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2023 Year-End Report on the Federal Judiciary

Sometimes, the arrival of new technology can dramatically change work and life for the better. Just one century ago, for example, fewer than half of American homes had electricity. During the New Deal, the federal government set out to “bring the light” to homes across rural America. Representatives recruited farmers to join electricity co-operatives for \$5 each. Then came teams of men to clear the brush, sink the poles, and wire homes to the still inert grid.

As Robert Caro relates in [The Path to Power](#), in some places the project took so long that many forgot about it, or were certain they had been duped. But eventually there were stories like Evelyn Smith’s to be told:

“[O]ne evening in November, 1939, the Smiths were returning from Johnson City, where they had been attending a declamation contest, and as they neared their farmhouse, something was different. ‘Oh my God,’ Evelyn’s mother said. ‘The house is on fire!’ But

as they got closer, they saw the light wasn't fire. 'No, Mama,' Evelyn said. 'The lights are on.'"¹

But not every story of technological investment ends brightly, as Mark Twain discovered financing the "Paige Compositor." A typesetting device, the elaborate Compositor consisted of 18,000 parts and came with a patent application longer than The Adventures of Tom Sawyer. Twain was entranced by the invention, committing most of his fortune to bringing it to market. Unfortunately for Twain, the Compositor was too complex to commercialize. Twain's company went bankrupt.² And according to at least one account, both the attorney who drafted the patent application and one of the officials who examined it ended up dying in an insane asylum.³

Thirty-five years ago, the Federal Judiciary began to take tentative steps into the modern era of information technology: In 1989, the branch finally supplied personal computers to secretaries in all judges' chambers and ensured that there was at least one personal computer to be shared by each judge's law clerks. New tools to make court information available to the public were rolling out, too. That same year, courts launched the Voice Case Information System (VCIS) with pilot tests in four bankruptcy courts. As it was explained to judges: "By using a touch-tone telephone, members of the public can connect to the court's computer voice synthesis device which

reads back case information to the caller from the court's database." (A successor to VCIS still exists, by the way: If you would like to travel back in technological time—and get current case information by phone—you can call 1-866-222-8029).

Those of us who marveled at new, bulky, early personal computer systems in legal workplaces could hardly have anticipated today's ubiquitous conversations about whether and when computers might replace all sorts of professions—not least, lawyers. Every year, I use the Year-End Report to speak to a major issue relevant to the whole federal court system. As 2023 draws to a close with breathless predictions about the future of Artificial Intelligence, some may wonder whether judges are about to become obsolete. I am sure we are not—but equally confident that technological changes will continue to transform our work.



Quills and inkwells like those used by Justices in the 19th century.

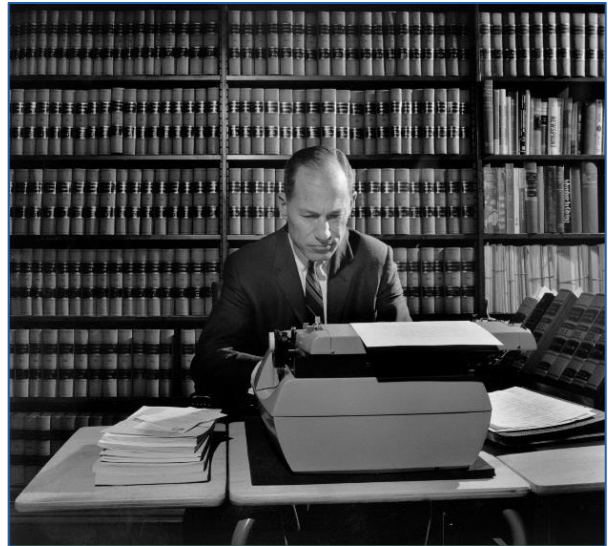
¹ R. Caro, *The Years of Lyndon Johnson: The Path to Power* 528 (1982); see *id.* at 52–53, 516–529.

² R. K. Rasmussen, *A Critical Companion to Mark Twain: A Literary Reference to His Life and Work* 827–828 (2007).

³ An Incident in Mark Twain's Life, 70 *The Typographical J.* 625, 626 (May 1927).

