
White Paper

Stakeholder Engagement with PCAOB Website Data

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1. INTRODUCTION

Transparency of regulatory information and its consumption by stakeholders are critical for the effective functioning and oversight of financial markets. Existing research in this space primarily centers on the digitization of financial disclosures and stakeholder interactions with platforms such as the U.S. Securities and Exchange Commission's (SEC) EDGAR database (e.g., Drake et al., 2015). Comparatively little is known about how stakeholders directly engage with information provided by the Public Company Accounting Oversight Board (PCAOB), which oversees the audits of public companies and SEC-registered brokers and dealers.

In recent years, the PCAOB has invested in digital transparency by redesigning its website, expanding search functionality, and revising the format of its inspection reports with the goal of providing stakeholders with useful and accessible information.¹ Understanding whether and how stakeholders engage directly with PCAOB resources, and whether these transparency initiatives influence stakeholder behavior, is important to understanding how audit-oversight information flows into financial markets.

In this paper, we provide the first detailed empirical analysis of stakeholder engagement with PCAOB website disclosures. We utilize an extensive archive of hourly website traffic data from Google Analytics spanning June 2016 through August 2023. We focus on stakeholder engagement with three key PCAOB resources: inspection reports, enforcement actions, and AuditorSearch.² Our dataset captures over 2.7 million page views across 2.2 million timestamps of PCAOB-hosted webpages.

Our analysis addresses two primary research questions: (1) How intense is stakeholder engagement with PCAOB disclosures over time? (2) How do engagement patterns vary by disclosure type, geography, and timing?

Our study yields four key insights. First, PCAOB inspection reports attract substantial stakeholder attention and retain interest well beyond their initial release. This finding highlights their importance as one of the PCAOB's primary transparency mechanisms (e.g., DeFond, 2010), and suggests they are a lasting reference point for stakeholders. Second, enforcement actions generate significant but relatively shorter-lived attention, similar to event-driven consumption patterns observed for SEC filings (Loughran and McDonald, 2017). Third, stakeholder engagement with AuditorSearch has steadily grown over the sample period, suggesting it is becoming increasingly valuable to stakeholders seeking timely audit-related information. Fourth, by exploiting global differences in time zones and standard business hours, we document international interest in PCAOB disclosures. Moreover, stakeholders frequently seek information about audit firms located outside the U.S., especially during periods of heightened regulatory scrutiny. These patterns imply that audit-oversight information provided by the PCAOB is consumed worldwide.

Overall, our findings provide new empirical evidence that informs ongoing discussions about how stakeholders, such as investors and audit committee members, acquire and use PCAOB regulatory

¹ See Section 2.2 for additional information on the PCAOB's website redesign.

² We provide additional information on inspection reports, enforcement actions, and AuditorSearch in Sections 2.3 to 2.5.

information, thereby adding to debates about the value and relevance of these disclosures.³ Existing academic research primarily infers stakeholder use of PCAOB information indirectly through market reactions to disclosures (e.g., Doxey et al., 2021; Acito et al., 2024). By contrast, we directly examine and quantify stakeholder engagement with PCAOB resources, which provides regulators, researchers, and market participants with novel insights into how audit-oversight information is consumed. We also discuss potential directions that future research could take using these data.

We organize the remainder of the paper as follows. Section 2 details the data, institutional background, and context of PCAOB disclosures. Section 3 presents empirical analyses of stakeholder engagement patterns and outlines potential opportunities for future research. Section 4 concludes by discussing the implications of our findings.

2. DATA AND BACKGROUND

2.1. Web Traffic from Google Analytics

The PCAOB uses Google Analytics to monitor user interactions with its website. Specifically, from June 2016 to August 2023, the PCAOB employed Google’s Universal Analytics, after which it transitioned to Google Analytics 4. During this transition, PCAOB staff archived historical data from Universal Analytics, which form the basis for our analysis. These archived data comprise hourly records of page views for each unique webpage Uniform Resource Locator (URL) hosted under the domain www.pcaobus.org.⁴

In total, the archived dataset captures over 39.5 million page views across approximately 13.6 million hourly timestamps. The full dataset encompasses a wide range of PCAOB resources, including inspections and enforcement disclosures, standards and standard-setting updates, staff spotlights, speeches and press releases, and staff white papers. For our analysis, we focus specifically on stakeholder engagement with three key PCAOB resources: inspection reports, enforcement actions, and

³ Outside of academic literature, there is a contemporaneous debate on the use of PCAOB information by stakeholders. For example, a November 2023 study commissioned by the Center for Audit Quality and conducted by KRC Research concluded that most investors were “unaware of PCAOB inspection reports” and skeptical about their usefulness. See https://www.thecag.org/wp-content/uploads/2023/11/cag_perspectives-on-corporate-reporting-the-audit-and-regulatory-environment_2023-11.pdf. However, during the September 2024 meeting of the PCAOB’s Investor Advisory Group, a member commented that having inspection reports and enforcement action information would be very important for the audit committees when they are going through an RFP (request for proposal) meeting with their auditor. See <https://pcaobus.org/news-events/events/event-details/pcaob-investor-advisory-group-meeting-september-2024>. Moreover, audit committees note that PCAOB inspection reports are one of the common topics they discuss with audit firms. See <https://assets.pcaobus.org/pcaob-dev/docs/default-source/documents/2024-conversations-with-audit-committee-chairs-spotlight.pdf>. There is also evidence that Form AP data are used by financial research companies. See p.51 of <https://jehoshaphatresearch.com/wp-content/uploads/2025/05/Jehoshaphat-Research-Short-Opinion-on-MAIN-May-2025.pdf>.

