." *Id.* The Court has quoted this language in numerous decisions since *Morrissey*. *See, e.g.*, Wilkinson v. Austin, 545 U.S. 209, 224 (2005); Gilbert v. Homar, 520 U.S. 924, 930 (1997); Memphis Light, Gas & Water Div. v. Craft, 436 U.S. 1, 15 n.15 (1978); Mathews v. Eldridge, 424 U.S. 319, 334 (1976); *see also* Connecticut v. Doehr, 501 U.S. 1, 10 (1991) ("[D]ue process, unlike some legal rules, is not a technical conception with a fixed content unrelated to time, place and circumstances." (quoting *Mathews*, 424 U.S. at 334) (internal quotation marks omitted)); Cafeteria & Rest. Workers Union v. McElroy, 367 U.S. 886, 895 (1961) ("The very nature of due process negates any concept of inflexible procedures universally applicable to every imaginable situation." (citations omitted)); 16B AM. JUR. 2D CONSTITUTIONAL LAW § 957 ("[T]he quantum and quality of the process due in a particular situation depends on the need to serve the due process function of minimizing the risk of error in decision making."); Jason Parkin, *Adaptable Due Process*, 160 U. PA. L. REV. 1309, 1311 (2012) (discussing the flexible nature of procedural due process).

54. *See* Phillips Petroleum Co. v. Shutts, 472 U.S. 797, 811–12 (1985) ("The notice must be the best practicable, 'reasonably calculated, under all the circumstances, to apprise interested parties of the pendency of the action and afford them an opportunity to present their objections.'" (quoting *Mullane*, 339 U.S. at 314, and citing Eisen v. Carlisle & Jacquelin, 417 U.S. 156, 174–75 (1974))). Lower courts consistently parrot this language. *See, e.g.*, Adams v. S. Farm Bureau Life Ins. Co., 493 F.3d 1276, 1287 n.5 (11th Cir. 2007); *In re* Nissan Motor Corp. Antitrust Litig., 552 F.2d 1088, 1104 (5th Cir. 1977); Perez v. Asurion Corp., 501 F. Supp. 2d 1360, 1377 (S.D. Fla. 2007).

55. *See Mullane*, 339 U.S. at 318.

56. *Id.*

57. *Id.* at 317; *see also* STEPHEN N. SUBRIN & MARGARET Y. K. WOO, LITIGATING IN AMERICA: CIVIL PROCEDURE IN CONTEXT 83 (2006) (summarizing *Mullane* by saying

The *Mullane* Court fully recognized the potential deficiencies with constructive notice. Nonetheless, the Court held "even a probably futile means of notification is all that the situation permits and creates no constitutional bar to a final decree foreclosing [affected individuals'] rights."[58] Moreover, the Court elected to not "commit[] itself to any formula achieving a balance between these interests in a particular proceeding or determining when constructive notice may be utilized or what test it must meet."[59] Instead, the Court analyzed the form of constructive notice by considering the specifics of the case, including the cost involved with such notice, whether the individuals were unknown or missing, and the reach of the proposed form.[60] In justifying this low bar for constitutional compliance, the Court explained a "construction of the Due Process Clause which would place impossible or impractical obstacles in the way could not be justified."[61]

Subsequent decisions have modified procedural due process requirements outside of class actions,[62] while sticking closely to the original themes of flexibility, practicality, and case-specific determination.[63] For class notice, though, *Mullane* alone still controls.[64]

"[r]easonableness is the key.").

58. *Mullane*, 339 U.S. at 317 (citing Cunnius v. Reading Sch. Dist., 198 U.S. 458 (1905), Blinn v. Nelson, 222 U.S. 1 (1911), and Jacob v. Roberts, 223 U.S. 261 (1912)).

59. *Id.* at 314.

60. *Id.* at 316–18.

61. *Id.* at 313–14.

62. *See, e.g.*, Mathews v. Eldridge, 424 U.S. 319, 334–35 (1976) (discussing procedural due process standards for the termination of social security disability benefits); Jason Parkin, *Due Process Disaggregation*, 90 NOTRE DAME L. REV. 283, 289–98 (2014) (detailing Supreme Court jurisprudence on procedural due process).

63. Gilbert v. Homar, 520 U.S. 924, 930 (1997) ("It is by now well established that 'due process, unlike some legal rules, is not a technical conception with a fixed content unrelated to time, place and circumstances.'" (internal quotation marks omitted) (quoting Cafeteria & Rest. Workers v. McElroy, 367 U.S. 886, 895 (1961))); *see also* Eric Wills Orts, *Tenants' Rights in Police Power Condemnations Under State Statutes and Procedural Due Process*, 23 U. MICH. J.L. REFORM 105, 142 (1989) (discussing the flexibility of procedural due process jurisprudence); Steilen, *supra* note 40, at 1051 (discussing the historical development of procedural due process requirements "toward a flexible and open-ended test centered around due process values").

64. Twenty years later, the Supreme Court directly applied the *Mullane* standard to class actions in *Eisen v. Carlisle & Jacqueline*, 417 U.S. 156 (1974). During the case's fourth visit to the high court, the Supreme Court discussed notice. *See* Michael A. Berch, *We've Only Just Begun: The Impact of Remand Orders from Higher to Lower Courts on American Jurisprudence*, 36 ARIZ. ST. L.J. 493, 511 n.103 (2004) (detailing the various *Eisen* decisions). The decision is best known for pronouncing which party pays for notice and for reinforcing a preference for individualized notice when possible. *Eisen*, 417 U.S. at 177; *see also* Oppenheimer Fund, Inc. v. Sanders, 437 U.S. 340, 350 (1978) ("The specific holding of *Eisen IV* is that where a representative plaintiff prepares and mails the class notice himself, he must bear the cost of doing so."). However, the decision also

In later class action decisions, the Court affirmed *Mullane* and reiterated the "best notice practicable" standard.[65] As discussed next, the Federal Rules of Civil Procedure mirror this reasonable approach to notice.

B. Due Process & Class Action Notice Requirements

In addition to this controlling precedent, statutory requirements also govern class action notice. Congress codified notice requirements[66] in Federal Rules of Civil Procedure 23(d),[67] 23(e),[68] and 23(c)(2).[69] Each triggers notice at a different procedural juncture, yet the rules share certain commonalities. First, in evaluating any notice plan, courts are obligated to protect the interests of absent class members.[70] Second,

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reinforces flexibility in evaluating notice modes rather than mandating particular modes of individual or constructive notice. *Eisen*, 417 U.S. at 184 (Douglas, J., dissenting in part) ("The purpose of Rule 23 is to provide flexibility in the management of class actions, with the trial court taking an active role in the conduct of the litigation." (citations omitted)).

65. *See, e.g.*, Phillips Petroleum Co. v. Shutts, 472 U.S. 797, 812 (1985); *Eisen*, 417 U.S. at 174–76.

66. *See, e.g.*, Juris v. Inamed Corp., 685 F.3d 1294, 1317 (11th Cir. 2012) ("The notice provisions of Rule 23, which are meant to protect the due process rights of absent class members, set forth 'different notice requirements to different kinds of cases and even to different phases of the same case.'" (quoting Battle v. Liberty Nat'l Life Ins. Co., 770 F. Supp. 1499, 1515 (N.D. Ala. 1991))).

67. FED. R. CIV. P. 23(d).

68. FED. R. CIV. P. 23(e).

69. FED. R. CIV. P. 23(c)(2). For certain types of claims, additional statutory notice is required. For example, securities cases must also comply with notice requirements under the Private Securities Litigation Reform Act. 15 U.S.C. § 78u-4 (a)(3)(A)(i) (requiring plaintiff to issue notice "in a widely circulated national business-oriented publication or wire service" within twenty days of filing a complaint). Also, in FLSA cases, courts issue notice upon conditional certification—a prerequisite to class certification under Rule 23. *See, e.g.*, Laroque v. Domino's Pizza, LLC, 557 F. Supp. 2d 346, 352 (E.D.N.Y. 2008); White v. MPW Indus. Serv., Inc., 236 F.R.D. 363, 366 (E.D. Tenn. 2006); De Asencio v. Tyson Foods, Inc., 130 F. Supp. 2d 660, 662–63 (E.D. Pa. 2001), *rev'd on other grounds*, 342 F.3d 301 (3d Cir. 2003); Hoffmann-La Roche, Inc. v. Sperling, 493 U.S. 165, 171 (1989). Conditional certification is a low bar, requiring solely that plaintiffs establish other putative class members exist who are "similarly situated in their job requirements and pay provisions." Lee v. Metrocare Servs., 980 F. Supp. 2d 754, 759 (N.D. Tex. 2013 (quoting Marshall v. Eyemasters of Tex., Ltd., 272 F.R.D. 447, 449 (N.D. Tex. 2011))); *see, e.g.*, *id.* ("The court's determination at this stage is made using a 'fairly lenient standard' because the court generally has minimal evidence." (quoting Jones v. SuperMedia Inc., 281 F.R.D. 282, 287 (N.D. Tex. 2012))); *see also id.* (noting the standard is "admittedly lenient" (quoting *Marshall*, 272 F.R.D. at 449)). Conditional certification notice is beyond the scope of this project.

70. Gulf Oil Co. v. Bernard, 452 U.S. 89, 100 (1981) ("Because of the potential for abuse [of the class action process], a district court has both the *duty* and the *broad authority* to exercise control over a class action and to enter appropriate orders governing the conduct of counsel . . . .") (emphasis added); *see also* Craig M. Freeman, John Randall Whaley & Richard J. Arsenault, *Knowledge Is Power: A Practical Proposal to Protect Putative Class Members from Improper Pre-*

all three rules apply trans-substantively, regardless of the underlying claims. Third, judicial decisions approving these notices are reviewed de novo.[71]

Further, the tiered approach to procedural due process from *Mullane* applies for all types of class action notice.[72] Individual notice is preferred when practicable.[73] Otherwise, notice through less-personalized methods suffices.[74] Rule 23, though, neither defines particular modes of individual or constructive notice nor explains how to weigh potential options. This is somewhat unsurprising, given Rule 23 encourages judicial flexibility to ensure "a good deal of play in the joints."[75] Despite this flexibility, courts demonstrate a preference for mailed notice.

Under all three rules, the goal of class notice is the protection of plaintiffs. As the draft Advisory Committee notes state, "A claims process that maximizes delivery of relief to class members should be a primary objective of the notice program."[76] Such notice allows class members to decide whether to file a claim or exclude themselves from the litigation.[77] It also lets them evaluate the fairness and adequacy of

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Certification Communication, 2006 FED. CTS. L. REV. 2, Abstract (2006) ("The United States Supreme Court and other courts have stated that courts overseeing class actions have a duty to protect the interests of absent class members.").

71. DeJulius v. New England Health Care Emps. Pension Fund, 429 F.3d 935, 942 (10th Cir. 2005) ("The underlying question of whether a particular class action notice program satisfies the requirements of Fed. R. Civ. P. 23 and the Due Process Clause is a legal determination we review *de novo*."); Torrisi v. Tucson Elec. Power Co., 8 F.3d 1370, 1374 (9th Cir. 1993) (applying de novo review to class action notice plan).

72. *See, e.g.*, Advisory Committee Notes, 39 F.R.D. 98, 107 (1966) ("Notice to members of the class, whenever employed under amended Rule 23, should be accommodated to the particular purpose but need not comply with the formalities for service of process.").

73. *See, e.g.*, FED. R. CIV. P. 23(c)(2)(B) ("For any class certified under Rule 23(b)(3), the court must direct to class members the best notice that is practicable under the circumstances, including individual notice to all members who can be identified through reasonable effort.").

74. Other forms of notice can still comply with procedural due process when "circumstances make it impracticable to gain the names and addresses of class members and notify them individually of the action's pendency." *In re* Nissan Motor Corp. Antitrust Litig., 552 F.2d 1088, 1097 (5th Cir. 1977); *cf.* Mullane v. Cent. Hanover Bank & Tr. Co., 339 U.S. 306, 315 (1950) ("It would be idle to pretend that publication alone . . . is a reliable means of acquainting interested parties of the fact that their rights are before the courts. It is not an accident that the greater number of cases reaching this Court on the question of adequacy of notice have been concerned with actions founded on process constructively served through local newspapers.").

75. Completion of Work Committee Meeting of Oct. 31–Nov. 2, 1963, at 4, Memorandum to the Advisory Committee on Civil Rules (Dec. 2, 1963).

76. Advisory Committee 2015 Report on Rule 23, *supra* note 22.

77. ADVISORY COMM. ON CIVIL RULES, ADDITIONAL MATERIALS IN PREPARATION FOR MEETING OF FEB. 21–23, 1963 (Jan. 17, 1963) ("This notice could invite attention to any

the representation.[78] While other aspects of the 1964 Amendment generated great debate, the addition of flexible notice requirements was uncontroversial.[79]

Despite the similarities, each rule has a different procedural trigger. Rule 23(d) affords courts discretionary power to issue notice at any time, so long as the court deems it necessary "for the protection of the members of the class."[80] In contrast, Rule 23(e) is a mandatory notice provision.[81] It requires notice "in a reasonable manner" to class members for settlements, judgments, or dismissals of class actions.[82]

Rule 23(c)(2) applies to notice of class certification decisions. Rule 23 provides for three categories of class actions:[83] (b)(1) classes require a genuine risk that separate individual actions would lead to "incompatible standards" or prejudice;[84] (b)(2) classes generally request declaratory or injunctive relief; and (b)(3) classes, the most common category, seek monetary relief.[85]

Rule 23(c)(2) notice is mandatory for (b)(3) classes but only discretionary for (b)(1) and (b)(2) classes.[86] Unlike (b)(1) and (b)(2), a

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opportunity of the members to come into the action, and state the court's intention to extend the judgment ultimately entered, whether or not favorable to the class, to all members.").

78. *See* Discussion of Responses to Memorandum of Dec. 2, 1963, at 7 (Jan. 31, 1964) (discussing how notice allows "members to signify whether they consider the representation to be fair and adequate [thus providing] a further check against possible rigging.").

79. Of the Committee members, John P. Frank, attorney in Phoenix, Arizona, and member of the Advisory Committee on Civil Rules between 1963 and 1970, was the most outspoken critic of the proposed revisions to the categories of class actions at the core of the 1964 Amendment. While he raised significant concerns about mass tort class actions and opt-out provisions for (b)(3) actions, even he did not raise concerns about the proposed notice requirements. *See generally id*.

80. Advisory Committee Notes, 39 F.R.D. 69, 97 (1966).

81. FED. R. CIV. P. 23(e)(1) ("The court *must* direct notice in a reasonable manner to all class members who would be bound by the proposal.") (emphasis added).

82. *Id.*

83. All three classes must satisfy the requirements of Rule 23(a): numerosity, typicality, commonality, and adequacy. FED. R. CIV. P. 23(a). For (b)(3) classes, though, plaintiffs must also establish two additional requirements: predominance and superiority. FED. R. CIV. P. 23(b)(3) ("[T]he court [must] find[] that the questions of law or fact common to class members predominate over any questions affecting only individual members, and that a class action is superior to other available methods for fairly and efficiently adjudicating the controversy.").

84. FED. R. CIV. P. 23(b).

85. *See, e.g.*, D. Theodore Rave, *When Peace Is Not the Goal of A Class Action Settlement*, 50 GA. L. REV. 475, 483 n.18 (2016) ("[T]he most common form of class actions [are] those seeking monetary damages . . . ."); Maureen A. Weston, *Universes Colliding: The Constitutional Implications of Arbitral Class Actions*, 47 WM. & MARY L. REV. 1711, 1730 (2006) ("Most suits fall under Rule 23(b)(3), where plaintiffs primarily seek monetary damages . . . .").

86. FED. R. CIV. P. 23(c)(2)(B) ("[T]he court must direct to class members the best notice practicable under the circumstances, including individual notice to all members who can be

(b)(3) class binds members unless they affirmatively opt out.[87] Facially, Rule 23(c)(2) notice differs slightly from Rule 23(e) notice. For cases seeking monetary damages, Rule 23(c)(2) requires the best notice practicable—echoing the *Mullane* standard[88]—whereas Rule 23(e) only requires notice be given to class members "in a reasonable manner."[89] As the Tenth Circuit has explained, "The lower standard is justified because the court has already certified that the class representation would be fair and adequate, and the unnamed class members have already made the decision to allow the named plaintiffs to represent them."[90]

Parties usually file joint submissions setting forth a plan for any type of Rule 23 notice.[91] This is not to say, however, that such plans are beyond scrutiny. When the parties reach an agreement prior to class certification, they request such certification as part of the settlement

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identified through reasonable effort."). For (b)(1) and (b)(2) cases, Rule 23(c)(2)(A) governs notice. It permits the court to "direct appropriate notice to the class," FED. R. CIV. P. 23(c)(2)(A), but such notice is discretionary, and courts should exercise this discretionary authority "with care." FED. R. CIV. P. 23(c)(2) advisory committee's note to 2003 amendment.

87. FED. R. CIV. P. 23(c)(2)(B). This notice must "clearly and concisely" detail the following:

> (i) the nature of the action;
>
> (ii) the definition of the class certified;
>
> (iii) the class claims, issues, or defenses;
>
> (iv) that a class member may enter an appearance through an attorney if the member so desires;
>
> (v) that the court will exclude from the class any member who requests exclusion;
>
> (vi) the time and manner for requesting exclusion; and
>
> (vii) the binding effect of a class judgment on members under Rule 23(c)(3).

Id.

88. FED. R. CIV. P. 23(c)(2)(B) ("For any class certified under Rule 23(b)(3), the court must direct to class members the best notice that is practicable under the circumstances, including individual notice to all members who can be identified through reasonable effort."). For (b)(1) and (b)(2) classes, the standard is lower. *Id.* at (c)(2)(A) ("For any class certified under Rule 23(b)(1) or (b)(2) or (b)(2), the court may direct appropriate notice to the class.").

89. *Id.* at (e)(1). Similarly, the content requirement for notice of a settlement class differs slightly from notice at (c)(2) notice. *See* MCLAUGHLIN ON CLASS ACTIONS § 6:17 (2017).

90. Gottlieb v. Wiles, 11 F.3d 1004, 1012 (10th Cir. 1993); *see also* Zimmer Paper Prods., Inc. v. Berger & Montague, P.C., 758 F.2d 86, 90 (3d Cir. 1985) (noting that "[a] higher notice standard is established by Rule 23(c)(2)" than Rules 23(d)(2) and (e)).