The legal profession is, in general, notoriously averse to change. For most of our Nation's first century, lawyers and judges produced their work with quill pens. Still today, as has been the custom for more than two centuries, the Clerk of the Supreme Court sets out white goose quill pens at counsel table before each oral argument. Symbols of tradition and timelessness, the quill pens go home as treasured souvenirs of each appearance before the highest court in the land. But the Court has taken away the inkwells that once sat beside quill pens, recognizing that the pens now serve only a symbolic function. Like the rest of society, if not quite as quickly, the federal judiciary has adapted its practices to meet the opportunities and challenges of new technologies.

The transition to more modern forms of document production began 150 years ago, with the appearance of the Sholes & Glidden Type Writer, first manufactured in 1873 and famous shortly thereafter as the Remington. Most judges still wrote their drafts by hand, but the typewriter became an important tool in the dissemination of judicial opinions both internally and to the outside world. In 1905, Justice David Brewer somewhat ungenerously referred to his law clerk as "a typewriter, a fountain pen, used by the judge to facilitate his work."⁴ Until the invention of the Dictaphone, law clerks of this vintage also had to take dictation, and at least one otherwise well qualified



Justice Byron White at a typewriter in 1963.

law clerk lost his job due to "lack of stenographic knowledge."⁵

The typewriter era lasted a century. On cue, fifty years ago a device called the Altair appeared on the market. Many historians consider the Altair to have been the first personal computer. It marked a significant step in the transition from large, stationary computers, like the Sperry Univac, housed in corporate and university buildings, to small, mobile devices designed for personal use in offices and living rooms.

While many professions eagerly anticipated advances in computing, the prevailing attitude within the judiciary was skepticism. As one contemporary author observed, "The archaic courts know nothing of computers."⁶

⁴ C. Cushman, "Lost" Clerks of the White Court Era, in *Of Courtiers and Kings* 15 (T. C. Peppers & C. Cushman eds. 2015).

⁵ *Id.* at 18.

⁶ A. Pantages, *No Glory in Chaos*, 12 *Jurimetrics J.* 193, 193 (1972).

That was largely true. In fact, the Supreme Court did not even have a photocopy machine until Chief Justice Warren E. Burger ordered one in 1969. Until that time, opinions and memoranda between the Justices were typed, often on carbon paper, and then duplicated on a hot-lead printing press that was not retired until the 1980s.

The lower courts, guided by the newly-created Federal Judicial Center, moved more quickly to bring computer technology into the federal judiciary, primarily through a system called “Courtran.” The development of Courtran implemented a 1967 congressional directive that the Center “study and determine ways in which automatic data processing and systems procedures may be applied to the administration of the courts of the United States.” Courtran relied on the use of large computers in Washington, D.C., to store and manipulate data, which then could be transmitted and displayed on terminals in local courts across the country. Participation in the network was voluntary, and not all courts opted in.

Computers came slowly but surely to the Supreme Court. In 1976, Justice Lewis Powell deployed a rented Wang computer in his chambers. Several other Justices observed the satisfactory performance of this newfangled “word processing machine” and followed suit the next year. By 1981, the Court adopted a state-of-the-art computer system called Atex that revolutionized the production of opinions from start to finish, leading to the eventual retirement of the hot press.

The 1980s saw a proliferation of personal computers in ordinary offices and households. By the early 1990s, most lawyers, law clerks, court administrators, and yes, even judges, had

them on their desks. Nevertheless, paper remained the rule of the day. Law clerks and law librarians of that era will recall directives to “pull” cases from hardbound case reporters. Legal writing instructors taught their students to check the continuing validity of precedents by sifting through bound volumes of a publication called Shepards. (Lawyers facing a deadline might skip this stage, proclaiming that “the Lord is my Shepards.”)

Once finalized, briefs and motions made their way from the office to the courthouse in the hands of couriers, carrying the number of hard copies required under local rules and individual judges’ standing orders, plus one or two more to be stamped and returned to the (paper) file. Judicial staff still maintained docket entries in the same large handwritten diaries used by their predecessors a century earlier. And anyone looking to obtain a document from a case file had to travel to a clerk’s office, request the file, inspect it, and then pay a cashier for any copies they wished to make.