⁴ Note that differences in PDF hosting methods across PCAOB website sections affect the availability of viewership data for PDFs in the archived data. For example, inspection reports and enforcement actions have publicly accessible URLs that load the PDFs directly in the browser, which allows Google Analytics to track user visits. In contrast, PDFs from the PCAOB’s Registration, Annual and Special Reporting (RASR) system (e.g., annual Form 2 filings) download directly to the user’s machine when accessed, which prevents Google Analytics from capturing these user interactions. Thus, RASR-hosted filings are not in the archived Google Analytics dataset. In addition, inspections report and AuditorSearch pages offer the information contained in individual PDF documents as data sets that are available for download. Our data does not include the user interactions with these datasets. Thus, there may be more stakeholder engagement with PCAOB information than we can observe with Google Analytics data.

AuditorSearch. This focused subset includes approximately 2.7 million page views recorded across roughly 2.2 million hourly timestamps.

The data span the period from June 2016 (the first complete month of available data) through August 2023 (the last complete month). However, due to a significant website redesign implemented in late 2020 that rearranged website architecture, Google Analytics was temporarily unable to track page views of PDFs hosted on the site from late November 2020 through early April 2021.⁵ Thus, traffic data for inspection report and enforcement action PDFs were not captured during this window. Other PCAOB URLs, including AuditorSearch, were unaffected and continuously tracked stakeholder engagement throughout this period. We discuss additional details about the website redesign in Subsection 2.2.

The archived data contain the hourly aggregated number of page views and unique users for each webpage that receives at least one visitor during each hourly interval. Given the hourly aggregation, the unique user count cannot be reliably summed to broader intervals (e.g., daily or monthly) without double counting users who visit multiple times within the broader period.⁶ Thus, we do not use unique user counts in our analyses. Instead, we focus on aggregations of total page views, which can be accurately aggregated annually, monthly, and daily. Additionally, for PDFs such as inspection reports and enforcement actions, we analyze unique document views by counting how many distinct PDF documents are accessed within specific intervals. This measure of unique documents accessed does not reflect unique users, but rather the breadth of different documents that stakeholders view.

Three important notes apply to our dataset. First, the archived data do not contain personally identifiable information, such as Internet Protocol (IP) addresses or precise geographic locations of users. Second, while Google's Universal Analytics directly measures engagement with the PCAOB website, it has some inherent limitations. For example, user interactions might not be recorded if visitors employ ad-blocking software or decline or disable cookies.⁷ Additionally, the dataset likely contains internal PCAOB staff website visits and robotic ("bot") traffic. Indeed, we provide evidence consistent with systematic downloads in Subsection 3.2.1. Third, third-party data providers, such as Audit Analytics and LexisNexis, aggregate and redistribute publicly available PCAOB information, including inspection reports and enforcement actions. Our data do not capture stakeholder interactions through these third-party platforms. Thus, while our measure may not precisely account for all human stakeholder engagement, it remains the most direct measure currently available for actual stakeholder engagement with PCAOB disclosures.

⁵ The redesigned PCAOB website launched on December 1, 2020. See <https://pcaobus.org/news-events/news-releases/news-release-detail/pcaob-launches-new-brand-and-redesigned-website-advances-key-strategic-priority>. Although user download data were not recorded from late November 2020 through early April 2021, the PDFs remained publicly accessible during this period.

⁶ For example, if the same user accessed the PCAOB webpage at 8 a.m. and again at 2 p.m., they are counted as a unique user in the 8 a.m. timestamp and the 2 p.m. timestamp.

⁷ This limitation arises because Google's Universal Analytics relies upon client-side cookies to track page views or user sessions, which may lead to a downward bias in tracking user interactions. However, we do not expect users who decline cookies or use ad-blockers to systematically access particular sections of the PCAOB's websites. Therefore, analyses comparing user engagement across different sections of the website should not be biased by users' cookie or ad-blockers preferences.

2.2. PCAOB Website Redesign

On December 1, 2020, the PCAOB launched a redesigned website with improved search capabilities as part of its strategic priority to enhance transparency and accessibility to audit-oversight information. The redesign focuses on four key attributes: user-friendly design, access to information, stakeholder engagement, and timeliness of information. As part of this initiative, the PCAOB updated search platforms hosting PCAOB information, including inspection reports, enforcement actions, and AuditorSearch, with the goal of making these resources more sophisticated and user-friendly.⁸ For example, the redesigned AuditorSearch webpage integrates previously separate advanced search functionality directly into its primary interface and added additional filtering criteria to search results. These changes eliminate the need for a standalone advanced search page.