91. *See, e.g.*, Bobbitt v. Acad. of Court Reporting, Inc., 252 F.R.D. 327, 345 (E.D. Mich. 2008) (directing parties to submit joint notice plans after class certification). Consequently, defendants who may have once challenged the ability of plaintiffs to provide notice under Rule 23(c)(2) now either acquiesce to class counsel's notice plan or help generate one. *Compare, e.g.*, Allen v. Similasan Corp., 306 F.R.D. 635, 643 (S.D. Cal. 2015) (discussing the defendant's ascertainability challenge to notifying class members), *with* Allen v. Similasan Corp., No. 12-CV-376-BAS-JLB, 2016 WL 3951277, at *1 (S.D. Cal. May 11, 2016) (detailing the parties' joint proposal for notifying class members of a pending settlement).

approval process.[92] When this happens, (c)(2) and (e) notice requirements often collapse into a single notice under (c)(2).[93] The parties submit this notice plan for preliminary approval.[94] If class members take issue with the settlement, certification, or the notice plan, they may file objections.[95] The court then considers these concerns by "objectors" prior to issuing any final approval of the settlement.[96]

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92. CHARLES ALAN WRIGHT & ARTHUR R. MILLER, FED. PRAC. & PROC. CIV. § 1797.2 (3d ed. 2017) ("[A] common practice that has evolved in these situations is for the parties to move simultaneously for class certification and settlement approval, with a single notice . . . ."); WILLIAM B. RUBENSTEIN, NEWBERG ON CLASS ACTIONS § 11:34 (4th ed. 2002) (discussing judicial approve of combined settlement and certification notice).

93. *See, e.g.*, *In re* Corrugated Container Antitrust Litig., 643 F.2d 195, 223 (5th Cir. 1981) (discussing the use of a single notice for certification of a settlement class); McLaurin v. Prestage Foods, Inc., No. 7:09-CV-100-BR, 2011 WL 13146422, at *5 (E.D.N.C. Nov. 9, 2011) (applying (c)(2) content requirements to notice of a settlement class).

94. FED. R. CIV. P. 23(e) (requiring judicial approval of a proposed settlement notice).

95. FED. R. CIV. P. 23(e)(5) (allowing class member objections).

96. In theory, such objections have the potential to enhance the quality of the settlement or the judicial decision-making about settlement approval. *See, e.g.*, STEVEN S. GENSLER, 1 FEDERAL RULES OF CIVIL PROCEDURE, RULES & COMMENTARY SCOPE INFORMATION R. 23, Westlaw (database updated Feb. 2018) (discussing how "[o]bjectors can help point out ways in which the settlement is inadequate overall or is unfair to groups or individuals within the class"); Pearson v. NBTY, Inc., 772 F.3d 778, 787 (7th Cir. 2014) ("[O]bjectors play an essential role in judicial approval of proposed settlements of class actions" by "flagg[ing] fatal weaknesses in the proposed settlement"). In reality, though, many objectors do little more than raise questions that do little to benefit the quality of the settlement in hopes of a quick payday. Rule 23 allows fees for successful objectors, thus incentivizing a niche market of repeat objectors. *See, e.g.*, Eubank v. Pella Corp., 753 F.3d 718, 720 (7th Cir. 2014) ("If their objections persuade the judge to disapprove it, and as a consequence a settlement more favorable to the class is negotiated and approved, the objectors will receive a cash award that can be substantial . . . ."); *In re* Trans Union Corp. Privacy Litig., 629 F.3d 741, 743 (7th Cir. 2011) ("[C]lass lawyers may try to fend off interlopers [objectors] who oppose a proposed settlement as insufficiently generous to the class; . . . given the role of . . . interlopers in preventing cozy deals that favor class lawyers and defendants at the expense of class members, their requests for fees must not be slighted." (citing Mirfasihi v. Fleet Mortg. Corp., 356 F.3d 781, 782–83 (7th Cir. 2006), Vollmer v. Seldon, 350 F.3d 656, 659–70 (7th Cir. 2000), Crawford v. Equifax Payment Servs. Inc., 201 F.3d 877, 880–82 (7th Cir. 2000), and *In re* General Motors Corp. Pick-Up Truck Fuel Tank Prods. Liability Litig., 55 F.3d 768, 803 (3d Cir. 1995))). Consequently, courts are unsurprisingly skeptical of professional objectors. *See, e.g.*, *In re* Domestic Air Transp. Antitrust Litig., 148 F.R.D. 297, 305 (N.D. Ga. 1993) ("While some . . . objectors are sincere in their concerns and have been helpful in . . . arriv[ing] at a fair and workable settlement, many of their suggestions constitute little more than a 'wish list' which would be impossible to grant and is hardly in the best interests of the class."); MANUAL FOR COMPLEX LITIGATION (4th) § 21.643 ("Some objections, however, are made for improper purposes, and benefit only the objectors and their attorneys (e.g., by seeking additional compensation to withdraw even ill-founded objections). An objection, even of little merit, can be costly and significantly delay implementation of a class settlement."); *cf.* Edward Brunet, *Class Action Objectors: Extortionist Free Riders or Fairness Guarantors*, 2003 U. CHI. LEGAL F. 403, 409 (2003) ("Objectors and their attorneys may be engaged in a form of extortion,

Despite the flexibility woven into Rule 23's notice requirements, over the last decade, two lines of judicial interpretation have clouded the analysis. First, some courts inject a tailoring requirement into class notice. Rather than assessing whether a method of notice is reasonably calculated to reach class members, these courts require plans that are reasonably calculated to reach *only* class members.[97]

Second, some courts impose an "ascertainability" requirement onto Rule 23.[98] Ascertainability's meaning varies, with judges adopting contrary positions as to what this assessment demands.[99] Some use ascertainability to evaluate issues of class manageability;[100] others add ascertainability to Rule 23(b)(3)'s superiority requirement.[101] One particular interpretation requires Plaintiffs to identify class members "using objective criteria."[102] This construction of ascertainability most

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seeking to hold up court approval of a settlement in exchange for a piece of a limited settlement pot.").

97. *See, e.g.*, *In re* "Agent Orange" Prods. Liab. Litig., 818 F.2d 145, 169 (2d Cir. 1987) (rejecting the argument that individual mail notice should have been provided to all 2.4 million Vietnam veterans, when "far fewer than that number were exposed to Agent Orange" and thus notice would have been "considerably overbroad"); *In re* Nissan Motor Corp. Antitrust Litig., 552 F.2d 1088, 1099 (5th Cir. 1977) (rejecting the proposed list of individuals to receive class notice, including both class members and non-class members, as being over-inclusive and as helpful as a "telephone book"); Yeoman v. Ikea U.S. W., Inc., No. 11CV701 WQH (BGS), 2013 WL 5944245, at *5 (S.D. Cal. Nov. 5, 2013) ("Notice to individuals is improper and not required by Rule 23 when it is overly broad or over-inclusive.") (citations omitted).

98. Some courts impose an "ascertainability" requirement onto manageability, though the term itself does not appear in Rule 23(b)(3)(D). Ascertainability concerns first appeared in the 1980s. *E.g.*, Simer v. Rios, 661 F.2d 655, 670 (7th Cir. 1981); *see also* Luks, *supra* note 34, at 2388–93 (discussing the policy considerations behind this split). Still others infuse ascertainability into numerosity. *See, e.g.*, Christine P. Bartholomew, *The Failed Superiority Experiment*, 69 VAND. L. REV. 1295, 1307 (2016) (discussing how "[a]scertainability's meaning radically varies").

99. Ascertainability has assumed three meanings: (1) identifying class members "using objective criteria; (2) capturing all members necessary to resolve the action in a single proceeding; and (3) describing the main claims and defenses that apply to the class." Stephanie Haas, *Class Is in Session: The Third Circuit Heightens Ascertainability with Rigor in* Carrera v. Bayer Corp., 59 VILL. L. REV. 793, 804 (2014).

100. *See, e.g.*, *In re* Worldcom, Inc., 343 B.R. 412, 424 (Bankr. S.D.N.Y. 2006); Boca Raton Cmty. Hosp., Inc. v. Tenet Healthcare Corp., 238 F.R.D. 679, 686 (S.D. Fla. 2006), *aff'd sub nom.* Boca Raton Cmty. Hosp., Inc. v. Tenet Health Care Corp., 582 F.3d 1227 (11th Cir. 2009); *see also* Bartholomew, *supra* note 98, at 1307 (detailing different ascertainability definitions); Erin L. Geller, *The Fail-Safe Class as an Independent Bar to Class Certification*, 81 FORDHAM L. REV. 2769, 2778 (2013) (discussing this implicit requirement).

101. Ackerman v. Coca-Cola Co., No. 09 CV 395(DLI)(RML), 2013 WL 7044866, at *21 (E.D.N.Y. July 18, 2013) (balancing judicial access gains against ascertainability challenges to find a lack of superiority); *see also* Bartholomew, *supra* note 98, at 1331 n.229 (detailing different ascertainability definitions).

102. *See, e.g.*, Byrd v. Aaron's Inc., 784 F.3d 154, 163 (3d Cir. 2015); Carrera v. Bayer Corp., 727 F.3d 300, 305 (3d Cir. 2013); *cf.* Mullins v. Direct Digital, LLC, 795 F.3d 654, 657 (7th Cir.

directly intersects with notice requirements.[103] Some courts apply this interpretation to deny certification when individually mailed notice is not possible through reasonable efforts.[104] As more courts adopt these implied requirements and stray from *Mullane*, they transform procedural due process' flexibility into a rigid preference for mailed notice. The impact of this preference is explored next.

II. UNDERSTANDING CLASS NOTICE JURISPRUDENCE: SURVEY & RESULTS

To scrutinize judicial interpretation, this Article approaches class notice empirically. The underlying analysis is based on over 2700 federal court decisions from 2005 through 2017.[105] It tracks multiple variables, including temporal trends, potential circuit differences, and variances depending on the substantive law at issue. It also considers whether the notice was pursuant to Rule 23(d), Rule 23(c)(2), or Rule 23(e).[106] Finally, where available, it studies potential differences

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2015) (describing courts with heightened ascertainability requirements as having "moved beyond examining the adequacy of the class definition itself to examine the potential difficulty of identifying particular members of the class and evaluating the validity of claims they might eventually submit") (citation omitted); Ransome E. Hare, *Class Action Law—the Growing Split on the Heightened Test for Ascertainability in Class Certification*—Briseno v. ConAgra Foods, Inc., 844 F.3d 1121 (9th Cir. 2017), 40 AM. J. TRIAL ADVOC. 615, 615 (2017) ("[A]n ascertainable class is typically described as one where class members can be promptly identified simply by referencing the objective criteria in the class definition.").

103. A third interpretation also intersects with notice requirements by considering the content of the notice—a concept related to procedural due process, as reaching class members is not sufficient. *See, e.g.*, *In re* Domestic Drywall Antitrust Litig., No. 13-MD-2437, 2017 WL 3700999, at *6 (E.D. Pa. Aug. 24, 2017) (blurring ascertainability and notice requirements).

However, this Article focuses on the mode rather than the content of such notice.

104. *See, e.g.*, Clavell v. Midland Funding LLC, No. 10-3593, 2011 WL 2462046, at *4 (E.D. Pa. June 21, 2011) (holding ascertainability fails automatically when nothing in defendant company's databases can identify appropriate class members); *see also* Erin L. Geller, *The Fail-Safe Class As an Independent Bar to Class Certification*, 81 FORDHAM L. REV. 2769, 2778 (2013) (discussing this implicit requirement); Haas, *supra* note 99, at 813 ("Absent physical proof of purchase, such as receipts or packaging, it is unclear whether consumers will ever be able to satisfy the ascertainability requirement.").

105. 2005 marked the enactment of the Class Action Fairness Act (CAFA), which expanded original and removal subject matter jurisdiction for federal courts. 28 U.S.C. § 1332(d)(2) (2012). CAFA requires only minimal diversity for class actions seeking damages over $5 million, exclusive of interests and costs. § 1332(d)(6). CAFA results in far more class actions being brought in federal court. Thus, while CAFA reserves some class actions for state courts, its enactment creates a logical starting point for this empirical analysis.

106. All cases are identified from Westlaw's federal decision database, using the search terms: (class /s notice) /p (mail OR publication OR text OR email OR blog OR Google OR Facebook). The data was then culled through the following steps: (1) Each case was reviewed for relevancy. Cases discussing notice outside of Rule 23 were excluded, such as in bankruptcy orders,

between the method of notice the parties requested and the method the court eventually ordered.

The findings challenge the accuracy of some long-standing claims. First, courts overwhelmingly cite *Mullane* in class notice opinions.[107] This contradicts scholarly assertions that the interpretation of Rule 23 is governed not by *Mullane*, but by *Mathews v. Eldridge*,[108] a subsequent procedural due process case.[109] Second, common assumptions about the timing of notice are incorrect. For example, one scholar states, "Ordinarily, class notification occurs at an early stage when the outcome of litigation is uncertain."[110] Yet, most class notice occurs at the end of litigation, upon settlement.[111] Third, the methods of notice in the different types of classes do not noticeably vary, despite

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foreclosure decisions, and conditional certification decisions under the Fair Labor Standards Act. (2) The data was further refined to exclude class certification or settlement approval denials, as no class notice is ordered in such cases. (3) Orders approving notice without detailing the notice method were excluded. (4) All duplicates were eliminated. This included matching preliminary and final settlement approval orders to avoid double-counting. Combined, these four steps reduced the relevant data to 1587 decisions.

107. *See, e.g.*, Hecht v. United Collection Bureau, Inc., 691 F.3d 218, 224 (2d Cir. 2012); Corpac v. Rubin & Rothman, LLC, 920 F. Supp. 2d 345, 349 (E.D.N.Y. 2013); Bruno v. Quten Research Inst., LLC, No. SACV 11-00173 DOC (EX), 2012 WL 12886843, at *1 (C.D. Cal. July 16, 2012).

108. Mathews v. Eldridge, 424 U.S. 319 (1976).

109. After *Mullane*, the Supreme Court next addressed procedural due process in *Mathews v. Eldridge*, 424 U.S. 319 (1976). There, the Court articulated a three-part balancing test for procedural due process queries. *Id.* at 335. The Court has not applied this balancing test to class notice in subsequent decisions. Rather, the Court distinguished *Mullane* and *Mathews* in *Dusenbery v. United States*, 534 U.S. 161 (2002), stating:

> The *Mathews* balancing test was first conceived in the context of a due process challenge to the adequacy of administrative procedures used to terminate Social Security disability benefits. Although we have since invoked *Mathews* to evaluate due process claims in other contexts . . . we have never viewed *Mathews* as announcing an all-embracing test for deciding due process claims. Since *Mullane* was decided, we have regularly turned to it when confronted with questions regarding the adequacy of the method used to give notice.

Id. at 167–68 (citation omitted). Nonetheless, some scholars argue that procedural due process requirements in class actions are governed by *Mathews*, not *Mullane*. *See, e.g.*, Rachel Cantor, Comment, *Internet Service of Process: A Constitutionally Adequate Alternative?*, 66 U. CHI. L. REV. 943, 949–50 (1999) (arguing that *Mathews* applies to class notice queries); Ehrlich, *supra* note 27, at 2179 (same).

110. Don Zupanec, *Class Actions—Notice Costs—Payment by Defendant*, 24 FED. LITIGATOR 7 (June 2009); *accord* George Rutherglen, *Better Late Than Never: Notice and Opt Out at the Settlement Stage of Class Actions*, 71 N.Y.U. L. REV. 258, 258 (1996) ("[C]ourts currently require early individual notice in (b)(3) class actions . . . .").

111. *See* CHRISTINE P. BARTHOLOMEW, CLASS NOTICE STUDY (on file with *Duke Law Journal*) (finding 188 class certification decisions versus 1274 settlement notice orders). These settlement orders overwhelmingly covered both class and settlement notice.

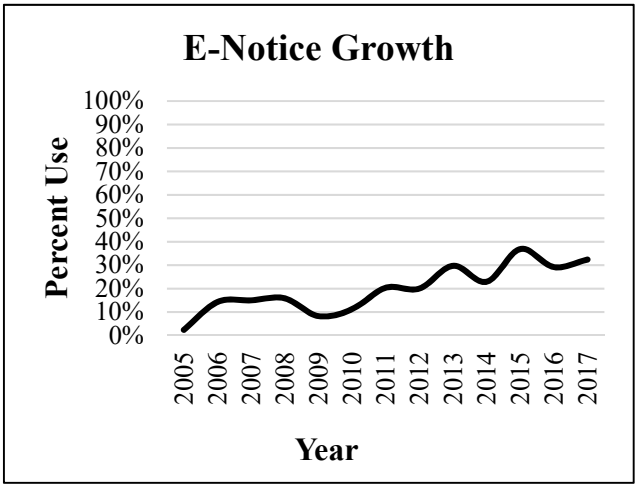
oft-repeated presumptions that standards for (b)(3) classes are more demanding than for (b)(1) or (b)(2) classes.[112]

With foundational assumptions cleared away, this Article focuses squarely on E-Notice—interweaving quantitative data results with a qualitative review of the underlying cases. This Part exposes a judiciary holding fast to mailed notice as the ideal. It also answers why courts are not embracing E-Notice, even though the Supreme Court's standard for constitutional notice anticipates change. Finally, this Part details three interpretative barriers to E-Notice rooted in unwarranted fears: fear of change, fear of technology, and, perhaps most oddly, fear of imperfection.

A. Fear of Changing Traditional Notice

At first blush, the findings may seem promising. During the thirteen-year period studied, E-Notice grew by 30 percent[113]: as shown in Figure A, decisions approving some form of E-Notice beyond settlement websites grew from 2 percent in 2005 to 32 percent in 2017.

Figure A. E-Notice Growth



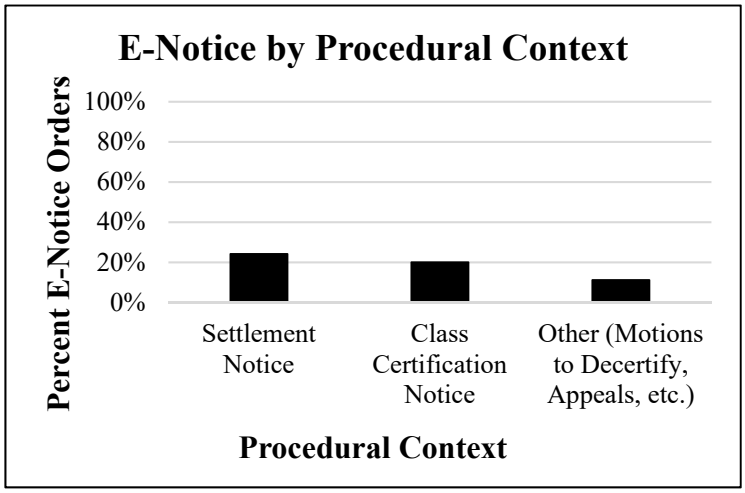
This temporal shift occurred across procedural contexts. As Figure B illustrates, courts are more inclined to approve E-Notice at

112. *Supra* Part I.B and accompanying notes.

113. *See* BARTHOLOMEW, CLASS NOTICE STUDY, *supra* note 111.

settlement.[114] Yet, the difference between procedural contexts is nominal.

Figure B. E-Notice by Procedural Context



However, a closer examination of the data suggests a form of judicial neophobia clouds class notice decisions. Despite claims to the contrary,[115] class notice plans are anachronistic. Of the cases analyzed, 76 percent approve notice by direct mail, publication through magazines or newspapers, or a settlement webpage.[116] Only 1 percent

114. *Id.*

115. *See supra* INTRODUCTION and accompanying text.