But change came fast. By the turn of the century, the paper world familiar to lawyers for centuries had largely given way to today’s electronic regime. The Public Access to Court



Justice Sandra Day O'Connor at a desktop computer in 1991.

Electronic Records (PACER) system, which celebrated its 35th anniversary a few months ago, allowed lawyers, litigants, and the public to view the business of the courts from their office or library computer terminals. About a decade later, the digital revolution in the federal courts pressed forward with the unveiling of a system called Case Management/Electronic Case Files (CM/ECF). CM/ECF brought about a seismic shift in efficiency. Lawyers, law clerks, and judges could file pleadings and other court documents any time of day or night and from any location, rendering paper largely optional.

New technology also entered law offices and courtrooms. Digitalization and technology-assisted review (TAR) help lawyers cope with the explosion of electronic discovery materials created and preserved in the digital age. Instead of poring through boxes of papers in dusty warehouses, lawyers now perform document review from their offices—or even their dining room tables.

Trials also look very different today than they did even a decade ago. Trial presentation software, real-time court reporting, accommodations for jurors, litigants, and spectators with disabilities, and many other applications have radically changed how lawyers present and jurors receive evidence in court.

The COVID-19 pandemic ushered in yet another wave of rapid technological innovation. Courts at all levels of the judiciary immediately shifted from in-person to remote hearings in civil cases. With the adoption of the CARES Act, many criminal proceedings also shifted online. Key innovations first adopted as temporary have now become permanent

features of the legal landscape, allowing litigants, lawyers, and courts to lock in efficiency gains that do not undercut other important legal or constitutional rights.

And now we face the latest technological frontier: artificial intelligence (AI). At its core, AI combines algorithms and enormous data sets to solve problems. Its many forms and applications include the facial recognition we use to unlock our smart phones and the voice recognition we use to direct our smart televisions. Law professors report with both awe and angst that AI apparently can earn Bs on law school assignments and even pass the bar exam. Legal research may soon be unimaginable without it. AI obviously has great potential to dramatically increase access to key information for lawyers and non-lawyers alike. But just as obviously it risks invading privacy interests and dehumanizing the law.

Proponents of AI tout its potential to increase access to justice, particularly for litigants with limited resources. Our court system has a monopoly on many forms of relief. If you want a discharge in bankruptcy, for example, you must see a federal judge. For those who cannot afford a lawyer, AI can help. It drives new, highly accessible tools that provide answers to basic questions, including where to find templates and court forms, how to fill them out, and where to bring them for presentation to the judge—all without leaving home. These tools have the welcome potential to smooth out any mismatch between available resources and urgent needs in our court system.

But any use of AI requires caution and humility. One of AI's prominent applications

made headlines this year for a shortcoming known as “hallucination,” which caused the lawyers using the application to submit briefs with citations to non-existent cases. (Always a bad idea.) Some legal scholars have raised concerns about whether entering confidential information into an AI tool might compromise later attempts to invoke legal privileges. In criminal cases, the use of AI in assessing flight risk, recidivism, and other largely discretionary decisions that involve predictions has generated concerns about due process, reliability, and potential bias. At least at present, studies show a persistent public perception of a “human-AI fairness gap,” reflecting the view that human adjudications, for all of their flaws, are fairer than whatever the machine spits out.

Many professional tennis tournaments, including the US Open, have replaced line judges with optical technology to determine whether 130 mile per hour serves are in or out. These decisions involve precision to the millimeter. And there is no discretion; the ball either did or did not hit the line. By contrast, legal determinations often involve gray areas that still require application of human judgment.

Machines cannot fully replace key actors in court. Judges, for example, measure the sincerity of a defendant’s allocution at sentencing. Nuance matters: Much can turn on a shaking hand, a quivering voice, a change of inflection, a bead of sweat, a moment’s hesitation, a fleeting break in eye contact. And most people still trust humans more than machines to perceive and draw the right inferences from these clues.

Appellate judges, too, perform quintessentially human functions. Many appellate decisions turn on whether a lower court has abused its discretion, a standard that by its nature involves fact-specific gray areas. Others focus on open questions about how the law should develop in new areas. AI is based largely on existing information, which can inform but not make such decisions.