116. *See* BARTHOLOMEW, CLASS NOTICE STUDY, *supra* note 111; *see also* Dewey v. Volkswagen Aktiengesellschaft, 681 F.3d 170, 176 (3d Cir. 2012); Dick v. Sprint Commc'ns Co., 297 F.R.D. 283, 292 (W.D. Ky. 2014); Pension Tr. Fund for Operating Eng'rs v. Assisted Living Concepts, Inc., No. 12-CV-884-JPS, 2013 WL 12180866, at *2 (E.D. Wis. Sept. 25, 2013); Beaulieu v. EQ Indus. Servs., Inc., No. 5:06-CV-00400-BR, 2009 WL 2208131, at *1 (E.D.N.C. July 22, 2009). Such websites provide copies of both the long and short form notices. *See, e.g.*, DOLLARSFORDISKDRIVES.COM, https://www.dollarsfordiskdrives.com [https://perma.cc/7JDV-2KKX] (settlement website for antitrust litigation involving optical disc drive ("ODD") suppliers, In re *Optical Disk Drive Antitrust Litig.*, No. 3:10–MD–2143 RS, 2011 WL 3894376 (N.D. Cal. Aug. 3, 2011) and In re *Optical Disk Drive Antitrust Litig.*, No. 3:10–MD–2143 RS, 2012 WL 1366718 (N.D. Cal. Apr. 19, 2012)); GORDON V. HAIN CELESTIAL, www.GordonSettlement.com [https://perma.cc/UB59-EVUK] (settlement website for *Lori D. Gordon v. The Hain Celestial Group, et al.*, No. 1:16-cv-06526-KBF (S.D.N.Y. Sept. 22, 2017)); SOTO V. WILD PLANET FOODS INC., https://www.wildplanetsettlement.com/Home.aspx [https://perma.cc/7MAV-D442] (settlement website for *Soto v. Wild Planet Foods Inc.*, No. 5:15-cv-05082 (N.D. Cal. May 11, 2017) and *Shihad v. Wild Planet Foods Inc.*, No. 1:16-cv-01478 (N.D. Cal.)). Many of these settlement pages include online claim forms. *See, e.g.*, DOLLARSFORDISKDRIVES.COM.

of plans deviate completely from these preferred mediums.[117]

This trend suggests a misapplication of precedent. Stare decisis supports changing modes of notice over time. As detailed in Part I.A, the Supreme Court has repeatedly stressed that procedural due process standards are case specific.[118] Even the "best practicable" language itself invites a flexible evaluation of what is practicable.[119] However, parties in prior appellate decisions primarily used traditional notice methods without judicial objection, making some lower courts apprehensive to deviate.[120] Rather than embracing the Supreme Court's flexible standard and following its rationale, courts focus on the mode of notice in past cases.

This focus on the fact application in prior high court decisions comes at a cost to E-Notice. It perverts the Court's articulated procedural due process standard: lower courts simply use mailed notice as a short-hand substitute for the nuanced analysis called for by *Mullane*.[121] A recent landowner class action illustrates this questionable approach. In *Fager v. CenturyLink*,[122] the Tenth Circuit

117. *See* BARTHOLOMEW, CLASS NOTICE STUDY, *supra* note 111 (coding class notice decisions by notice method).

118. *See, e.g.*, Zinermon v. Burch, 494 U.S. 113, 127 (1990) ("Due process, as this Court often has said, is a flexible concept that varies with the particular situation."); Schweiker v. McClure, 456 U.S. 188, 200 (1982) ("Due Process is flexible and calls for such procedural protections as the particular situation demands." (quoting Morrissey v. Brewer, 408 U.S. 471, 481 (1972))); Lassiter v. Dep't of Soc. Servs., 452 U.S. 18, 35 (1981) (Blackmun, J., dissenting) (discussing how "the due process guarantee of the Fourteenth Amendment permitted a flexible, case-by-case determination").

119. *See* FED. R. CIV. P. 23 (c)(2)(B); Phillips Petroleum Co. v. Shutts, 472 U.S. 797, 812 (1985) ("The notice must be the best practicable, 'reasonably calculated, under all the circumstances, to apprise interested parties of the pendency of the action and afford them an opportunity to present their objections.'" (quoting *Mullane v. Cent. Hanover Bank & Tr. Co.*, 339 U.S. 306, 314–15 (1950))).

120. *See, e.g.*, DeJulius v. New England Health Care Emps. Pension Fund, 429 F.3d 935, 947 (10th Cir. 2005) (approving a settlement that used mail, newspaper, and website notice); Zimmer Paper Prods., Inc. v. Berger & Montague, P.C., 758 F.2d 86, 90 (3d Cir. 1985) ("It is well settled that in the usual situation first-class mail and publication in the press fully satisfy the notice requirements of both FED. R. CIV. P. 23 and the due process clause.") (citation omitted); *In re* Gypsum Antitrust Cases, 565 F.2d 1123, 1127 n.5 (9th Cir. 1977) (finding it "fair and reasonable" to provide notice by mail and publication).

121. *See supra* Part I.A (discussing *Mullane*). While this article focuses on notice in federal courts, state courts likely share a default preference to mailed notice. *See, e.g.*, West v. Carfax, Inc., No. 2008-T-0045, 2009 WL 5064143, at *3 (Ohio Ct. App. Dec. 24, 2009) ("We agree with appellants that, pursuant to *Eisen*, the notice provided in this case was defective. Courts have required notice by mail in class actions when the names and last known addresses of customers were available from a defendant's own business records.") (citation omitted).

122. Fager v. CenturyLink Commc'ns, LLC, 854 F.3d 1167 (10th Cir. 2016).

approved mailed settlement notice while disregarding the flexibility and creative inquiry required by *Mullane*.[123] Instead of analyzing whether the proposed plan was reasonably calculated to reach class members, the court simply stated: "The Supreme Court has consistently endorsed notice by first-class mail. In 1985 it held that 'a fully descriptive notice . . . sent first-class mail to each class member . . . satisfies due process.'"[124]

More fundamentally, though, this holding misunderstands precedent. The Supreme Court has not "endorsed" any particular form of notice.[125] While the Court has approved mailed-notice plans, it has never prescribed any one mode.[126] Rather, the Court mandated individualized notice where practicable[127]—not necessarily mailed notice. Similarly, the Court approved constructive notice when individualized notice proves impracticable[128]—though it did not restrict constructive notice to hard-copy publication.

Reducing procedural due process notice options to mail and hard copy publication creates problems. The oversimplification of *Mullane* leads courts to overlook innovative class notice options. In every circuit, courts approve mail or hard copy publication without considering E-Notice alternatives.[129] Thus, as shown in Figure C, E-Notice rates are unsurprisingly stunted across all circuits.

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123. *Id.* At 1173.

124. *Id.* (quoting *Phillips Petroleum Co.*, 472 U.S. at 812).

125. *Id.*

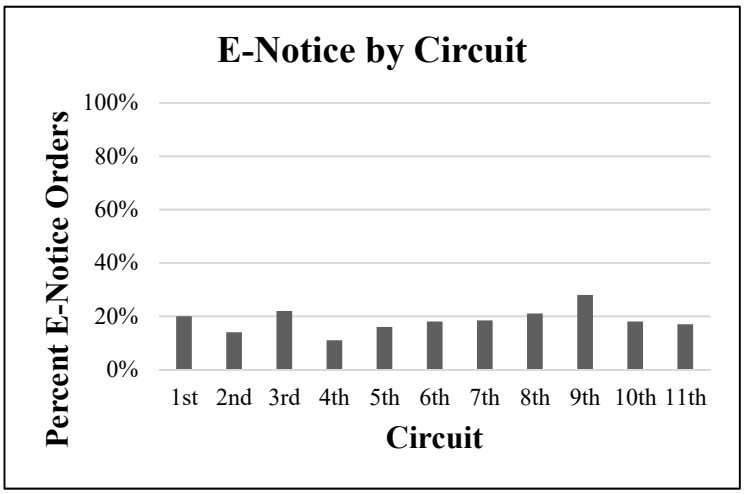
126. *See, e.g.*, *Mullane*, 339 U.S. at 319 (explaining notice must be "reasonably calculated to reach those who could easily be informed by other means at hand"—not specifically mailed notice, per se).

127. *Id.* at 317 ("This Court has not hesitated to approve of resort to publication as a customary substitute in another class of cases where it is not reasonably possible or practicable to give more adequate warning.").

128. *Id.*; *see also* Eisen v. Carlisle & Jacquelin, 417 U.S. 156, 173 (1974) ("[T]he court is required to direct to class members 'the best notice practicable under the circumstances, including individual notice to all members who can be identified through reasonable effort.'" (quoting FED. R. CIV. P. 23(c)(2))) (emphasis omitted).

129. *See, e.g.*, Sonoma Cty. Ass'n of Retired Emps. v. Sonoma Cty., No. CV 09-4432 CW, 2016 WL 7743407, at *3 (N.D. Cal. Dec. 7, 2016); Kirven v. Cent. States Health & Life Co. of Omaha, No. 3:11-CV-2149-MBS, 2014 WL 12734325, at *9 (D.S.C. Dec. 12, 2014); Mims v. Wells Fargo Home Mortg., No. 4:07-CV-00014-WLS, 2014 WL 12701130, at *2 (M.D. Ga. Oct. 23, 2014); Beesley v. Int'l Paper Co., No. 06-703-DRH, 2013 WL 12171727, at *6 (S.D. Ill. Oct. 30, 2013); Chieftain Royalty Co. v. QEP Energy Co., No. CIV-11-212-R, 2013 WL 12090345, at *5 (W.D. Okla. May 31, 2013); Brody v. Merck & Co., No. 12-CV-4774-PGS-DEA, 2012 WL 12905988, at *5–6 (D.N.J. Dec. 28, 2012); Assif v. Titleserv, Inc., 288 F.R.D. 18, 26 (E.D.N.Y. 2012); Franklin v. Midland Funding, LLC, No. 3:10 CV 91, 2011 WL 3557033, at *12 (N.D. Ohio Aug. 12, 2011); Ridgely v. Fed. Emergency Mgmt. Agency, No. CIV. 07-2146, 2010 WL 5140833, at *3 (E.D. La.

Figure C. E-Notice by Circuit[130]



Opinions—particularly for settlement approvals—frequently devote a mere passing sentence or two to the method of notice.[131] *In re MetLife Demutualization Litigation*[132] illustrates this cursory approach.[133] In this securities class action, the Eastern District of New York approved settlement notice solely by newspaper.[134] The decision notably ignores other E-Notice options. As the court explained, "In view of the millions of members of the class, notice to class members by individual postal mail, email, or radio or television advertisements, is neither necessary nor appropriate. The publication notice ordered is appropriate and sufficient in the circumstances."[135] Thus, for some lower courts, the fear of breaking the mold ties them steadfastly to

Dec. 13, 2010); Bussie v. Allmerica Fin. Corp., No. CIV.A. 97-40204-NMG, 2006 WL 8201933, at *1 (D. Mass. Sept. 19, 2006).

130. The D.C. and Federal Circuits are intentionally omitted, given the small sample size for each. *See* BARTHOLOMEW CLASS NOTICE STUDY, *supra* note 111 (coding notice decisions by circuit).

131. *See, e.g.*, *In re* Chinese-Mfrd. Drywall Prod. Liab. Litig., MDL No. 2047, 2017 WL 1421627, at *15 (E.D. La. Apr. 21, 2017) (addressing a notice plan summarily) *appeal dismissed for lack of jurisdiction*, No. 17-30432, 2017 WL 5624275 (5th Cir. June 26, 2017); *Ridgely*, 2010 WL 5140833, at *3 (devoting one sentence to notice); Coffin v. Bowater Inc., 379 F. Supp. 2d 1, 1 (D. Me. 2005) (same).

132. *In re* MetLife Demutualization Litig., 262 F.R.D. 205 (E.D.N.Y. 2009).

133. *Id.* at 208.

134. *Id.*

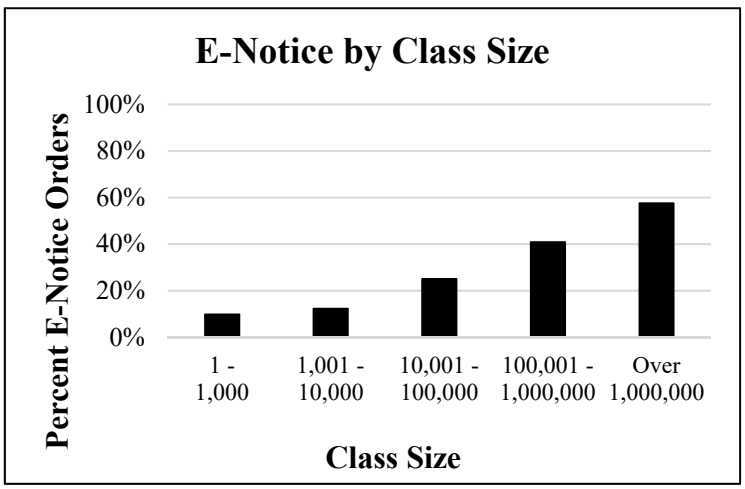
135. *Id.*

mailed notice; as one attorney has stated, mailed notice is appropriate because "that's the way it has always been done."[136]

The FJC perpetuates this fear of change. Its Judges' Class Action Notice and Claims Process Checklist starts by equating mail with the ideal form of notice.[137] The Checklist then cautions judges to be wary of E-Notice plans, warning the "[r]each, awareness, and claims will likely be very low when such a program is complete."[138] Notably, the FJC neither provides empirical foundation for this warning nor compares the reach of E-Notice to other forms of constructive notice.[139]

Then, in the Manual of Complex Litigation, the FJC treats E-Notice as distinct from the "preferred" methods of notice, stating: "When the names and addresses of most class members are known, notice by mail usually is preferred."[140] This "preferred" label tracks the observable trend in case law. As shown in Figure D, E-Notice is primarily limited to large class sizes, where individualized notice is less practicable.

Figure D. E-Notice by Class Size



136. *See, e.g.*, *In re* Scotts EZ Seeds Litig., No. 12 CV 4727(VB), 2015 WL 5502053, at *2 (S.D.N.Y. July 7, 2015).

137. CHECKLIST, *supra* note 24, at 2 ("If names and addresses are reasonably identifiable, Rule 23(c)(2) requires individual notice. Be careful to look closely at assertions that mailings are not feasible.").

138. *Id.* at 4.

139. The pending FTC study may remedy this gap. *See supra* note 20. To help with this study, the data from this Article has been offered to the FTC for use.

140. ANN. MANUAL FOR COMPLEX LITIG. § 33.26 (4th ed. 2017).

Again, the FJC does not justify perpetuating this preference for mail. Instead, the Manual references online notice as a mere "supplement," further reinforcing the status quo.[141]

E-Notice will only increase when courts and parties venture from their comfort zone. A binary definition of individualized notice—a mail or bust approach—runs contrary to the intended flexibility envisioned by the Court in fulfilling this constitutional protection. Thus, overcoming judicial fear of change is a necessary first step.

B. Fear of "New" Technologies

A second fear plagues E-Notice: a fear of "new" technologies. Interestingly, privacy concerns are rarely raised as rationale for denying E-Notice.[142] Rather, some courts worry E-Notice may be ineffective or misused, and consequently only insist on traditional notice methods. For other courts, this fear leads to lukewarm, limited E-Notice approval. Either approach contributes to a continuing gap between the growth of E-Notice and society's general use of technology.

Although no appellate court has voiced concerns about abuse, some trial courts fret someone might alter electronic forms of notice. For example, in *Karvaly v. eBay*,[143] the Eastern District of New York rejected a plan to use email as individualized notice to a class of payment account holders.[144] The court recognized email was "clearly more convenient and less expensive for the parties,"[145] but worried that:

> [N]otification by electronic mail creates risks of distortion or misleading notification that are substantially reduced when first-class mail is used. . . .

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141. *Id.* § 21.311.

142. This finding was somewhat surprising given concerns about the use of Big Data. *See, e.g.*, MARK BARTHOLOMEW, ADCREEP 71–77 (2017); BRETT FRISCHMANN & EVAN SELINGER, RE-ENGINEERING HUMANITY 21–28 (2018). Such concerns are warranted and invite further scholarship to explore this area. In a way, though, the proverbial cat is already out of the bag. Companies already gather information on consumers' identities and preferences. Rather than ignore it out of privacy concerns, perhaps its existence has a silver lining: it is a way to increase the accuracy and utility of E-Notice methods. Further, claims administrators already have access to confidential information in cases, including private financial information. Hence, borrowing best practices from existing data sources may provide a path forward.

143. Karvaly v. eBay, Inc., 245 F.R.D. 71 (E.D.N.Y. 2007).

144. *Id.* at 91.

145. *Id.*

> [E]lectronic communication inherently has the potential to be copied and forwarded to other people via the internet with commentary that could distort the notice approved by the Court. Electronic mail heightens the risk that the communication will be reproduced to large numbers of people who could compromise the integrity of the notice process. In addition, email messages could be forwarded to nonclass members and posted to internet sites with great ease.[146]

Given these fears, the court required mailed notice. However, the same risks apply to traditional mail: Mail can be altered, "copied and forwarded to other people."[147] It also can be "reproduced to large numbers of people" or scanned and "posted to internet sites with great ease."[148] Such risks have not limited mail notice, nor should they preclude E-Notice—yet they do.

Other courts dismiss these concerns as "outdated."[149] These courts recognize that encryption or locking attachments as PDF documents can alleviate such concerns.[150] Yet, although the data suggests that courts are slowly modernizing, the technology lag continues, particularly for constructive notice.

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146. *Id.* (internal quotation marks omitted) (quoting Reab v. Elec. Arts, Inc., 214 F.R.D. 623, 630–31); *see also* Kuznyetsov v. W. Penn Allegheny Health Sys., Inc., Civ. A. No. 09-CV-379, 2009 WL 1515175, at *6 (W.D. Pa. June 1, 2009) (repeating such fears and holding that "first-class mail is appropriate as the sole form of notice."); *cf.* Vargas v. Gen. Nutrition Ctrs., Inc., No. 2:10-CV-867, 2012 WL 5336166, at *13 (W.D. Pa. Oct. 26, 2012) ("Plaintiffs have not offered any persuasive justification that notification by first-class mail would be inadequate . . . .").

147. *Reab*, 214 F.R.D. at 630; *cf. Karvaly*, 245 F.R.D. at 91 ("[N]otification by electronic mail creates risks of distortion or misleading notification that are substantially reduced when first-class mail is used.").

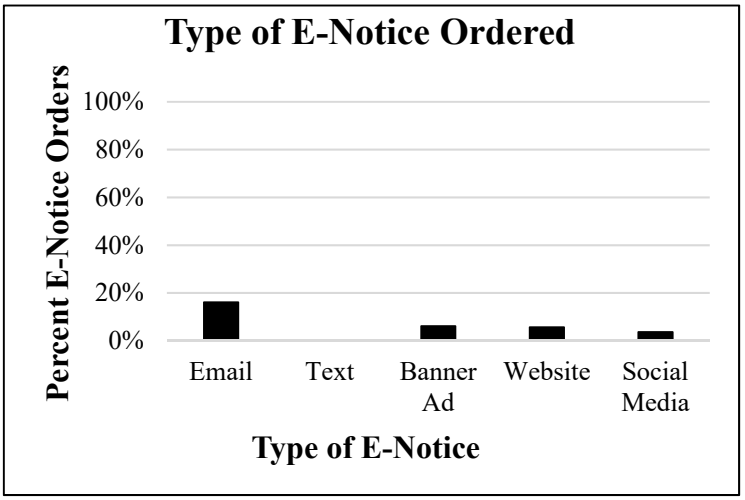
148. *Reab*, 214 F.R.D. at 631.

149. Peterson v. Alaska Commc'ns Sys. Grp., Inc., No. 3:12-CV-00090-TMB, 2015 WL 13376562, at *2 (D. Alaska Feb. 4, 2015) ("[T]he reasoning identified in cases that have limited distribution to U.S. mail is outdated."); *see also* Jaso v. Bulldog Connection Specialists LLC, No. 2:15-CV-269, 2015 WL 11144603, at *5 (S.D. Tex. Oct. 15, 2015) ("Sending a paper notice does not afford the same amount of protection from further dissemination and commentary today, however, for a recipient with a smart phone can easily snap a picture of a paper notice and disseminate it electronically with commentary."); Browning v. Yahoo! Inc., No. 04CV01463(HRL), 2007 WL 4105971, at *4 (N.D. Cal. Nov. 16, 2007) (finding that "[e]mail notice was particularly suitable" because the claim arose from visits to the defendant's website) (citing cases).

150. *See, e.g.*, Lewis v. Huntington Nat'l Bank, No. C2-11-CV-0058, 2011 WL 8960489, at *2 (S.D. Ohio June 20, 2011) ("If the Notice were attached to the email as a pdf file rather than typed into the body of the email, the risk that the Notice will be 'copied and forwarded to other people via the internet with commentary . . . distort[ing] the notice approved by the Court' . . . would be mitigated.") (citation omitted); *but see* Chavez v. Lumber Liquidators, Inc., No. CV-09-4812 SC, 2012 WL 6115611, at *3 (N.D. Cal. Dec. 10, 2012) ("Restricting access to the proposed website by requiring passwords which could be easily lost or forgotten would only undermine the Court's goal of providing the best notice practicable.").

As Figure E shows, of the various types of E-Notice in use, email exceeded all other forms of E-notice combined.[151] During the study period, courts relied on this form of individual notice in 16 percent of cases.[152]

Figure E. Type of E-Notice Ordered



Technology is now part of everyday life. Smart devices allow constant delivery of email—a mode of communication that grows even in the shadow of instant messaging, texting, and social media.[153] Eighty-nine percent of Americans read their email daily, but class notice by email is still a rarity[154]—courts rely on email to provide individual notice in less than one in five cases.[155] Similarly, smart device ownership is rising dramatically,[156] with the number of smartphones doubling

151. *See* BARTHOLOMEW CLASS NOTICE STUDY, *supra* note 111.

152. *Id.*

153. THE RADICATI GROUP, EMAIL STATISTICS REPORT 2017–2021 (Feb. 2017), https://www.radicati.com/wp/wp-content/uploads/2017/01/Email-Statistics-Report-2017-2021-Executive-Summary.pdf [https://perma.cc/U6AH-Z3JP].

154. *22 New Stats Showing How American Adults Use Email*, ELEVENTY MARKETING GROUP (Jan. 5, 2016) http://eleventygroup.com/2016/01/05/american-email-usage [https://perma.cc/6J4V-WK3X].

155. BARTHOLOMEW CLASS NOTICE STUDY, *supra* note 111 (coding cases by method of notice).

156. In 2016, roughly 25 percent of Americans owned an e-reader and 50 percent of Americans owned tablets. PEW RES. CTR., *supra* note 16.

since just 2011.[157] These devices create connectivity to social networks previously inconceivable, radically transforming communication. The majority of Americans now get their news from social media.[158] Hard-copy newspaper readership[159] and circulation[160] are in rapid decline.[161] Yet, E-Notice through social media occurs in only 8 percent of cases.[162]

Given these figures, perhaps it is unsurprising a gap persists between the growth of E-Notice and society's general use of technology, as illustrated by Figure F. One pragmatic, though perhaps perfunctory, explanation could be what law and technology scholars call the "law lag"—the idea that "existing legal provisions are inadequate to deal with a social, cultural or commercial context created by rapid advances in information and communication technology . . . ."[163]

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157. Jacob Poushter, *Smartphones are Common in Advanced Economies, but Digital Divides Remain*, PEW RES. CTR. (Apr. 21, 2017), http://www.pewresearch.org/fact-tank/2017/04/21/smartphones-are-common-in-advanced-economies-but-digital-divides-remain [https://perma.cc/38AB-BEYB].

158. Michael Barthel, *Newspapers: Fact Sheet*, in PEW RES. CTR., STATE OF THE NEWS MEDIA 2016, at 9 (June 15, 2016), http://assets.pewresearch.org/wp-content/uploads/sites/13/2016/06/30143308/state-of-the-news-media-report-2016-final.pdf [https://perma.cc/5LFP-EEBC] (reporting that since 2004 more than 100 newspapers have stopped providing daily issues).

159. *See, e.g.*, Mathew Ingram, *Print Readership is Still Plummeting, and Paywalls Aren't Really Helping*, FORTUNE (June 1, 2015), http://fortune.com/2015/06/01/print-readership-paywalls [https://perma.cc/JN3H-RW6R] (discussing a report finding a 25 percent drop in print newspaper readership between 2011 and 2015); *cf.* Barthel, *supra* note 158, at 11 (noting "the portion of Americans turning to print newspapers continues to decline," though most self-reported newsreaders still rely on print).

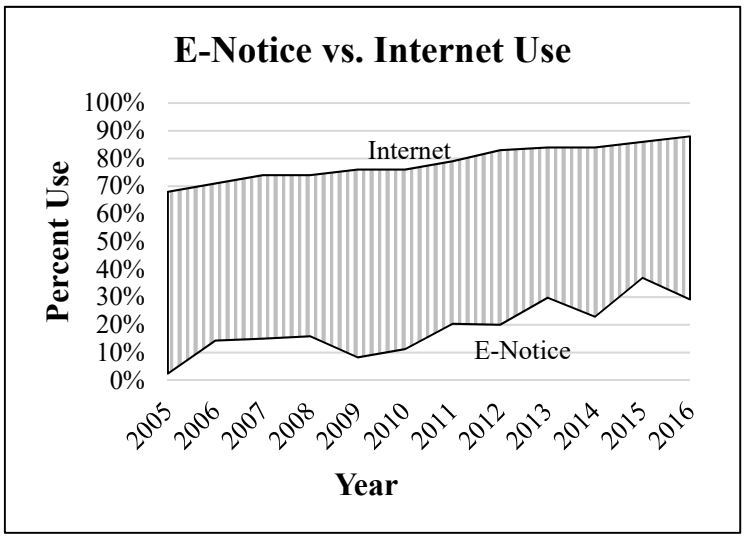
160. *See, e.g.*, Barthel, *supra* note 158, at 9 ("For newspapers, 2015 might as well have been a recession year. Weekday circulation fell 7% and Sunday circulation fell 4%, both showing their greatest declines since 2010."); Dan Kennedy, Opinion, *Print Is Dying, Digital Is No Savior: The Long, Ugly Decline Of The Newspaper Business Continues Apace*, WGBH (Jan. 26, 2016), https://www.wgbh.org/news/2016/01/26/local-news/print-dying-digital-no-savior-long-ugly-decline-newspaper-business-continues [https://perma.cc/5WHZ-Y79V] ("[P]rint circulation plunged between 2013 and 2015 at a far faster rate than had been expected. The *Journal* is down by 400,000; the *Times* by 200,000; *The Washington Post* and the *Los Angeles Times* by 100,000.").

161. *Cf.* Derek Thompson, *The Print Apocalypse and How to Survive It*, ATLANTIC (Nov. 3, 2016), https://www.theatlantic.com/business/archive/2016/11/the-print-apocalypse-and-how-to-survive-it/506429 [https://perma.cc/D98Q-PP4F] (discussing the demise of newspapers); *see also* Klonoff, *supra* note 27, at 731–32 ("[P]eople do not read the newspaper as often or as diligently as they once did.").

162. BARTHOLOMEW CLASS NOTICE STUDY, *supra* note 111.

163. Carla L. Reyes, *Moving Beyond Bitcoin to an Endogenous Theory of Decentralized Ledger Technology Regulation: An Initial Proposal*, 61 VILL. L. REV. 191, 202 (2016) (defining law lags).

Figure F. E-Notice vs. Internet Use



This lag is not unique to class notice.[164] However, with class notice, it seems more than a mere lag is at play. For example, threads of the judiciary simply assume E-Notice is dangerous or flawed.[165] Once again, language from the FJC fosters such fears:

> Audiences of Internet websites are measured by "impressions." Total, or "gross," impressions of the entire website do not reveal how many people will view the notice "ad" appearing periodically on a particular page. Inflated audience data via Internet ads is common. It is very expensive to reach a significant percentage of a mass audience with Internet banner ads. Watch for suggestions that Internet ads and social network usage can replace all other methods. Reach,

164. *See, e.g.*, Ben Depoorter, *Technology and Uncertainty: The Shaping Effect on Copyright Law*, 157 U. PA. L. REV. 1831, 1840 (2009) (discussing the technological gap between law and copyright); Thomas R. McLean, *The Offshoring of American Medicine: Scope, Economic Issues and Legal Liabilities*, 14 ANNALS HEALTH L. 205, 207 (2005) (discussing how "international law and the legal 'lag phase' associated with technology leaves many unanswered questions on cyberspace medical malpractice"); Sean B. Seymore, *Patently Impossible*, 64 VAND. L. REV. 1491, 1513 (2011) ("[P]atent law inevitably lags a step or two behind the cutting edge of science and technology.").

165. *See, e.g.*, Kuznyetsov v. W. Penn Allegheny Health Sys., Inc., No. CIV. A. 09-CV-379, 2009 WL 1515175, at *6 (W.D. Pa. June 1, 2009) (holding "that first-class mail is appropriate as the sole form of notice" in part because of fears of alteration).

awareness, and claims will likely be very low when such a program is complete.[166]

Yet class notice experts are more sanguine. For example, Richard Simmons, the president of a well-respected claims-administration company, is willing to "assume that digital banner advertisements, when properly employed, can be used in a holistic program to provide adequate notice to class members regarding a settlement."[167] Similarly, Steven Weisbrot, another nationally recognized class action notice expert, recently urged the Rules Committee "to explicitly endorse the use of banner ads in notifying unknown class members."[168]

These experts recognize that while the parameters of E-Notice plans need careful consideration, such plans have been successful.[169] Though few published decisions include detailed data, the information available suggests the reach and claims rates from E-Notice plans are on par with or higher than traditional class notice methods.[170] Further,

166. CHECKLIST, *supra* note 24, at 4.

167. Richard Simmons & Christian Clapp, *Crafting Digital Class Notices That Actually Provide Notice*, LAW 360 (Mar. 10, 2016), https://www.law360.com/articles/769290/crafting-digital-class-notices-that-actually-provide-notice [https://perma.cc/8XEW-MFRB].

168. Steven Weisbrot, *Is Digital the New Print in Class Action Notification Programs?*, AM. BAR ASS'N (Feb. 19, 2015), http://apps.americanbar.org/litigation/committees/classactions/articles/winter2015-0215-is-digital-the-new-print-in-class-action-notification-programs.html [https://perma.cc/UGT3-MGUX].

169. Admittedly, some plans work better than others. *See, e.g.*, Michael Brenner, *Banners Have 99 Problems and a Click Ain't One*, MKTG. INSIDER GRP. (Jan. 30, 2017), https://marketinginsidergroup.com/content-marketing/banners-99-problems/ [https://perma.cc/E2RM-M4MG] (detailing variances in banner ad effectiveness); *see also* Scheibel, *supra* note 10, at 1358 ("Measurements of impressions would likely be more meaningful if the notice was published in targeted places that made sense in the context, or, to recall Rule 23(c)(2)(B)'s direction, the circumstances, of the suit."). E-Notice should squarely target class members and provide repeated exposure to the notice. *Id.* Further, it is not sufficient to merely design and then launch an E-Notice plan. Rather, claims administrators should affirmatively manage plans and be willing to make adjustments as necessary to ensure "the best notice practicable." *Id.*

170. *Compare, e.g.*, *In re* Carrier IQ, Inc., Consumer Privacy Litig., No. 12-MD-02330-EMC, 2016 WL 4474366, at *3 (N.D. Cal. Aug. 25, 2016) (reaching 81.3 percent through publication and social media notice) (subsequent history omitted) *and* LaGarde v. Support.com, Inc., No. C12-0609 JSC, 2013 WL 1283325, at *2 (N.D. Cal. Mar. 26, 2013) ("Notice to the class was delivered via e-mail, reaching more than 92% of the 759,000 class members' email addresses.") *and* Cohorst v. BRE Props., Inc., No. 3:10-CV-2666-JM-BGS, 2011 WL 7061923, at *6 (S.D. Cal. Nov. 14, 2011) (using email and publication generated a 95.35 percent receipt rate), *report and recommendation adopted as modified*, No. 10CV2666 JM BGS, 2012 WL 153754 (S.D. Cal. Jan. 18, 2012), *with* Domonoske v. Bank of Am., N.A., 790 F. Supp. 2d 466, 472 (W.D. Va. 2011) (providing notice by mail to 86.7 percent of the class) *and* Vaughn v. Am. Honda Motor Co., 627 F. Supp. 2d 738, 744 (E.D. Tex. 2007) (providing mailed notice to approximately 91 percent of class members), *order amended sub nom.*, Vaughn v. Am. Honda Motor Co., 507 F.3d 295 (5th Cir. 2007).

in cases combining traditional and E-Notice methods, claims rates often exceed those derived from traditional notice methods alone.[171]

Nonetheless, some courts ignore these successes. Take, for example, the actions of the District of Kansas in *In re Motor Fuel Temperature Sales Practices Litigation*.[172] As part of a settlement notice plan, plaintiffs proposed using a banner ad on highly frequented websites to provide constructive notice.[173] This banner ad campaign was crafted to provide notice "where at least 75 percent of the target population has Internet access."[174] Where Internet access fell below that threshold, plaintiffs proposed publication notice and a settlement website. Despite other successful banner ad plans,[175] the court refused to approve the plan, fearing class members would never "actually click on the banner ads"[176] The court was "skeptical whether a notice program based primarily on banner ads" could ever satisfy Rule 23.[177]

Such statements suggest judicial fear of E-Notice may stem from a more fundamental misunderstanding. Click-through rates are only a partial measure of the impact of online ads.[178] Instead, a more relevant metric is conversion rate—the percentage of individuals who actually

171. Consumer class actions generate some of the lowest claims rates. However, use of E-Notice helps drive up these figures. *Compare, e.g.*, Gascho v. Glob. Fitness Holdings, LLC, 822 F.3d 269, 290 (6th Cir. 2016) (using a combination of traditional and E-Notice to generate 8 percent claims rate), *cert. denied sub nom.* Zik v. Gascho, 137 S. Ct. 1065 (2017); Date v. Sony Elecs., Inc., No. 07-15474, 2013 WL 3945981, at *9 (E.D. Mich. July 31, 2013) (using a combination of traditional and E-Notice, class notice resulted in a 4 percent claims rate), *with* Touhey v. United States, No. EDCV 08–01418, 2011 WL 3179036, at *7–8 (C.D. Cal. July 25, 2011) (finding a 2 percent response rate acceptable—38 responses out of 1875 mailed notices).

172. *In re* Motor Fuel Temperature Sales Practices Litig., No. 07-MD-1840-KHV, 2013 WL 139732, at *3 (D. Kan. Jan. 10, 2013).

173. *Id.*

174. *Id.*

175. *See, e.g.*, *In re* Google Referrer Header Privacy Litig., 87 F. Supp. 3d 1122, 1129 (N.D. Cal. 2015) (approving "(1) internet-based notice using paid banner ads targeted at potential class members (in English and in Spanish on Spanish-language websites); (2) notice via 'earned media' or, in other words, through articles in the press; (3) a website decided solely to the settlement (in English and Spanish versions); and (4) a toll-free telephone number where class members can obtain additional information and request a class notice."); *In re* Nat'l Arbitration Forum Trade Practices Litig., No. 10-2122, 2011 WL 13135575, at *2 (D. Minn. Aug. 8, 2011) ("Plaintiffs note that the banner ads regarding the settlement were viewed 190 million times, and that the website set up for the administration of the settlement received more than 100,000 'clicks.'").

176. *In re Motor Fuel*, 2013 WL 139732, at *2.

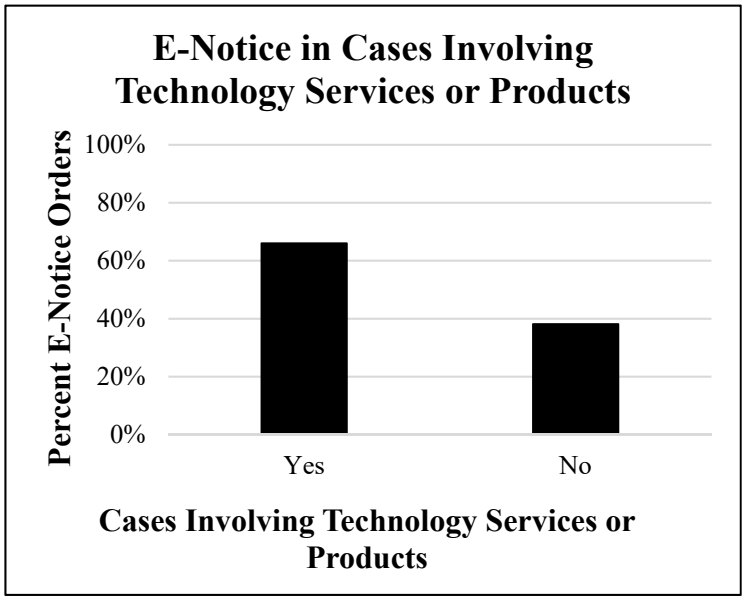
177. *Id.*

178. Michael Agger, *Responsible Browsing, Will Clicking on All the Ads Help Your Favorite Web Site?*, SLATE (Sept. 28, 2009), http://www.slate.com/articles/technology/lifehacking/2009/09/responsible_browsing.html [https://perma.cc/Q3Z7-EL89] (reporting how marketers view click-through rates as "a crude measurement that doesn't really capture an ad's impact.").

take action after viewing an ad.[179] As research on online ads confirms, even in the absence of clicks, such ads still "reach" individuals—and do so quite effectively.[180]

Despite courts' general reluctance to adopt E-Notice, the data did identify a segment of cases in which E-Notice is more common. In cases involving technology services or products, courts turn to E-Notice nearly twice as often, as Figure G depicts.