Rule 1 of the Federal Rules of Civil Procedure directs the parties and the courts to seek the “just, speedy, and inexpensive” resolution of cases. Many AI applications indisputably assist the judicial system in advancing those goals. As AI evolves, courts will need to consider its proper uses in litigation. In the federal courts, several Judicial Conference Committees—including those dealing with court administration and case management, cybersecurity, and the rules of practice and procedure, to name just a few—will be involved in that effort.

I am glad that they will be. I predict that human judges will be around for a while. But with equal confidence I predict that judicial work—particularly at the trial level—will be significantly affected by AI. Those changes will involve not only how judges go about doing their job, but also how they understand the role that AI plays in the cases that come before them.

Of course, the branch is composed of more than judges, and I would like to single out for praise this year the skilled and dedicated information systems professionals who support our courts. They are often unsung public servants performing indispensable work to keep the judicial branch running. Gone are the days when

the quill pen alone was sufficient to maintain a docket; courts could not do our work without technologists and cybersecurity experts in the Department of Technology Services at the Administrative Office of the U.S. Courts, at the circuit-wide level, and in individual courts. More parochially, judges, including me, have been known to call on help desk staff for urgent and essential assistance.

Once again, I am privileged and honored to thank all the judges, court staff, and other judicial branch personnel throughout the Nation for their outstanding service.

Best wishes to all in the New Year.

John G. Roberts, Jr.
Chief Justice of the United States
December 31, 2023

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Page 3, Collection of the Supreme Court of the United States, courtesy of the Estate of Yousuf Karsh.

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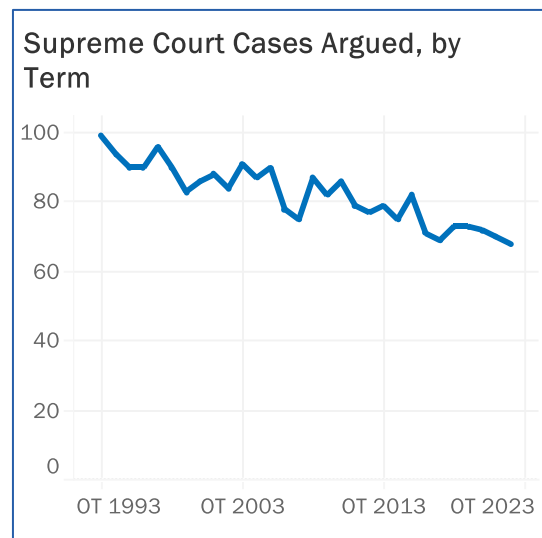
Appendix

Workload of the Courts

In October Term 2022, the number of cases filed in the Supreme Court fell by 15 percent compared to the prior year.¹ For the 12-month period ending September 30, 2023, the number of cases filed in the U.S. courts of appeals declined by four percent. Civil cases filed in the U.S. district courts increased 24 percent and cases filed in the U.S. bankruptcy courts increased 13 percent. Pretrial supervision cases fell three percent and post-conviction supervision case numbers remained even.

The Supreme Court of the United States

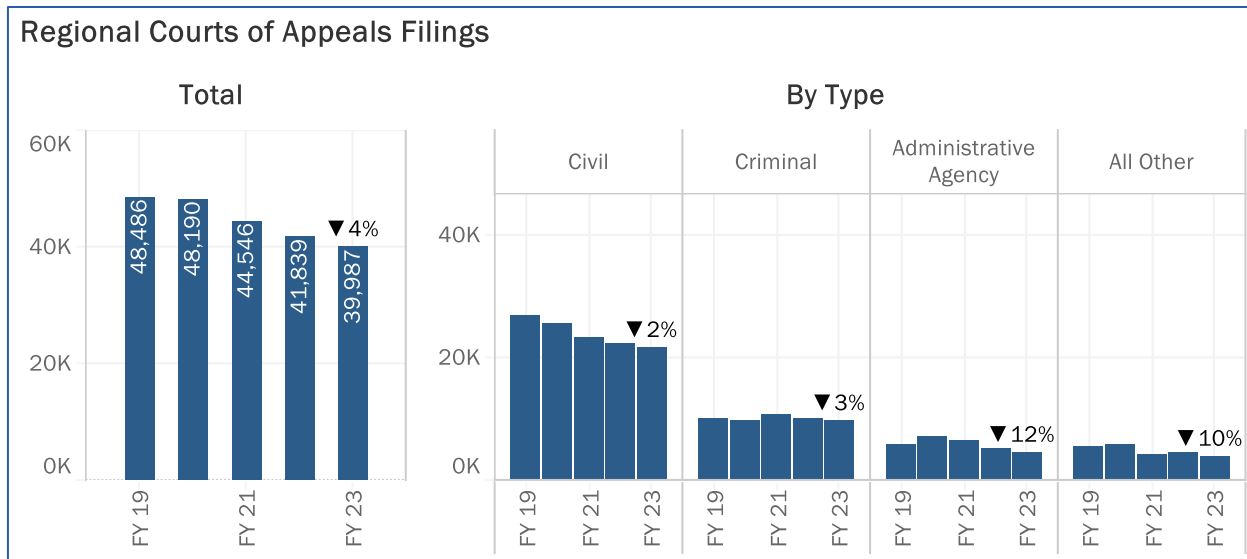
The total number of cases filed in the Supreme Court decreased 15 percent from 4,900 filings in the 2021 Term to 4,159 in the 2022 Term. The number of cases filed in the Court's *in forma pauperis* docket decreased 12 percent from 3,288 filings in the 2021 Term to 2,907 filings in the 2022 Term. The number of cases filed in the Court's paid docket decreased 22 percent from 1,612 filings in the 2021 Term to 1,252 filings in the 2022 Term. During the 2022 Term, 68 cases were argued and 66 were disposed of in 55 signed opinions, compared to 70 cases argued and 63 disposed of in 58 signed opinions in the 2021 Term. The Court also issued two per curiam opinions in argued cases during the 2022 Term.



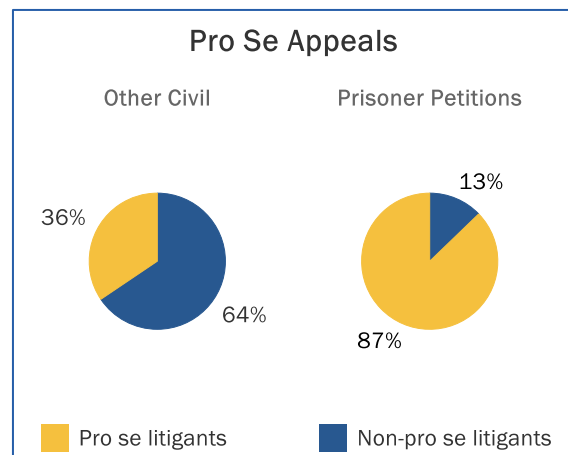
¹ The October Term 2022 workload statistics cover the period between the docketing of the first case with a 22- prefix on June 30, 2022, and the release of opinions and an order list on June 30, 2023.

The Federal Courts of Appeals

In the regional courts of appeals, filings fell four percent from 41,839 to 39,987 in FY 2023. Total civil appeals were down two percent from the prior year to 21,756. Criminal appeals were down three percent from the prior year to 9,649. Appeals of administrative agency decisions fell 12 percent to 4,638. All other appeals (bankruptcy appeals, original proceedings, and miscellaneous applications) decreased 10 percent to 3,944.



Appeals by pro se litigants, which amounted to 46 percent of filings, decreased four percent to 18,517. Prisoner petitions accounted for 23 percent of appeals filings (a total of 9,089), and 87 percent of prisoner petitions were filed pro se, compared with 36 percent of other civil filings.