Figure G. E-Notice in Cases Involving Technology Services or Products



179. *See, e.g.*, Anindya Ghose and Sha Yang, *An Empirical Analysis of Search Engine Advertising: Sponsored Search in Electronic Markets*, 55 MANAGEMENT SCI. 1605, 1606 (2009) (distinguishing click-through and conversion rates).

180. Rex Briggs & Nigel Hollis, *Advertising on the Web: Is There Response Before Click-Through*, 37.2 J. ADVERTISING RES. 2 (Mar.–Apr. 1997) (finding online advertising "works with or without the added benefit of click-through"); Robert Hof, *Study: Mobile Ads Actually Do Work - Especially In Apps*, FORBES (Aug. 27, 2014), https://www.forbes.com/sites/roberthof/2014/08/27/study-mobile-ads-actually-do-work-especially-in-apps/#69462b8857aa [https://perma.cc/3MJH-YKPK] (featuring a recent research study by Medialets that tracked "the impact of ads that are seen but not clicked. Using that data, Medialets says, the rate at which ads prompt people to view a Web page rises 288%, while the rate for app downloads rises 162% and the rate for purchases rises 157%."); Farhad Manjoo, *Facebook Followed You to the Supermarket*, SLATE (Mar. 20, 2013), http://www.slate.com/articles/technology/technology/2013/03/facebook_advertisement_studies_their_ads_are_more_like_tv_ads_than_google.html [https://perma.cc/JT9G-N4PQ] ("[T]he click doesn't matter; people who click on ads aren't necessarily buying, and people who are buying are almost certainly not clicking.").

In these cases, the facts, rather than the presumed technological savvy of class members, control.[181] For example, when a class member's primary interaction with the defendant is through an electronic medium, E-Notice is likely.[182] Take *Evans v. Linden Research, Inc.*,[183] a class action involving participants in Second Life, an internet role-playing game.[184] Class members alleged the defendant unilaterally suspended their Second Life accounts without compensating them for virtual assets they purchased through the game. The Northern District of California approved a notice plan that relied exclusively on email and online notice.[185]

In some of these cases, courts rely solely on E-Notice even when individualized mailed notice is possible. In doing so, they buck the more common trend of demoting E-Notice to a form of supplemental notice.[186] For example, *In re Electronic Books Antitrust Litigation*[187] involved antitrust claims against e-book retailers including Amazon, Barnes & Noble, Apple, Kobo, Sony, and Google.[188] The retailers obtained class members' mailing addresses as part of the billing information.[189] Nonetheless, the approved class notice relied primarily on email.[190] The claims administrator only mailed notice to "class members for whom no correct e-mail address was found in the two prior rounds of notice."[191]

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181. *See, e.g.*, Douglas v. W. Union Co., No. 14-cv-1741, 2015 WL 9302316, at *2–3 (N.D. Ill. Nov. 10, 2015); Flynn v. Sony Elecs., Inc., No. 09-CV-2109-BAS MDD, 2015 WL 128039, at *1 (S.D. Cal. Jan. 7, 2015) (using E-Notice in a case involving defective notebook computers); Mirakay v. Dakota Growers Pasta Co., Inc., No. 13-cv-4429, 2014 WL 5358987, at *2 (D.N.J. Oct. 20, 2014).

182. *See, e.g.*, Hanlon v. Palace Entm't Holdings, LLC, No. CIV.A. 11-987, 2012 WL 27461, at *6 (W.D. Pa. Jan. 3, 2012) (approving notice plan including email because email was the primary form of communication between class members and defendants).

183. Evans v. Linden Research, Inc., No. C-11-01078, 2013 WL 5781284 (N.D. Cal., Oct. 25, 2013).

184. *Id.* at *1.

185. *Id.* at *3.

186. *In re* TracFone Unlimited Serv. Plan Litig., No. 13-cv-03440, 2015 WL 13035125, at *2–3 (N.D. Cal. Feb. 20, 2015); Keirsey v. eBay, Inc., No. 12-cv-01200, 2014 WL 644697, at *1 (N.D. Cal. Feb. 14, 2014); *In re* Sony SXRD Rear Projection Television Class Action Litig., No. 06 CIV. 5173 (RPP), 2008 WL 1956267, at *1 (S.D.N.Y. May 1, 2008).

187. *In re* Elec. Books Antitrust Litig., No. 11 MD 2293 DLC, 2014 WL 1641699 (S.D.N.Y. Apr. 24, 2014).

188. *Id.* at *3.

189. *Id.* at *2.

190. *Id.* at *3.

191. *Id.*

Hence, cases involving technology are sometimes outliers, with courts more willing to experiment with E-Notice. However, despite these instances of experimentation, courts more commonly allow ungrounded fears about technology contribute to the slow growth of E-Notice. Without judicial willingness to consider the trade-offs between hypothetical abuse and verifiable gains, E-Notice will likely remain underutilized. When combined with judicial fears of change and imperfect tailoring, the reasons for E-Notice's slow growth are clear. What to do about these barriers, however, is the subject of the next Part.

C. Fear of Imprecision

A third fear undermines E-Notice: fear of imprecision. Although parties must "reasonably calculate[]" notice plans to reach class members,[192] this calculation, or tailoring, need not be perfect. The Supreme Court has long-blessed constructive notice, even though "[c]hance alone brings to the attention of even a local resident an advertisement in small type inserted in the back pages of a newspaper."[193]

Nonetheless, a distorted understanding of this tailoring requirement leads some courts to forgo E-Notice. These courts worry broad notice "would unfairly publicize yet unproven allegations about defendants to their customers."[194] If allegations of wrongdoing are broadly shared, the argument goes, non-class members may learn about pending litigation, thereby harming defendants' reputations.[195]

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192. *See, e.g.*, Phillips Petroleum Co. v. Shutts, 472 U.S. 797, 811–12 (1985) (internal quotation marks omitted); Mullane v. Cent. Hanover Bank & Tr. Co., 339 U.S. 306, 311 (1950); Gooch v. Life Inv'rs Ins. Co. of Am., 672 F.3d 402, 423 (6th Cir. 2012); § 6 NEWBERG ON CLASS ACTIONS § 18:43 (5th ed. 2015).

193. *Mullane*, 339 U.S. at 315.

194. *See, e.g.*, Brooks v. GAF Materials Corp., No. 8:11-CV-00983-JMC, 2013 WL 2109559, at *2 (D.S.C. May 15, 2013) (rejecting the notice plan in a defective shingle case because the plaintiff proposed notifying "builders and distributors, who are customers of Defendant, receive notice of a class action to which they are not potential plaintiffs.") (citation omitted); Owen v. W. Travel, Inc., No. C03-0659Z, 2003 WL 25961848 (W.D. Wash. Dec. 12, 2003).

195. Some courts fully reject such reputational-harm arguments. *See, e.g.*, Lake Butler Apparel Co. v. Sec'y of Labor, 519 F.2d 84, 89 (5th Cir. 1975) ("The posting of the notice does not by any stretch of the imagination reflect one way or the other on the views of the employer."); Pacheco v. Aldeeb, No. 5:14-CV-121-DAE, 2015 WL 1509570, at *9 (W.D. Tex. Mar. 31, 2015) (recognizing courts have approved various notice plans "over objections that such publication could cause reputational harm"); *In re* Elec. Books Antitrust Litig., No. 11 MD 2293 (DLC), 2014 WL 1641699, at *4–6 (S.D.N.Y. Apr. 24, 2014) (rejecting Apple's claim of potential reputational harm from a multifront E-Notice plan); Barajas v. Acosta, No. CIV.A. H-11-3862, 2012 WL

To insulate defendants from this imagined risk, some courts carefully circumscribe notice.[196] Unlike reticence toward changing methods of notice, the problem here is not judicial inaction, but rather over-reaction. Unrealistic perfection has become the enemy of the good.[197]

The data evidences a concern that class plans might reach too many individuals—including non-class members. This concern is growing with the rise of an implied ascertainability requirement. Courts are denying certification rather than considering E-Notice solutions. For example, in *LaBauve v. Olin*,[198] recreational anglers impacted by chemical run-off sought certification of an environmental class action.[199] To identify class members, plaintiffs proposed using a database of fishing licenses.[200] However, the Southern District of Alabama found the class unascertainable.[201] The Court disregarded constructive notice as a viable option, opting instead to deny certification.[202] The court worried such a plan "may be both overinclusive and underinclusive in identifying class members, as not all of them may read the paper and certain people may respond to

1952261, at *4 (S.D. Tex. May 30, 2012) ("[T]he notice informs potential plaintiffs of the action and their rights to join the lawsuit. The notice will not prejudice the rights of Defendants, and it does not purport to assert their position about the litigation."); Simpkins v. Pulte Home Corp., No. 608-CV-130-ORL-19DAB, 2008 WL 3927275, at *8 (M.D. Fla. Aug. 21, 2008) (rejecting a challenge to class notice because defendant "offers no case-specific explanation of how it will suffer harm in this case").

196. Much like the fear of change, the Manual for Complex Litigation plays a part in fueling the fear of overly broad notice. In discussing notice through defendant's own mailings, the Manual states:

> Defendant may object that requiring it to use its own mailings to announce the certification of a class against it may be prejudicial and may even deprive it of First Amendment rights. It is important to balance any efficiencies that might be gained by this approach against the burden such mailings can impose. Before requiring a defendant to use its own mailings to provide certification notice, the court should require class counsel to show the absence of feasible alternatives.

ANN. MANUAL COMPLEX LIT. § 21.311 (4th ed. 2017). Such defendant-orientated concerns detract from a focus on protecting class members.

197. *Cf.* Briseno v. ConAgra Foods, Inc., 844 F.3d 1121, 1130 (9th Cir. 2017), *cert. denied sub nom.* ConAgra Brands, Inc. v. Briseno, 138 S. Ct. 313 (2017) ("As the Seventh Circuit put it, '[w]hen it comes to protecting the interests of absent class members, courts should not let the perfect become the enemy of the good.'" (quoting *Mullins v. Direct Digital, LLC*, 795 F.3d 654, 666 (7th Cir. 2015))), *cert. denied*, 136 S. Ct. 1161 (2016).

198. LaBauve v. Olin Corp., 231 F.R.D. 632 (S.D. Ala. 2005).

199. *Id.* at 641.

200. *Id.* at 684.

201. *Id.* at 662.

202. *Id.* at 684.

publication notice even though they were not fishing in the particular area of concern during the particular temporal interval of concern."[203]

As the implied ascertainability requirement spreads,[204] the judiciary is moving incrementally closer to requiring actual notice.[205] This move compromises constructive notice, including E-Notice options. Consider, for example, E-Notice in the Third Circuit.[206] As Figure H shows, E-Notice slowed shortly after the court adopted the ascertainability requirement in 2012.[207] The court doubled down on the requirement in 2013 and 2014.[208] Soon after, E-Notice use notably dipped. After 2015, when the court loosened the requirement slightly, E-Notice increased slightly before leveling off.[209]

203. *Id.*

204. *See* Hare, *supra* note 102 at 615 (discussing the "plethora of authority from various courts" on ascertainability).

205. *See* Luks, *supra* note 34 at 2371 (discussing the connection between notice and ascertainability).

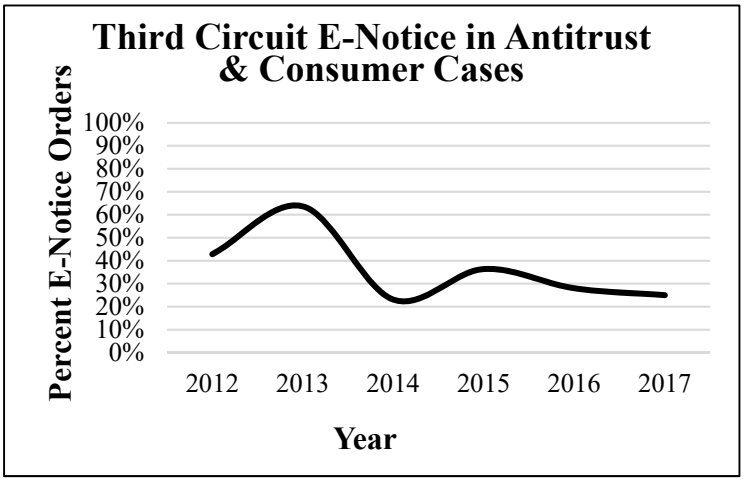
206. The Third Circuit was the first to definitively require ascertainability. *See* Marcus v. BMW of N. Am., LLC, 687 F.3d 583, 593 (3d Cir. 2012) (requiring that "the class must be currently and readily ascertainable based on objective criteria."); *accord* Hayes v. Wal-Mart Stores, Inc., 725 F.3d 349, 354–55 (3d Cir. 2013).

207. This drop is likely even greater than reflected here, as the analysis focuses on approved notice. As a result, it does not reflect cases where courts denied certification because of ascertainability concerns. *See, e.g.*, Karhu v. Vital Pharm., Inc., 621 F. App'x 945, 949–50 (11th Cir. 2015) (denying certification of purchasers of dietary supplements); Carrera v. Bayer Corp., 727 F.3d 300, 307–12 (3d Cir. 2013) (same); Xavier v. Philip Morris USA Inc., 787 F. Supp. 2d 1075, 1089–90 (N.D. Cal. 2011) (denying certification of a class of Marlboro smokers); Weiner v. Snapple Beverage Corp., No. 07 Civ. 8742 (DLC), 2010 WL 3119452, at *12–13 (S.D.N.Y. Aug. 5, 2010) (denying certification of Snapple beverages purchasers).

208. *See Carrera*, 727 F.3d at 308 (affirming the ascertainability requirement); *Marcus*, 687 F.3d at 609.

209. Byrd v. Aaron's Inc., 784 F.3d 154, 170 (3d Cir. 2015) (finding class members' ascertainability by reference to public records).

Figure H. Third Circuit E-Notice in Antitrust & Consumer Cases



Fear of imprecision compromises E-Notice even beyond ascertainability cases. In some cases, defendants successfully narrow class certification notice by arguing reputational harm will occur if non-class members learn about the alleged wrongdoing.[210] As courts entertain such arguments, E-Notice usage stalls. For example, in *Korrow v. Aaron's*,[211] the plaintiffs proposed a multifront notice plan using mail, publication, and a hypertargeted Google AdWords campaign.[212] The defendants challenged the Google ads, arguing instead for only direct mail or hard copy publication.[213] Defendants asserted such notice would be "prejudicial and harmful to [their] business reputation" but provided no supporting evidence.[214] The district court acknowledged, given the class demographic, "traditional forms of notice, such as direct mail or publications in regional newspapers, which are based on a class member's previous residence,

210. *See, e.g.*, Fraser v. Wal-Mart Stores, Inc., No. 2:13-CV-00520-TLN-DB, 2016 WL 6208367, at *8 (E.D. Cal. Oct. 24, 2016) (narrowing potential methods of notice in an FLSA case because additional notice "would encourage inquiries by non-class members, which could interfere with Defendant's reputation and business"); Murray v. E*Trade Fin. Corp., 240 F.R.D. 392, 401 (N.D. Ill. 2006) (staying notice to absent class members in Fair Credit Reporting Act case based on defendant E*Trade's unsubstantiated claim that notice would "needlessly injure E*Trade's reputation and good will" should defendant ultimately prevail on its motion for summary judgment).

211. Korrow v. Aaron's Inc., No. CV 10-6317, 2015 WL 7720491 (D.N.J. Nov. 30, 2015).

212. *Id.* at *9.

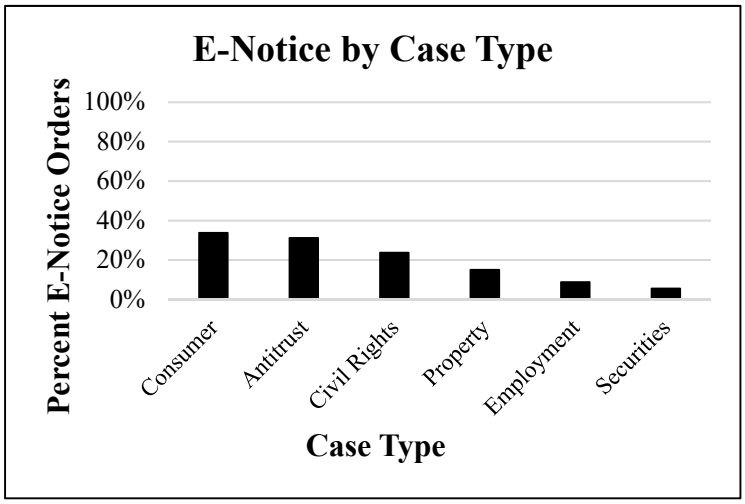
213. *Id.* at *10.

214. *Id.*

may be ineffective."[215] Nonetheless, the Court accepted the defendant's argument and ordered a narrower notice plan.[216]

This fear of imprecision undermines enforcement of cases most dependent on constructive notice—namely, antitrust and consumer class actions.[217] Currently, these claims are more likely to trigger E-Notice, as Figure I shows.[218]

Figure I. E-Notice by Case Type



Unlike say, an employment case, it is less likely a defendant in an antitrust or consumer case will have retained records necessary to enable mailed notice. Thus, as fear of imprecision grows, consumer and antitrust cases are most at risk.

More fundamentally, though, fear of imprecision drives courts to prioritize unsubstantiated claims of harm over constitutional protection. Worrying that non-class members may learn about pending litigation improperly shifts the focus away from putative class members, even though class notice "is intended fundamentally as

215. *Id.*

216. *Id.*

217. *Cf.* Walters, *supra* note 1, at 4 (discussing the benefits of electronic notice in cases with wide-spread audiences).

218. *See* BARTHOLOMEW CLASS NOTICE STUDY, *supra* note 111; *see also, e.g.*, *In re* Korean Ramen Antitrust Litig., No. C-13-04115-WHO, 2016 WL 8188743, at *1 (N.D. Cal. Aug. 22, 2016) (approving E-Notice in an indirect purchaser antitrust case); Kelly v. Phiten USA, Inc., 277 F.R.D. 564, 569 (S.D. Iowa 2011) (using E-Notice in a consumer class action).

protection of the class."[219] This shift is particularly questionable in the absence of proof of harm to the defendant[220] and the strong governmental interest in providing such notice.

Class notice is reasonably related to a government interest; namely, compliance with putative class members' constitutional rights. Thus, the governmental interest in compelling such speech is substantial.[221] Once such an interest exists, the defendant's First Amendment protection is minimal.[222] Generalized assertions of harm are insufficient.[223] Yet, some courts insist on such tailoring, even without a defendant raising reputational concerns. In *Jermyn v. Best Buy*,[224] the Southern District Court of New York certified a consumer class action alleging Best Buy failed to honor its price match policy.[225]

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219. Advisory Committee Notes Jan. 17, 1963 (emphasis added); *see also* Whitlock v. FSL Mgmt., LLC, No. 3:10CV-00562-JHM, 2015 WL 13322438, at *3 (W.D. Ky. July 13, 2015) ("The purpose of Fed. R. Civ. P. 23(e) is to protect the absent class members, not the defendants in a class action 'who are in a position to protect their own interests during negotiations.'").

220. Nor are defendants likely to have any actual evidence given consumer behavior. Consumers have a notably short memory when it comes to prior alleged or established wrongdoing, as is evident from Toyota and Firestone's continued viability after proven wrongdoing. This continued success suggests that it is not class notice that impacts a defendant's long-term reputation, but how the defendant responds to such allegations. *See, e.g.*, Kim Bhasin, *9 PR Fiascos That Were Handled Brilliantly by Management*, BUS. INSIDER (May 26, 2011), http://www.businessinsider.com/pr-disasters-crisis-management-2011-5 [https://perma.cc/A5H6-3EK2] (detailing how corporate responses to crises impacted potential public perception of the company's brand).

221. In re Domestic Air Transp. Antitrust Litig., 141 F.R.D. 534, 552 (N.D. Ga. 1992) (finding "a substantial interest in assuring that the goals and requirements of the Federal Rules of Civil Procedure concerning class actions be implemented to protect the due process rights of all parties").

222. Zauderer v. Office of Disciplinary Counsel, 471 U.S. 626, 651 (1985).

223. *Cf.* Montanez, et al. v. Gerber Childrenswear, LLC, et al., No. CV097-420DSFDTBX, 2012 WL 12932032, at *2 (C.D. Cal. Feb. 2, 2012) (noting "[d]amage to reputation from a class notice is highly speculative given the prevalence of class action lawsuits, meritorious and not, against virtually any and all kinds of companies"). This is particularly true for class notice given its factual nature. Such notice does no more than alert putative class members of their legal rights. It includes specific caveats clarifying that defendants contest any wrongdoing, thus further minimizing any potential reputational harm. As the Supreme Court has explained, "[b]ecause the extension of First Amendment protection to commercial speech is justified principally by the value to consumers of the information such speech provides, . . . appellant's constitutionally protected interest in *not* providing any particular factual information in his advertising is minimal." *Zauderer*, 471 U.S. at 651; *cf.* Nat'l Elec. Mfrs. Ass'n v. Sorrell, 272 F.3d 104, 114 (2d Cir. 2001) ("[M]andated disclosure of accurate, factual, commercial information does not offend the core First Amendment values of promoting efficient exchange of information or protecting individual liberty interests.").

224. Jermyn v. Best Buy Stores, L.P., No. 08 Civ. 002149(CM), 2010 WL 5187746 (S.D.N.Y. Dec. 6, 2010).

225. *Id.* at *1.

Mailed individual notice was not possible because the defendant lacked class members' addresses.[226] In the alternative, the plaintiffs proposed using email and text for individual notice, as well as Twitter, the defendant's website, and newspaper ads for constructive notice.[227] While the proposed individual notice would have reached class members, it also would have extended to other Best Buy customers not eligible for compensation. The court assumed "individual notice . . . creates a greater expectation than notice by publication," and, therefore, "the plaintiffs should make every effort to provide such notice only to class members."[228] Based on this assumption, the court rejected any individualized E-Notice at all.[229] Instead, it ordered solely newspaper publication and notice posted on Defendant's website.[230]

Ironically, by rejecting individualized E-Notice options, the *Best Buy* court sacrificed the narrowly targeted notice it desired. Individual E-Notice through email would have afforded an opportunity to reach purchasers during the class period. Even constructive E-Notice methods could have provided targeted notice. For example, Google banner ads can hypertarget[231] a given demographic by using metadata to narrow geographic scope and microsegment users.[232] Google also has access to between 70 and 80 percent of credit card purchase data, which in a consumer class can help microsegment class members.[233] Similarly, E-Notice through Facebook can narrowly target relevant class members. Ads on this platform can target a relevant segment

226. *Id.* at *4.

227. *Id.* at *2.

228. *Id.* at *6 (internal quotation marks omitted) (quoting Pierce v. Novastar Mortg., Inc., 2007 WL 505670, at *3 (W.D. Wash. Feb. 12, 2007)).

229. *Id.* at *9.

230. *Id.*

231. CLARA SHIH, THE FACEBOOK ERA: TAPPING ONLINE SOCIAL NETWORKS TO MARKET, SELL, AND INNOVATE 40 (2d ed. 2011) (defining hypertargeting).

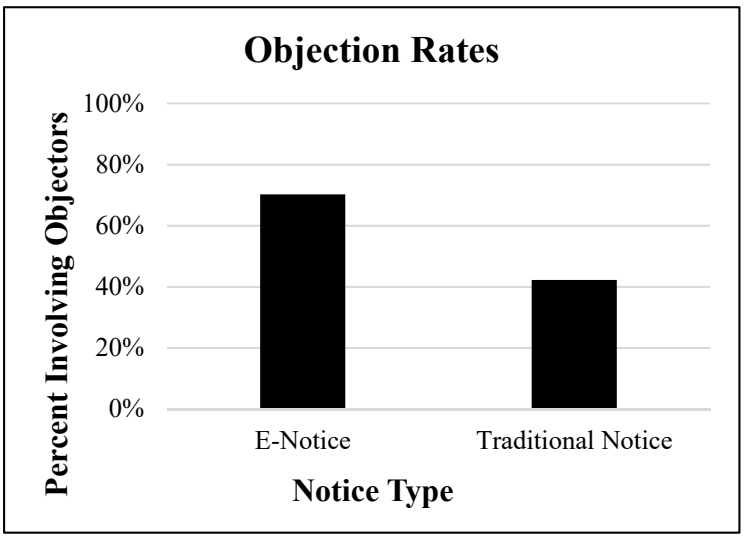
232. *See id.* at 114 (explaining how hypertargeting uses information like "location, gender, age, education, workplace, relationship status, relationship interests, and interest keywords" to "test and optimize" the audience reach).

233. *See* Chris Smith, *Google Search Just Got a Lot More Personal*, BGR (May 30, 2017), https://bgr.com/2017/05/30/google-search-personal-results-tab [https://perma.cc/XBW9-UNRP]. This is in addition to the extensive non-credit-card data Google collects. *See, e.g.*, GREG CONTI, GOOGLING SECURITY: HOW MUCH DOES GOOGLE KNOW ABOUT YOU? 32 (2008) (listing the data vectors Google collects); Todd Haselton, *How to Find Out What Google Knows About You and Limit the Data it Collects*, CNBC (Nov. 20, 2017) https://www.cnbc.com/2017/11/20/what-does-google-know-about-me.html [https://perma.cc/LE9H-LSK9] (listing information Google collects, such as where users have traveled, their ages, and even when they have turned off their bedroom lights).

from the "more than 500 million people spending an astonishing 20 billion minutes per day logged in."[234] It could identify users that perhaps, "checked into" a Best Buy or "liked" the company during the class period.[235] By comparing existing metadata to the class definition, these ads can reach a more targeted demographic than publication notice—the primary fallback method for constructive notice.

Judicial uncertainty regarding the appropriate degree of precision needed for class notice encourages objectors. Objectors are almost twice as common in cases involving E-Notice,[236] as Figure J illustrates.

Figure J. Objection Rates



234. SHIH, *supra* note 231, at 4. This figure may even be higher, given the growth of older Facebook users. *See* Monica Anderson & Andrew Perrin, *Tech Adoption Climbs Among Older Adults*, PEW RES. INST. (May 17, 2017), http://www.pewinternet.org/2017/05/17/tech-adoption-climbs-among-older-adults [https://perma.cc/S4TS-GNPJ] (detailing the growth of technology use by older Americans); Shannon Greenwood et al., *Social Media Update 2016*, PEW RES. INST. (Nov. 11, 2016), http://www.pewinternet.org/2016/11/11/social-media-update-2016/ [https://perma.cc/SE2S-2WBD] (discussing "the growing number of older adults who are joining the site").

235. *See, e.g.*, Louise Matsakis, *Facebook's Targeted Ads Are More Complex Than It Lets On*, WIRED (Apr. 25, 2018), https://www.wired.com/story/facebooks-targeted-ads-are-more-complex-than-it-lets-on [https://perma.cc/RJ5B-K54R] (referencing the ability of a local bike shop to target female bicyclists in the area).

236. *See* BARTHOLOMEW, CLASS NOTICE STUDY, *supra* note 111.

Fruitful or otherwise, such objections risk chilling innovative notice methods. For example, in *Cohorst v. BRE Properties, Inc.*,[237] the Southern District of California approved settlement notice after the parties reached a class settlement for claims that defendants improperly recorded telephone communications.[238] Because the parties lacked mailing addresses for the "highly transitory" class members,[239] they proposed email and newspaper publication notice.[240] Objectors challenged the settlement for failing to provide notice by mail.[241] Ultimately, the court agreed to supplemental mailing for the small portion of the class which did not receive the email, but only after the judiciary and parties expended resources responding to the tailoring challenge.[242] Rather than risk such challenges, parties may opt to pursue traditional methods of notice—even when those means are potentially less effective.[243]

In sum, judicial fear of imprecision helps explain the limited growth of E-Notice. This fear contributes to courts restrictively defining available notice methods. The additional fears of change and technology only exacerbate this concern. The next question, then, is how to overcome these worries.

III. OVERCOMING FEAR OF E-NOTICE

This Part proposes adjustments to the notice approval process to maximize judicial consideration of E-Notice by responding to judicial concerns. To be clear, the argument here is not wholesale replacement of mail and newspaper. For some demographics, email is not yet a true substitute for mail; nor would a Facebook ad be effective.[244] But rigid

237. Cohorst v. BRE Props., Inc., No. 10CV2666 JM BGS, 2012 WL 153754 (S.D. Cal. Jan. 18, 2012).

238. *Id.* at *2.

239. *Id.*

240. *Id.*

241. *Id.*

242. *Id.* at *3.

243. *See, e.g.*, O'Keefe v. Mercedes-Benz USA, LLC, 214 F.R.D. 266, 270–71 (E.D. Pa. 2003) (explaining how meritless objections "only succeeded in lengthening [the court's] memorandum and unnecessarily requiring class counsel and the Defendant to expend additional resources"); Bruce D. Greenberg, *Keeping the Flies Out of the Ointment: Restricting Objectors to Class Action Settlements*, 84 ST. JOHN'S L. REV. 949, 967 (2010) ("Even a baseless objection can delay the implementation of a proposed settlement."); *cf.* Edward Brunet, *Class Action Objectors: Extortionist Free Riders or Fairness Guarantors*, 2003 U. CHI. LEGAL F. 403, 422 (2003) (discussing "meritless appeals by class action objectors" and judicial responses to them).

244. *See* THE CHANGING POSTAL AND DELIVERY SECTOR: TOWARDS A RENAISSANCE 5–8

adherence to the status quo sometimes causes courts to forego the "best notice practicable."[245] Even a modest switch—say, from hard-copy newspaper ads to digital ads—could improve some notice plans.

While the proposed amendment to the Rule 23 comments, discussed below, is a solid starting point,[246] it will not cure judicial hesitation on its own. Rather, courts need to return to basics, actively engage in class notice determinations, and communicate notice plan decisionmaking. Combined, these practical solutions encourage courts to embrace the modern era and overcome the fear that cripples E-Notice's full potential.

A. Acknowledging E-Notice's Legitimacy

First, in evaluating notice plans, courts should follow the spirit and rules of *Mullane*,[247] not just the fact application. Law review articles frequently proffer radical revisions to legislation or new theories to reorient the law. E-Notice requires no such extreme measures. The working parts are all in place. The Supreme Court has already articulated a malleable standard.[248] Congress has already codified a case-by-case standard.[249] What remains is for trial courts to fall in line.

The proposed amendment to Rule 23 would nudge courts towards this modernized understanding of class notice. It acknowledges E-Notice methods, such as email.[250] Yet, nothing in the proposed amendment would reorient reluctant courts' perception of apt notice.

(Michael Crew, Pier Luigi Parcu & Timothy Brennan eds., 2017) (discussing how email and mail are not yet commodities in the economic sense). Current data shows people are still more likely to open even junk mail than email. *10 Mind-Blowing Baby Boomer Facts*, DMN3, https://www.dmn3.com/dmn3-blog/10-mind-blowing-direct-mail-statistics-and-what-they-mean [https://perma.cc/FVV3-RXBA]. However, this gap is beginning to close, particularly for millennials. Matt Mansfield, *DIRECT MAIL MARKETING STATISTICS for Small Businesses*, SMALL BUS. TRENDS (Jan. 10, 2017), https://smallbiztrends.com/2017/01/direct-mail-marketing-statistics.html [https://perma.cc/6JDS-83ZV] ("When asked, 'Which is more effective at getting you to take action?' 30 percent of millennials said direct mail, 24 percent said email.").

245. *See, e.g.*, Mullane v. Cent. Hanover Bank & Tr. Co., 339 U.S. 306, 314 (1950); *cf.* Eisen v. Carlisle & Jacquelin, 417 U.S. 156, 174–75 (1974) (citing *Mullane* for holding that "where the names and addresses of the beneficiaries were known," a constitutionally valid means of notice requires at least notice by mail (citation omitted)).

246. Proposed Amendment to FED. R. CIV. P. 23(3)(2) (adding language that notice may be given by "U.S. mail or electronic or other appropriate means").

247. *Mullane*, 339 U.S. at 314.

248. *Id.*

249. FED. R. CIV. P. 23.

250. Advisory Committee Memo, *supra* note 23.

The proposal does not go far enough to legitimize E-Notice options as equal or potentially superior methods of notice.

Even without further changes to Rule 23, though, the judiciary can embrace modern notice methods through a closer reading of Supreme Court authority. Notice satisfies procedural due process when it is "reasonably calculated, under all the circumstances, to apprise interested parties of the pendency of the action and afford them an opportunity to present their objections."[251] When individualized notice is possible, it is the starting point for evaluating reasonableness.[252] However, mail is but an exemplar—not a necessity. Individualized notice options should include email, texts, or private messages—not just mail.[253] Similarly, constructive notice options should include websites, banner ads, or social media posts—not just hard copy publication.[254] The use of mail and newspaper in *Mullane* does not bind future class notice plans.[255] After all, such rigid categories conflict with the Supreme Court's repeated statements about the flexibility of due process standards.[256]

Moreover, a wider range of methods advances the foundational goal of *Mullane*—providing notice.[257] E-Notice generates a more

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251. *Mullane*, 339 U.S. at 314.

252. *Id.* at 318 ("Where the names and post-office addresses of those affected by a proceeding are at hand, the reasons disappear for resort to means less likely than the mails to apprise them of its pendency.").

253. *See, e.g.*, Wolfe v. Anchor Drilling Fluids USA Inc., No. 4:15-CV-1344, 2015 WL 12778393, at *2 (S.D. Tex. Dec. 7, 2015) (email); Boyd v. Coventry Health Care Inc., 299 F.R.D. 451, 457 (D. Md. 2014) (email); *In re* Penthouse Exec. Club Comp. Litig., No. 10 CIV. 1145 KMW, 2014 WL 185628, at *7 (S.D.N.Y. Jan. 14, 2014) (text); *In re* AT & T Mobility Wireless Data Servs. Sales Tax Litig., 789 F. Supp. 2d 935, 968 (N.D. Ill. 2011) (text).

254. *See, e.g.*, *In re* Auto. Parts Antitrust Litig., No. 12-MD-02311, 2016 WL 9280050, at *3 (E.D. Mich. Nov. 28, 2016) (social media and Twitter); Spillman v. RPM Pizza, LLC, No. CIV.A. 10-349-BAJ, 2013 WL 2286076, at *2 (M.D. La. May 23, 2013) (banner ads).

255. *See, e.g.*, 18 MOORE'S FEDERAL PRACTICE § 134.01[5] (3d ed. 2005) (explaining that stare decisis is limited to pure questions of law); Lawrence C. Marshall, *Contempt of Congress: A Reply to the Critics of an Absolute Rule of Statutory Stare Decisis*, 88 MICH. L. REV. 2467, 2468–69 (1990) ("There is a critical difference between the precedential import of a *legal standard* . . . and the *specific application* of the standard to the set of facts before the court. An absolute rule of statutory stare decisis does not claim to govern applications of law to changing factual patterns . . . .").

256. Zinermon v. Burch, 494 U.S. 113, 127 (1990) ("Due process, as this Court often has said, is a flexible concept that varies with the particular situation."); Mathews v. Eldridge, 424 U.S. 319, 334 (1976); Morrissey v. Brewer, 408 U.S. 471, 481 (1972) ("[D]ue process is flexible and calls for such procedural protections as the particular situation demands."); Cafeteria & Rest. Workers Union v. McElroy, 367 U.S. 886, 895 (1961) ("[D]ue process . . . is not a technical conception with a fixed content unrelated to time, place and circumstances." (citation omitted)).

257. *See* Mullane v. Cent. Hanover Bank & Tr. Co., 339 U.S. 306, 314 (1950) ("An elementary

robust understanding of the plan's reach than traditional methods, by generating receipt and viewing information unavailable through traditional methods. The number of letters mailed is an unnecessarily imprecise measure. It does not reflect whether the letter was ever opened or simply tossed into the circular file.[258] Over 50 percent of unsolicited mail ends up thrown out without ever being opened.[259] Similarly, newspaper circulation figures are only a circumstantial indicator of reach.[260]

E-Notice, in contrast, can provide data on actual views—be it the number of opened emails, click-throughs, or conversion rates from online advertisements.[261] Banner ads and website links help claims administrators track class responses[262] and generate insights as to when modifying class notice would expand reach. Claims administrators—and, ultimately, the courts—can actively manage such plans, monitor

and fundamental requirement of due process . . . is notice reasonably calculated, under all the circumstances, to apprise interested parties of the pendency of the action and afford them an opportunity to present their objections.").

258. *See, e.g.*, Fager v. CenturyLink Commc'ns, LLC, 854 F.3d 1167, 1173 (10th Cir. 2016) (noting an objector's argument that class members were "likely to mistake the notice as junk mail and ignore it").

259. Lina Younes, *Put an End to Junk Mail*, THE EPA BLOG, (Feb. 6, 2009), https://blog.epa.gov/blog/2009/02/put-an-end-to-junk-mail [https://perma.cc/H683-AKLZ]. Perhaps Andy Rooney best explains this approach to mail: "[I]f the envelope says IMPORTANT, you know it's safe to throw away." ANDY ROONEY, YEARS OF MINUTES: THE BEST OF ROONEY FROM 60 MINUTES (2007).

260. *See* PEW RES. INST., NEWSPAPERS TRY TO COUNT READERS DIFFERENTLY (Nov. 8, 2007), http://www.journalism.org/numbers/newspapers-try-to-count-readers-differently [https://perma.cc/L7NS-J2ZZ] (discussing the challenges of deriving actual readership from circulation figures).