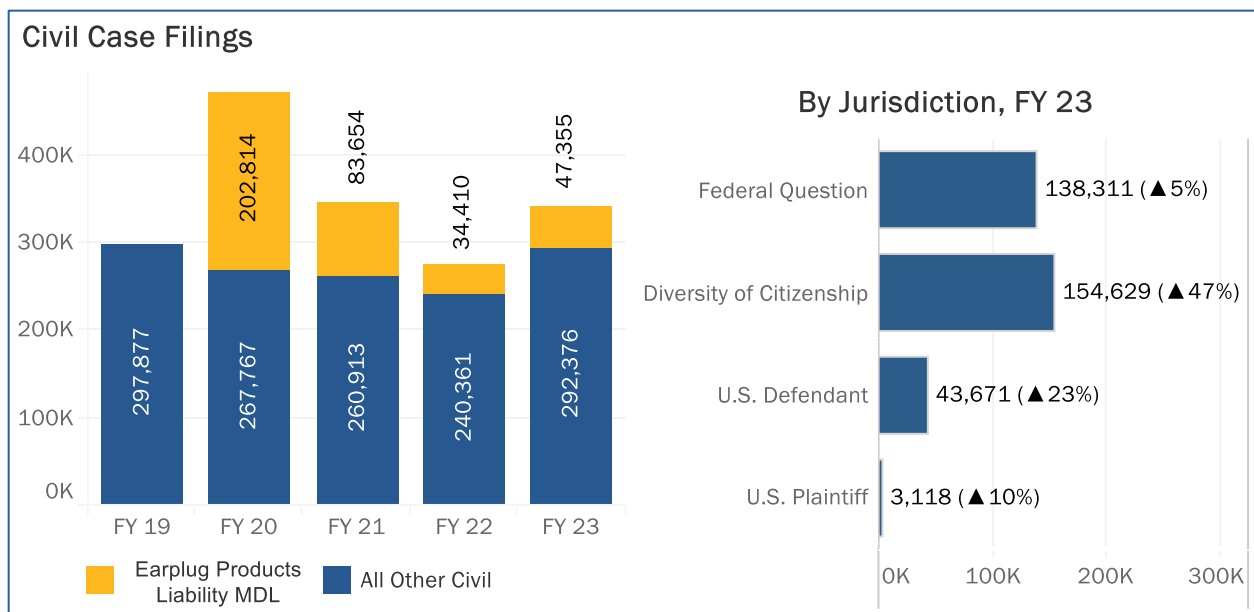
The Federal District Courts

The federal district courts docketed 339,731 civil cases in FY 2023, an increase of 24 percent from the prior year. Once again, an unusually large number of filings were associated with an earplug product liability multidistrict litigation (MLD) centralized in the Northern District of Florida, which consolidated 47,355 filings in FY 2023. Excluding those MDL filings, total civil case filings rose 22 percent to 292,376.

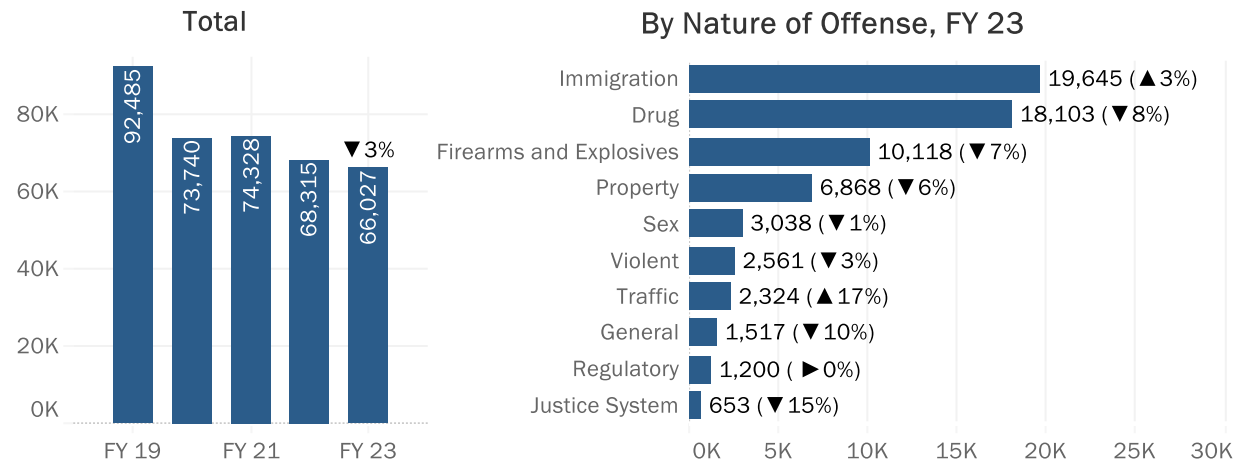
Cases involving diversity of citizenship (*i.e.*, disputes between citizens of different states), which had decreased 37 percent from FY 2021 to FY 2022, climbed 47 percent to 154,629 in FY 2023. These fluctuations are closely tied to the cases involving earplugs, as many MDL filings are in the category of diversity of citizenship. Federal question cases (*i.e.*, actions under the Constitution, laws, or treaties of the United States in which the United States is not a party) increased 5 percent to 138,311. Cases with the United States as a plaintiff increased 10 percent to 3,118. Cases with the United States as a defendant grew 23 percent to 43,671. Filings involving Social Security, civil immigration, and prisoner petitions represented 81 percent of all cases in which the United States was a defendant, and growth occurred in all three categories from FY 2022 to FY 2023.