261. *See, e.g.*, *In re* Optical Disk Drive Prod. Antitrust Litig., No. 3:10-MD-2143 RS, 2016 WL 7364803, at *3 (N.D. Cal. Dec. 19, 2016) ("[T]he indirect notice efforts generated over 207,530,045 impressions, directing over 272,184 clicks through to the case website."); Dewey v. Volkswagen of Am., 909 F. Supp. 2d 373, 380 (D.N.J. 2012) (using click-through rates to respond to an objector challenge to notice), *aff'd sub nom.* Dewey v. Volkswagen Aktiengesellschaft, 558 F. App'x 191 (3d Cir. 2014); *In re* Nat'l Arbitration Forum Trade Practices Litig., No. CV 10-2122 (PAM/JSM), 2011 WL 13135575, at *2 (D. Minn. Aug. 8, 2011) ("Plaintiffs note that the banner ads regarding the settlement were viewed 190 million times, and that the website set up for the administration of the settlement received more than 100,000 'clicks.'").

262. *See, e.g.*, Edwards v. Nat'l Milk Producers Fed'n, No. 11-CV-04766-JSW, 2017 WL 3623734, at *2 (N.D. Cal. June 26, 2017) (breaking down E-Notice methods by numbers of impressions and corresponding figures of click-throughs to the settlement website).

class members' behavior, and revise strategies as needed to enhance notice.[263] Such maneuverability better "apprise[] interested parties."[264]

In addition to satisfying *Mullane*, E-Notice also advances the Supreme Court's articulated goals for class actions. At its core, Rule 23 is a procedural device intended to empower collective action through private enforcement.[265] Class actions help balance individual and corporate power, ensuring potential recovery for harms that in the aggregate may be significant but individually are too small to justify suit.[266] Antiquated definitions of procedural due process invite underdeterrence.[267] In cases involving thousands of putative class

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263. As one claims administrator explains:

> A real benefit of e-noticing is the flexibility one has in managing the class. In addition to providing a link to a dedicated settlement Web site where class members can receive additional information or even file claims, personal identifiers the Web site will recognize once the class member clicks through can be added in order to further streamline the claims process. Not only will an administrator know how many e-mail notice recipients visited the Web site, but identifiers enable submitted claims to be matched with any personal information on record for the class members. This automation can save time and money in the review process.

Cameron R. Azari, *Clearing the Five Hurdles of Email Delivery of Class-Action Legal Notice*s, 15 ANDREWS CLASS ACTION LITIG. REP. 2 (2008); *see also, e.g.*, Pollard v. Remington Arms Co., LLC, 320 F.R.D. 198, 209 (W.D. Mo. 2017) (using E-Notice options to supplement notice and drive up response rates); Kaufman v. Am. Express Travel Related Servs. Co., No. 07-CV-1707, 2016 WL 806546, at *5 (N.D. Ill. Mar. 2, 2016) (same) (subsequent history omitted).

264. Mullane v. Cent. Hanover Bank & Tr. Co., 339 U.S. 306, 314 (1950).

265. STEPHEN C. YEAZELL, FROM MEDIEVAL GROUP LITIGATION TO THE MODERN CLASS ACTION 232 (1987); *see also* Lopez v. Youngblood, No. CV-F-07-0474, 2011 WL 10483569, at *14 (E.D. Cal. Sept. 2, 2011) ("[O]ne important purpose of the class action device is that defendants should not benefit from their wrongdoing, and should be deterred from doing so by being vulnerable to class actions to remedy their wrongful conduct."); Abels v. JBC Legal Grp., P.C., 227 F.R.D. 541, 546 (N.D. Cal. 2005); Christine P. Bartholomew, *Saving Charitable Settlements*, 83 FORDHAM L. REV. 3241, 3265 (2015) ("Exposure to potential liability incentivizes actors to avoid wrongdoing and affects widespread change.").

266. *See, e.g.*, Castano v. Am. Tobacco Co., 84 F.3d 734, 748 (5th Cir. 1996) (stating class action devices are "most compelling" with the "existence of a negative value suit") (internal citation omitted); Eisen v. Carlisle & Jacquelin, 391 F.2d 555, 560 (2d Cir. 1968) ("[T]he class suit both eliminates the possibility of repetitious litigation and provides small claimants with a method of obtaining redress for claims which would otherwise be too small to warrant individual litigation."); Escott v. Barchris Constr. Corp., 340 F.2d 731, 733 (2d Cir. 1965) (describing a class action as "a device for vindicating claims which, taken individually, are too small to justify legal action but which are of significant size if taken as a group."); *see also* Brian T. Fitzpatrick, *Do Class Action Lawyers Make Too Little?*, 158 U. PA. L. REV. 2043, 2083 (2010); Note, *Locating Investment Asymmetries and Optimal Deterrence in the Mass Tort Class Action*, 117 HARV. L. REV. 2665, 2671 (2004) ("[T]he need to aggregate small recoveries to make unmarketable claims into marketable class actions continues to sit close to the heart of Rule 23(b)(3).").

267. Christine P. Bartholomew, *Redefining Prey and Predator in Class Actions*, 80 BROOK. L. REV. 743, 806 (2015) (discussing the relationship between barriers to certification and underdeterrence); Robert H. Klonoff, *The Decline of Class Actions*, 90 WASH. L. REV. 729, 735 (2013) (same); Byron G. Stier, *Crimtorts, Class Actions, and the Emerging Mass Tort Method*, 17

members, proof that mailed notice reached every class member would be impracticable at best and impossible at worst.[268] Rather than undertake the costly risk of pursuing a non-certifiable case, plaintiffs' attorneys may decline to file potential class claims.[269]

A modernized interpretation ensures notice requirements do not impede certification.[270] Allowing E-Notice as an adaptable alternative to traditional methods helps ensure corporate wrongdoing is redressed. In this way, E-Notice helps to protect the very cases for which class actions are intended[271]: those small-stakes claims where individuals have little incentive to retain records of purchase.[272] Moreover, E-Notice partly counteracts incentives for corporations to insulate themselves from liability by foregoing detailed customer records.[273]

WIDENER L.J. 893, 897 (2008) (same).

268. *See, e.g.*, Brown v. Rita's Water Ice Franchise Co. LLC, 242 F. Supp. 356, 359 n.22 (E.D. Pa. 2017) (noting "[t]he fund administrator was unable to contact 3,835 class members" out of the 138,000 class members).

269. *See, e.g.*, Bartholomew, *Saving Charitable Settlements*, *supra* note 265, at 3267 n.184 ("[I]f class counsel cannot expect potential recovery for the vast time and monetary outlay associated with pursuing a class claim, attorneys simply will not take the case."); *see also* Sofia Adrogué & Hon. Caroline Baker, *Litigation in the 21st Century: The Jury Trial, the Training & the Experts*, 56 ADVOCATE (TEX.) 8, 12 (2011) (noting that "the Class Action Fairness Act of 2005 . . . makes it too difficult and expensive for a consumer to bring a class action lawsuit," which "inhibits attorneys' ability to advocate for clients in need for legal assistance"); Christine P. Bartholomew, *Death by Daubert: The Continued Attack on Private Antitru*st, 35 CARDOZO L. REV. 2147, 2149–50 (2014) (noting that "economist testimony plays a critical role in establishing the requirements for class certification" and that pre-class certification review of expert testimony could make plaintiffs "powerless to satisfy Rule 23"); Nantiya Ruan & Nancy Reichman, *Hours Equity Is the New Pay Equity*, 59 VILL. L. REV. 35, 75 (2014) (discussing how greater barriers for class actions means "fewer private plaintiffs' attorneys are willing to risk the high costs of these cases").

270. *See, e.g.*, Karhu v. Vital Pharm., Inc., 621 F. App'x 945, 947 (11th Cir. 2015) (denying class certification because of ascertainability); LaBauve v. Olin Corp., 231 F.R.D. 632, 662 (S.D. Ala. 2005) (same); *accord* Crosby v. Social Sec. Admin., 796 F.2d 576, 580 (1st Cir. 1986) (same); Noble v. 93 Univ. Place Corp., 224 F.R.D. 330, 338 (S.D.N.Y. 2004) (same).

271. *See* Mullins v. Direct Dig., LLC, 795 F.3d 654, 658 (7th Cir. 2015) ("[Ascertainability] gives one factor in the balance absolute priority, with the effect of barring class actions where class treatment is often most needed: in cases involving relatively low-cost goods or services, where consumers are unlikely to have documentary proof of purchase.").

272. For example, the Central District of California denied certification to a class of city parking lot users for violation of the Fair and Accurate Credit Transactions Act. The Court found the putative class was not sufficiently ascertainable because "[e]ven those few who retained their receipts dating back five years" would have to testify, as their receipts did not demonstrate consumer status. Rowden v. Pac. Parking Sys., Inc., 282 F.R.D. 581, 586 (C.D. Cal. 2012), *aff'd in part sub nom.* Martin v. Pac. Parking Sys. Inc., 583 F. App'x 803 (9th Cir. 2014).

273. *See, e.g.*, *Mullins*, 795 F.3d at 668 ("[R]efusing to certify on th[e] basis [of ascertainability] effectively immunizes defendants from liability because they chose not to maintain records of the relevant transactions."); Birchmeier v. Caribbean Cruise Line, Inc., 302 F.R.D. 240, 250 (N.D. Ill. 2014) ("Doing this—or declining to certify a class altogether, as defendants propose—would

Finally, to fulfill the spirit of *Mullan*e, courts should focus squarely on the requirements of Rule 23—without adding new implied requirements. Ascertainability and tailored notice requirements depart from the purpose of Rule 23 and conflict with *Mullane* by encouraging courts to approve unnecessarily outdated notice plans. Given judicial acceptance of these additional hurdles to Rule 23 certification and settlement approval, this risk is no longer a mere specter.[274] These ungrounded requirements nudge courts further towards mandating actual notice[275]—despite the Supreme Court's express rejection of such a requirement.[276] However, this Article's proposed change in course would allow lower courts to squarely focus on identifying "the best notice practicable"[277] and avoid interpretative distractors.

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create an incentive for a person to violate the TCPA on a mass scale and keep no records of its activity, knowing that it could avoid legal responsibility for the full scope of its illegal conduct.").

274. For an excellent summary of the growth of the ascertainability requirement, see Robert G. Bone, *Justifying Class Action Limits: Parsing the Debates over Ascertainability and Cy Pres*, 65 U. KAN. L. REV. 913, 923–28 (2017).

275. *See, e.g.*, Byrd v. Aaron's Inc., 784 F.3d 154, 165 (3d Cir. 2015) ("We are 'stringent in enforcing th[at] individual notice requirement.' The separate ascertainability requirement ensures that class members can be identified after certification . . . .") (citations omitted); Marcus v. BMW of N. Am., LLC, 687 F.3d 583, 593 (3d Cir. 2012) (equating ascertainability with the "best notice practicable" requirement); *see also* Sarah R. Cansler, *An "Insurmountable Hurdle" to Class Action Certification? The Heightened Ascertainability Requirement's Effect on Small Consumer Claims*, 94 N.C. L. REV. 1382, 1395 (2016) ("If heightened ascertainability requires actual notice, then *Mullins* (and other proposed classes where potential members may lack records to prove their membership) would fail the heightened ascertainability requirement, and the court would deny certification.").

276. Mullane v. Cent. Hanover Bank & Tr. Co., 339 U.S. 306, 319 (1950) ("[N]otice reasonably certain to reach most of those interested in objecting is likely to safeguard the interests of all, since any objections sustained would inure to the benefit of all. We think that under such circumstances reasonable risks that notice might not actually reach every beneficiary are justifiable."); Fidel v. Farley, 534 F.3d 508, 514 (6th Cir. 2008) ("Due process does not, however, require *actual* notice to each party intended to be bound by the adjudication of a representative action."); *In re* Integra Realty Res., Inc., 262 F.3d 1089, 1110–11 (10th Cir. 2001) (rejecting the argument that *Mullane* requires actual notice); Silber v. Mabon, 18 F.3d 1449, 1453–54 (9th Cir. 1994) (same); *In re* Agent Orange Prod. Liab. Litig. MDL No. 381, 818 F.2d 145, 168–69 (2d Cir. 1987) (same).

277. *Mullane*, 339 U.S. at 317.

B. Using Analysis to Overcome Fear

A second step towards E-Notice is more judicial oversight.[278] Building on a return to the principles of *Mullane*, courts must rigorously engage in evaluating and monitoring notice plans from the moment they are first submitted. Courts rarely engage in detailed analysis of the benefits and detriments of various modes of notice.[279] Rather, in well over 80 percent of cases, courts bless the parties' proposals.[280] In doing so, courts overlook the pressure parties face to rely on traditional notice.[281] Innovation risks a court reconsidering certification or denying settlement approval.[282] Innovation by parties also entails greater time expended by counsel and higher fees paid by clients, still with the possibility a plan may not be adopted.[283] Further, from the perspective of the parties, innovation both encourages a greater number of objectors and potentially diminishes attorneys' credibility with their clients in the event of an adverse decision.[284]

Hence, it is incumbent on the judiciary to make the first move toward expanding notice options.[285] Courts are already duty-bound to protect the interests of absent class members—including members'

278. This need for more active case management is not limited to class notice. *See* REPORT TO THE CHIEF JUSTICE OF THE UNITED STATES ON THE 2010 CONFERENCE ON CIVIL LITIGATION, SUBMITTED BY JUDICIAL CONFERENCE ADVISORY COMM. ON CIVIL RULES & COMM. ON RULES OF PRACTICE 10 (2010), http://www.uscourts.gov/sites/default/files/report_to_the_chief_justice.pdf. [https://perma.cc/L4BN-PWU3] ("Pleas for universalized and invigorated case management achieved strong consensus at the Conference. . . . Conference participants underscored that judicial case-management must be ongoing.").

279. *See, e.g.*, *In re* Optical Disk Drive Prod. Antitrust Litig., No. 3:10-MD-2143 RS, 2016 WL 7364803, at *3 (N.D. Cal. Dec. 19, 2016) (engaging in detailed analysis of various methods of notice before approving notice plan).

280. *See* BARTHOLOMEW CLASS NOTICE STUDY, *supra* note 111 (tracking proposed versus approved notice plans).

281. *See supra* Part II.A (discussing why parties would be hesitant to propose novel methods).

282. *Cf. The Influence of Mass Toxic Tort Litigation on Class Action Rules Reform*, 22 VA. ENVTL. L.J. 249, 284–85 (2004) (discussing how innovation can risk certification denial).

283. *See* Giovanni B. Ramello, *Aggregate Litigation and Regulatory Innovation: Another View of Judicial Efficiency*, 32 INT'L REV. L. & ECON. 63, 69 (2012) (comparing the lead actor in aggregate litigation, commonly the attorney or law firm, to "an entrepreneur who bears non-insurable risks and introduces innovations in exchange for opportunities to profit").

284. *See* BARTHOLOMEW, CLASS NOTICE STUDY, *supra* note 111; *see also* Figure J.

285. Two slight modifications to the proposed Rule 23 Subcommittee language could codify this approach. Currently, the proposal would amend only Rule 23(b)(3) to permit notice by "U.S. mail or electronic or other appropriate means." Advisory Committee Memo, *supra* note 23. Instead, the amendment should be rewritten to apply to all Rule 23 notice. Second, "appropriate" should be replaced with "justified," notice by "U.S. mail or electronic or other appropriate means." Such modification is not essential, though it would be a step in the right direction.

constitutional right to notice.[286] To fulfill this duty, judges need to weigh alternative notice methods before approving a notice plan.[287] This weighing of alternatives should start with the factors from *Mullane*: the cost of such notice, whether the individuals are unknown or missing, and the reach of the proposed form of notice.[288] Engagement with these factors will then incentivize parties to consider all possible notice options before presenting them to a watchful court.

If, however, the *Mullane* factors are inconclusive, courts already have access to a proven framework for expanding notice analysis. The Third Circuit has proposed drawing an analogy between E-Discovery and notice to evaluate the reasonable degree of effort a defendant must undertake to identify class members from its records.[289] The analogy need not be so narrow, though. Several factors used for evaluating E-Discovery plans apply equally to notice, such as whether "the burden or expense of the proposed discovery outweighs its likely benefit," as well as "the amount in controversy, the parties' resources, the importance of the issues at stake in the action, and the importance of the discovery in resolving the issues."[290]

Judicial review of notice should then endure beyond initial approval of a proposed plan. Courts should continue monitoring the plan's efficacy throughout execution. At each inquiry, judges would ideally consider the full tool belt of possible notice methods, as more options would allow for more finely calibrated plans.

Assuming judges actively analyze and supervise class notice plans, E-Notice would likely continue to expand. E-Notice generates more

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286. *See, e.g.*, *In re* Gen. Motors Corp. Engine Interchange Litig., 594 F.2d 1106, 1124 (7th Cir. 1979) (discussing the court's "'fiduciary' duty to the non-representative class members"); *In re* Glob. Crossing Sec. & ERISA Litig., 225 F.R.D. 436, 455 (S.D.N.Y. 2004) (same); Christopher R. Leslie, *The Significance of Silence: Collective Action Problems and Class Action Settlements*, 59 FLA. L. REV. 71, 130 (2007) ("The court's fundamental duty is to protect the interests of class members, even if they do not object.").

287. *See* Todd B. Hilsee, Shannon R. Wheatman, Ph.D. & Gina M. Intrepido, *Do You Really Want Me to Know My Rights? The Ethics Behind Due Process in Class Action Notice Is More Than Just Plain Language: A Desire to Actually Inform*, 18 GEO. J. LEGAL ETHICS 1359, 1372 (2005) ("[C]ourts should regularly be presented with data and calculations—at the outset, conservatively performed by qualified experts and professionals—which would verify the adequacy of a proposed outreach program for a notice campaign. In doing so, notice programs would improve dramatically.").

288. *Id.* at 316–17.

289. *See* Larson v. AT&T Mobility LLC, 687 F.3d 109, 131 (3d Cir. 2012) (recognizing that "e-discovery practice [does not] provide[] a perfect parallel. . . . Nevertheless, these e-discovery principles may provide a helpful template.").

290. FED R. CIV. P. 26 (listing factors).

usable information on a plan's reach than outdated methods.[291] This data can inform courts how best to supplement a notice plan, if needed.[292]

Engagement has a secondary benefit. It responds to a common attack levied against class actions—namely, that they unduly compromise absent class members' autonomy in the litigation process.[293] The response rates in opt-in class actions—cases where class members must submit a claim to recover monetary damages—are often less than 10 percent,[294] particularly for small-stake claims.

Critics use these low rates as tenuous evidence that individuals would prefer not having such cases brought on their behalf,[295] though such a conclusion is questionable.[296] Even assuming its legitimacy, a

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291. *See supra* Part II.C (describing the gains of E-Notice plans).