- Civil immigration filings increased 44 percent to 11,108,
- Prisoner petition filings increased 21 percent to 9,425,
- Social Security filings increased 12 percent to 15,005.

Civil immigration cases address topics such as petitions for naturalization and adjudication of immigration status. Criminal immigration cases, discussed below, deal with matters such as unlawful entry and reentry into the United States, alien smuggling, and fraud and misuse of visas or other permits.



Criminal Defendant Filings

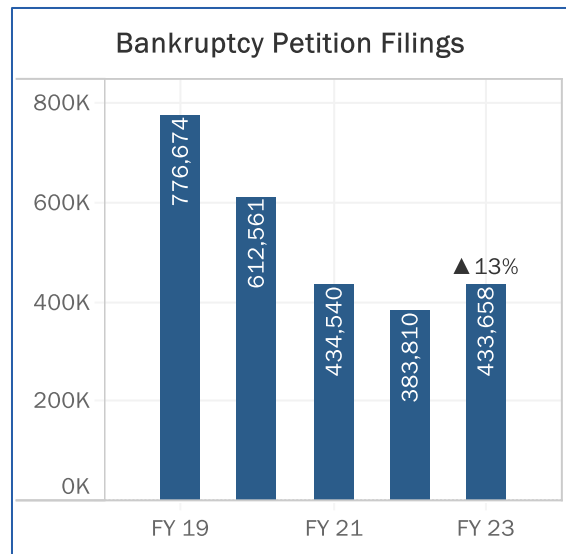


The federal district courts docketed 66,027 criminal defendant filings (excluding transfers) in FY 2023, a reduction of three percent from the prior year. The largest categories were filings for defendants accused of immigration offenses, which increased three percent to 19,645, and filings for defendants charged with drug offenses, which fell 8 percent to 18,103.

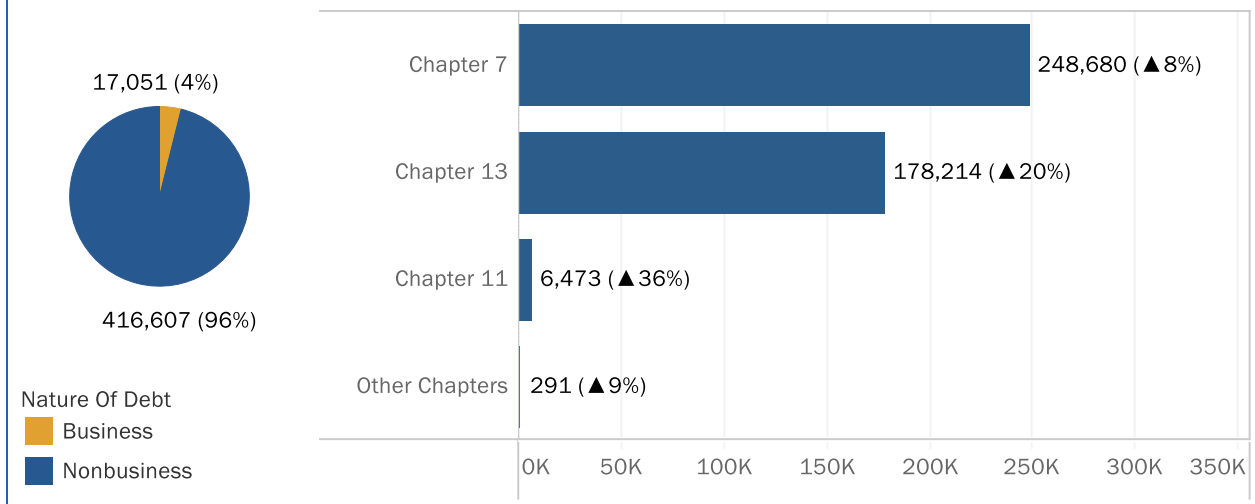
The Bankruptcy Courts

Bankruptcy courts docketed 433,658 new filings in FY 2023, representing a 13 percent increase from the prior year.

Of the 90 bankruptcy courts, 85 courts received more petitions in FY 2023 than in the prior year. In FY 2022, only 11 courts received more petitions than they had in the previous year.



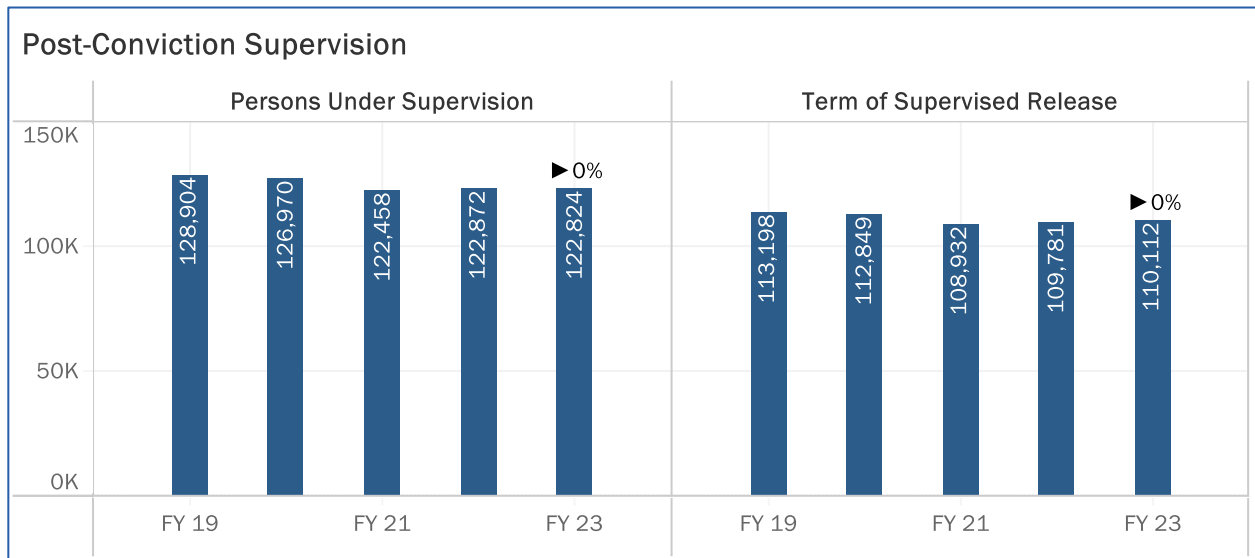
Bankruptcy Filings, By Nature of Debt, FY 2023



Consumer (*i.e.*, non-business) petitions, which amounted to approximately 96 percent of bankruptcy petitions, increased 12 percent to 416,607. Business petitions rose 30 percent to 17,051. Petitions filed under Chapter 7 rose eight percent from the previous year, those filed under Chapter 11 increased 36 percent, and those filed under Chapter 13 rose 20 percent.

Pretrial Services, Federal Probation, and Supervised Release System

A total of 122,824 persons were under post-conviction supervision on September 30, 2023, a decrease of less than 1 percent from the prior year. Of that number, 110,112 were serving terms of



supervised release after leaving correctional institutions, an increase of less than 1 percent from FY 2022.

Cases activated in the pretrial services system, including pretrial diversions, fell three percent to 71,297.