292. Alterations in the class definition warrant repeated notice. *See, e.g.*, *In re* New Motor Vehicles Canadian Exp. Antitrust Litig., No. 2:03-MD-1532-DBH, 2012 WL 313948, at *1 (D. Me. Jan. 31, 2012) (requiring supplemental notice after the court altered settlement at the final approval hearing); Holman v. Student Loan Xpress, Inc., No. 8:08-CV-305-T-23MAP, 2010 WL 4054275, at *1 (M.D. Fla. Oct. 14, 2010) (providing supplemental notice for changes to subclasses); Williams v. San Bernardino Cty., No. EDCV 09-00092-VAP(VBK), 2009 WL 1844296, at *3 (C.D. Cal. June 18, 2009) (approving supplemental notice to newly identified class members). Other times, courts order supplemental notice to drive up response rates. *See, e.g.*, Weber v. Gov't Emps. Ins. Co., 262 F.R.D. 431, 440 (D.N.J. 2009) (using repeated notice to increase class response rate by just over 5 percent).

293. *See, e.g.*, Samuel Issacharoff & Richard A. Nagareda, *Class Settlements Under Attack*, 156 U. PA. L. REV. 1649, 1654 (2008) ("Class actions further compromise litigant autonomy, for absent class members typically express their consent to a binding settlement not affirmatively but only tacitly, through their failure to withdraw from the class representation.").

294. *See, e.g.*, Gascho v. Glob. Fitness Holdings, LLC, No. 2:11-cv-436, 2014 WL 1350509, at *30 (S.D. Ohio Apr. 4, 2014) (accepting expert testimony "that response rates in class actions generally range from one to 12 percent with a median response rate, and a normal consumer response rate, of approximately five to eight percent") (citation omitted).

295. *See, e.g.*, Martin H. Redish & Nathan D. Larsen, *Class Actions, Litigant Autonomy, and the Foundations of Procedural Due Process*, 95 CALIF. L. REV. 1573, 1601 (2007) (discussing "the traditional litigant autonomy concern that is threatened by any forced inclusion in a class proceeding"); Ryan C. Williams, *Due Process, Class Action Opt Outs, and the Right Not to Sue*, 115 COLUM. L. REV. 599, 646 (2015) ("An individual . . . may well perceive the forced inclusion of her claim in a mandatory class action as posing a far greater threat to her autonomy."); *cf.* Charles Silver, *A Restitutionary Theory of Attorneys' Fees in Class Actions*, 76 CORNELL L. REV. 656, 663 (1991) ("The practice of granting fee awards forces class members to pay for services and benefits they neither request nor, in many cases, are free to reject. In other words, it requires them to participate in exchanges without their consent.").

296. Class members may not participate for far less nefarious reasons. Apathy is a more likely culprit. Similarly, requiring proof of purchase or other documentation with a claim may disincentive participation just enough. For example, consider the claims process in *Pearson v. NBTY, Inc.*, 772 F.3d 778 (7th Cir. 2014). The case involved allegations of false claims by a dietary supplement manufacturer. *Id.* at 779. Class members were purchasers of the supplement. *Id.* The proposed settlement resulted in a low response rate, as well as reversal by the Seventh Circuit. *Id.*

central precept of autonomy-based arguments is individuals can better evaluate their own interests than even the most benevolent state.[297] To properly conduct such an evaluation, though, information is essential. E-Notice has the potential to inform more class members simply because the platforms it utilizes are widely used. Take Facebook: users spend roughly fifty minutes a day on the social media platform—a figure far in excess of the amount of time spent reading mail in a day, let alone a week.[298] With traditional notice, only those who receive mailed notices or stumble upon printed ads learn about the litigation. E-Notice's potentially greater reach means more consumer education about class actions.

Better-informed class members translates to more autonomy in deciding whether to be bound by the outcome of class litigation.[299] Such notice directs individuals to settlement websites they may not otherwise come upon. These websites often educate class members about the claims process in a particular case, while also serving as

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at 782–83, 787. In its decision, the appellate court itemized several barriers created by the notice plan:

> One would have thought, given the low ceiling on the amount of money that a member of the class could claim, that a sworn statement would be sufficient documentation, without requiring receipts or other business records likely to have been discarded. The requirement of needlessly elaborate documentation, the threats of criminal prosecution, and the fact that a claimant might feel obliged to wade through the five other documents accessible from the opening screen of the website, help to explain why so few recipients of the postcard notice bothered to submit a claim.

Id. at 783. Nor do these low response rates necessarily demonstrate a preference for regulatory enforcement solely by administrative agencies or attorneys general rather than private enforcement. Patrick A. Luff, *Bad Bargains: The Mistake of Allowing Cost-Benefit Analyses in Class Action Certification Decisions*, 41 U. MEM. L. REV. 65, 68 (2010) (discussing criticisms of class actions).

297. *See* JOHN S. MILL, ESSAY ON LIBERTY 93 (Elizabeth Rapaport ed., 1978).

298. *See* James B. Stewart, *Facebook Has 50 Minutes of Your Time Each Day. It Wants More.*, N.Y. TIMES (May 5, 2016), https://www.nytimes.com/2016/05/06/business/facebook-bends-the-rules-of-audience-engagement-to-its-advantage.html [https://perma.cc/Y6GB-STJM]; *see also supra* note 234 and accompanying text.

299. *Cf.* Joshua P. Davis, Eric L. Cramer & Caitlin V. May, *The Puzzle of Class Actions with Uninjured Members*, 82 GEO. WASH. L. REV. 858, 869 (2014) ("The failure to require actual notice has implications for both autonomy and compensation. A class member cannot exercise choice in class litigation—she cannot decide whether to opt out of litigation or object to any proposed settlement—if she does not know it is occurring."); Jeffrey P. Donohue, *Developing Issues Under the Massachusetts 'Physician Profile' Act*, 23 AM. J.L. & MED. 115, 130–31 (1997) ("[A]ny increase in consumer information—in any market—would thus improve self-determination and heighten this form of autonomy."). This is not to suggest, as some have, that opt-in class actions are superior. *See, e.g.*, MARTIN H. REDISH, WHOLESALE JUSTICE: CONSTITUTIONAL DEMOCRACY AND THE PROBLEM OF THE CLASS ACTION LAWSUIT 135–37 (2009). To the contrary, such an approach just creates different autonomy concerns. This opt-in approach, however, could actually restrict class member autonomy. *See* Davis et al., *supra*, at 872.

"educational portals that provide information on everything from the basic rules to the most complex issues in class action litigation."[300]

Admittedly, this call for more judicial engagement is not new. As one scholar recently explained, "Courts must . . . be more active in policing whether the notice was or will be the best practicable . . . ."[301] However, such calls have yet to be coupled with empirical evidence backing claims of judicial inconsistency and reticence towards modern technology. This grounded understanding hopefully will spur action.

C. Drawing Notice Plans out from the Shadows

After such engagement, a third and final adjustment would promote E-Notice. Appellate courts must engage with class notice plans to ensure effective notice, to sharpen the reasoning of the district courts they oversee, and to enforce the constitutional parameters of due process. Accordingly, trial courts should endeavor to memorialize the judicial reasoning for approving a particular plan.[302] A trial court should no longer passively acquiesce to a joint plan triggering huge postal costs without fleshed-out, written justification. This is particularly true given notice is not just a pro forma obligation in class action settlements. Rather, such notice fulfills a constitutional mandate for due process.[303] While such a final step creates an administrative burden, some courts already provide detailed notice decisions, illustrating the feasibility of such a proposal.[304]

Once judges explain their reasoning, detailed notice decisions would also help trigger the appellate engagement necessary to modernize notice plans. Detailed reasoning shines a light on

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300. Robert H. Klonoff, Mark Herrmann & Bradley W. Harrison, *Making Class Actions Work: The Untapped Potential of the Internet*, 13 J. INTERNET L. 1, 14 (2009).

301. Scheibel, *supra* note 10, at 1361 (proposing more active engagement "whether by independently considering and researching notice options or by requiring detailed justifications from the parties for why the notice meets Rule 23(c)(2)(B)'s standard and should be considered sufficient in light of absent parties' due process rights").

302. This proposal is in accord with another pending amendment to Rule 23, which urges more detailed Rule 23 opinions. Advisory Committee Memo, *supra* note 23.

303. *See* U.S. CONST. amend. V. (guaranteeing "[n]o person shall . . . be deprived of life, liberty, or property, without due process of law"); *id.* amend. XIV, § 1 ("[N]or shall any State deprive any person of life, liberty, or property, without due process of law . . . .").

304. *See, e.g.*, Larson v. Sprint Nextel Corp., No. 07-5325JLL, 2009 WL 1228443, at *4–10 (D.N.J. Apr. 30, 2009) (comparing the attempted notice program to the notice required by Rule 23); *In re* Lupron Mktg. & Sales Practices Litig., 228 F.R.D. 75, 84–86 (D. Mass. 2005) (same); *cf.* Korrow v. Aaron's Inc., No. CV 10-6317, 2015 WL 7720491, at *10 (D.N.J. Nov. 30, 2015) (comparing the cost of an additional notice method to the potential gains).

interpretations that deviate from Rule 23. This affords appellate courts the opportunity to apply true de novo review of the standards lower courts use in approving notice and reverse plans that stray from *Mullane*.[305] Stated more directly, detailed notice plans should help appellate courts curtail the growth of implied Rule 23 requirements, such as ascertainability or tailored notice.[306] Not only will this help cultivate E-Notice, it will help preserve the notion of constructive notice.[307]

The judicial weighing of notice alternatives proposed in Part III.B. requires factual findings. Appellate courts should review such findings under a "clearly erroneous" standard of review.[308] Such an approach would bring balance to the notice approval process. It ensures compliance with constitutional rights and increased transparency[309] while simultaneously providing a quasi-safe harbor for fully reasoned notice plan orders. A clearly erroneous standard would protect thorough trial courts from unwelcome reversals.[310] It would also place a higher burden on objectors, thus insulating plans from frivolous

305. Appellate oversight should also aim to protect against frivolous objections. As discussed in Part I, objectors are double-edged swords. *See supra* Part I.B and accompanying footnotes. Though well-situated to raise concerns about the mode of notice, objectors can wield their power to coerce modifications that do little to actually benefit class members. To minimize this risk, objectors should have to provide actual proof to back up challenges to notice. Conjecture and speculation alone have dominated notice decisions long enough. For example, if an objector claims an alternative method of notice will reach a greater number of class members at a lower cost, such a claim requires evidentiary support—be it an affidavit from a claims administrator or comparative cost figures from prior litigation.

306. *See supra* Part I.B (describing these implied requirements).

307. *See supra* Parts I.B and II.C (discussing how tailoring and ascertainability undermine constructive notice).

308. *See, e.g.*, Easley v. Cromartie, 532 U.S. 234, 242 (2001) (explaining that under the "clear error" standard of review, "a reviewing court must ask whether, 'on the entire evidence,' it is 'left with the definite and firm conviction that a mistake has been committed'" (quoting United States v. U.S. Gypsum Co., 333 U.S. 364, 395 (1948)).

309. These transparency gains would increase if trial courts consistently issued opinions on class notice. Specifically for (b)(3) class certification notice, courts currently trend toward issuing unreported orders rather than released opinions. *See, e.g.*, Nitsch v. DreamWorks Animation SKG Inc., 315 F.R.D. 270, 317 (N.D. Cal. 2016) (approving class certification but deferring the notice determination); Wahl v. Midland Credit Mgmt., Inc., 243 F.R.D. 291, 301 (N.D. Ill. 2007) (same). As a result, such orders are not available on Westlaw or Lexis. Ellen Platt, *Unpublished vs. Unreported*, 5 NO. 1 PERSP: TEACHING LEGAL RES. & WRITING 26 (1996).

310. *See, e.g.*, Evan H. Caminker, *Precedent and Prediction: The Forward-Looking Aspects of Inferior Court Decisionmaking*, 73 TEX. L. REV. 1, 77–78 (1994) (detailing evidence that trial courts dislike reversal on appeal); Pauline T. Kim, *Beyond Principal-Agent Theories: Law and the Judicial Hierarchy*, 105 NW. U. L. REV. 535, 557 (2011) ("[J]udges undoubtedly dislike being reversed . . . .").

objections. Concurrently, this standard would preserve appellate courts' ability to weed out decisions that prioritize unsubstantiated fears over class members' best interests.[311] Hence, more detailed findings in class notice decisions would potentially benefit class members in a given case, as well as improve future class notice plans.

Social scientists and advertisers are continuing to study online marketing and are learning that not all ads are equal.[312] Click-through rates depend on the product and ad at issue.[313] The effectiveness of online ads varies depending on the forum. When consumers are highly "engaged" with a media vehicle they are more responsive to such ads.[314] Currently, the judiciary's shared experience with E-Notice is too limited to know if these trends carry over to class notice.[315]

A 2016 Northern District of California antitrust case illustrates how E-Notice can achieve these gains.[316] *In re Optical Disk Drive*[317] involved a class of indirect purchasers of Panasonic optical disk drives.

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311. Long term, E-Notice may even help measure the legitimacy of these autonomy critiques. To date, the cases involving E-Notice do not have notably higher opt-out rates. However, the total number of decisions that include sufficient information to asses this are statistically de minimis. If increased notice results in increased opt-outs, this would support class action critics. If, however, increased notice has no impact on opt-out rates, it will at least partially refute autonomy-based challenges. Measuring such correlations may not reveal why class members fail to respond, but it would narrow the range of possible reasons.

312. *See, e.g.*, JAMES MATHEWSON & MIKE MORAN, OUTSIDE-IN MARKETING: USING BIG DATA TO GUIDE YOUR CONTENT MARKETING 22 (2016) (noting "not all paid search advertising works"); JOSEPH PLUMMER, STEPHEN D. RAPPAPORT, TADDY HALL & ROBERT BAROCCI, THE ONLINE ADVERTISING PLAYBOOK 42 (2007) ("[N]ot all sites, even those with similar content, build audience at the same rate.").

313. *See* Mark Irvine, *Google AdWords Benchmarks for YOUR Industry*, WORDSTREAM (June 26, 2018), https://www.wordstream.com/blog/ws/2016/02/29/google-adwords-industry-benchmarks [https://perma.cc/V85T-CYCX] (providing click-through rates by industry for Google AdWords campaigns); *Digital Display Ad Benchmarks in H1 2016, by Vertical and Region*, MARKETINGCHARTS (Nov. 28, 2016), http://www.marketingcharts.com/industries/pharma-and-healthcare-72605 [https://perma.cc/ZEY9-MZ9E].

314. *See, e.g.*, Bobby J. Calder, Edward C. Malthouse & Ute Schaedel, *An Experimental Study of the Relationship between Online Engagement and Advertising Effectiveness*, 23 J. INTERACTIVE MKTG. 321 (2009); Todd Cunningham, Amy Shea Hall & Charles Young, *The Advertising Magnifier Effect: An MTV Study*, 4 J. ADVERT. RES. 46 (2006).

315. Similarly, the information in such opinions could tease out potential barriers to filing a claim. For example, with E-Notice, a court might use the number of views and clicks to discern whether notice is actually reaches the class. If, however, there were a high number of clicks but few claims filed, that would prompt a review of the class notice's content or the claims administration process for answers.

316. *In re* Optical Disk Drive Prods. Antitrust Litig., No. 3:10-MD-2143 RS, 2016 WL 7364803, at *3 (N.D. Cal. Dec. 19, 2016).

317. *Id.* at *1.

As part of a settlement, the Court approved notice through publication, internet advertising, banner ads, and press releases.[318] Even without individual mailing, this multiplatform notice plan reached at least 70 percent of the class.[319] As the Court explained, the reach was greater than originally estimated: "In total, the indirect notice efforts generated over 207,530,045 impressions, directing over 272,184 clicks through to the case website. The volume of impressions generated was nearly 11 million more than estimated in the Notice plan."[320]

Wide and effective reach was only one benefit of this multifaceted notice plan, though. The plan also provided information on which modes of notice most successfully directed class members to the settlement website.[321] For example, banner and text link advertising on Facebook generated more click-throughs than Twitter or Google ads.[322] Even more successful, though, were hypertargeted banner ads.[323] This data will guide future courts seeking to replicate the success of this plan in later cases with similar class demographics. However, such gains are only possible because Judge Richard Seeborg provided a detailed class notice opinion.

Thus, the best course for modernizing class notice must include deeper engagement in the development and continued monitoring of notice plans by both trial and appellate courts. The Supreme Court has already mapped out a clear course in *Mullane*—a course Congress has codified.[324] Following this path through judicial engagement and shared information will likely banish any lingering trepidation about

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318. *Id.* at *3.

319. *Id.*

320. *Id.*

321. *Id.* (setting forth methods of notice, number of impressions, and number of click-throughs).

322. *Id.* (comparing "4,481,222 impressions with 89,327 clicks through to the case website" on Facebook with "1,770,199 impressions with 16,209 clicks through" from Twitter and "4,593,972 impressions with 8,092 clicks through" from Google).

323. *Id.* (describing "creative banner advertisements that utilizes behavioral audience targeting, contextual targeting, mobile inventory, and prospecting to reach likely class members—which resulted in 196,122,505 impressions with 158,556 clicks through to the case website").

324. FED. R. CIV. P. 23(c)(2); FED. R. CIV. P. 23 advisory committee's note to 1966 amendments (referencing Mullane v. Cent. Hanover Bank & Tr. Co., 339 U.S. 306 (1950)); Harvey Rochman, *Due Process: Accuracy or Opportunity?*, 65 S. CAL. L. REV. 2705, 2723 (1992) (discussing how subsequent Supreme Court jurisprudence and "the Advisory Committee's notes to rule 23(c)(2) all refer to *Mullane v. Hanover Bank & Trust Co.* for an explanation of the due process requirement of notice").

E-Notice. What is needed is judicial oversight, with a clear adherence to controlling precedent—not controlling norms.

CONCLUSION

Courts are dipping their toes into the deep end of E-Notice. When traditional mailed notice is not possible, some courts demonstrate a degree of creativity and daring. Unfortunately, this is a rarity. Fear of change, fear of technology, and fear of imperfection keep many courts firmly rooted on the safe shores of antiquity, ordering mail and publication notice and sacrificing potentially farther-reaching notice methods.

Courts already have the power to consider the pros and cons of various methods of notice under Rule 23. Triggering this analysis is dependent first on establishing oversight matters, not only to further the goals of class actions but also to avoid distortion of procedural due process jurisprudence.

This Article does the heavy lifting necessary to prove courts are falling behind society's use of technology. It exposes the fears underlying long-standing scholarly and judicial assumptions that run contrary to E-Notice. It also reveals existing interpretative barriers that distort the class notice analysis, then offers feasible solutions.

Notably, this Article does not advocate for any single form of E-Notice. Instead, the hope is to spur judicial engagement and abate decisionmaking based on fear. The case review and empirical analysis underpinning this Article serve as a springboard for a more informed procedural due process evaluation of class notice plans. Perhaps with this new understanding, the tired fiction of searching through newspapers for class notices can finally come to rest.