Additionally, the PCAOB revised the format of its inspection reports during our sample period. On June 1, 2020, the inspection reports for the six largest U.S. audit firms were released in a new, redesigned format.⁹ This change marks the first substantial alteration to the inspection report format since the inception of PCAOB inspections. The updated format aims to enhance readability and interpretability of inspection information for users. This effort was supported by the PCAOB's publication of an interpretive guide to assist stakeholders in reading and interpreting the redesigned reports.¹⁰

Further, beginning in June 2021, the PCAOB undertook additional proactive efforts to increase public awareness of inspection reports, enforcement actions, and AuditorSearch. These efforts include an upgraded email subscription service, more press releases for enforcement actions, and more frequent promotional posts on social media platforms, especially for AuditorSearch and inspection reports. Although the PCAOB employed outreach strategies prior to this time, the enhanced efforts represent a more systematic and targeted approach to stakeholder engagement.

Taken together, these digital information changes are intended to facilitate greater stakeholder access and understanding of PCAOB data, potentially enabling more effective dissemination and consumption of audit oversight data.¹¹ Accordingly, we explicitly evaluate stakeholder engagement trends before and after the website redesign and the change in the inspection report format.¹²

⁸ See <https://pcaobus.org/about/the-new-pcaob-website>.

⁹ See <https://pcaobus.org/news-events/news-releases/news-release-detail/pcaob-issues-six-largest-u-s-firm-inspection-reports-in-new-user-friendly-format-guide-to-reading-reports> 731.

¹⁰ See <https://pcaobus.org/Inspections/Documents/Inspections-Report-Guide.pdf>.

¹¹ The Board's 2018-2022 Strategic Plan included enhancing transparency and accessibility through proactive stakeholder engagement as one of its goals. See https://assets.pcaobus.org/pcaob-dev/docs/default-source/about/administration/documents/strategic_plans/pcaob-2018-2022-strategic-plan.pdf.

¹² The Board has released further transparency enhancements for inspection reports to allow investors, audit committee members, and other stakeholders to better access, understand, and summarize data from PCAOB inspection reports in May 2023, July 2023, August 2024, and April 2025. For example, see <https://pcaobus.org/news-events/news-releases/news-release-detail/pcaob-makes-available-new-downloadable-datasets-featuring-pcaob-inspection-findings-from-audit-firm-inspection-reports>.

2.3. Inspection Reports

In accordance with the Sarbanes-Oxley Act and PCAOB rules, the PCAOB conducts a program of inspections of registered public accounting firms to assess a firm's compliance with certain laws, rules, and professional standards in connection with its performance of audits, issuance of audit reports, and related matters involving public companies and other issuers.¹³ Following each inspection, the PCAOB issues a report, a portion of which is publicly available.¹⁴ While prior academic literature examines and debates the information content of the public inspection reports for investors and other stakeholders (e.g., Lennox and Pittman, 2010; DeFond, 2010; Gunny and Zhang, 2013), extant research lacks direct measures of actual stakeholder access to these documents.

The PCAOB publicly posts inspection reports on its website that users can access through search and filtering tools that allow them to easily find specific reports.¹⁵ Each inspection report is hosted as a PDF with a dedicated URL, allowing the report to open directly in a user's browser. The archived Google Analytics data include hourly records of page views for each inspection report URL. To determine each inspection report's publication date, we use release-date data from Acito et al. (2024).

To avoid potential double counting arising from website redesigns or changes in PDF hosting directories—such as the same inspection report temporarily appearing under multiple URLs or having filenames adjusted after the initial posting—we manually group all associated PDF URLs by their corresponding report release number, rather than relying strictly on identical filenames. We then perform counts and summations of page views at the individual inspection report level rather than the unique URL level. This approach helps ensure accurate measurement of engagement despite changes in naming conventions over time.

2.4. Enforcement Actions

The PCAOB's enforcement action page publicly discloses disciplinary actions involving registered audit firms and associated individuals.¹⁶ The PCAOB posts all publicly available opinions, orders, termination of bars, and other PCAOB-issued enforcement actions, as well as related SEC and court actions reviewing those sanctions. These actions are categorized into settled disciplinary orders (89.6% of enforcement

¹³ The inspection reports analyzed in our sample do not cover the inspection of broker-dealer engagements, since those are included in a separate summary report issued under the Interim Inspection Program Related to Audits of Brokers and Dealers. In accordance with the Dodd-Frank Act, the PCAOB established this interim program to inspect auditors of broker-dealers in June 2011. This interim program identifies and addresses with auditors of broker-dealers any significant issues observed in their audits and related attestation engagements. The PCAOB publishes a summary inspection report for these inspections each year, which is hosted on a separate webpage. See <https://pcaobus.org/resources/information-for-audit-firms/information-for-auditors-of-broker-dealer>.

¹⁴ Inspection reports are currently available at: <https://pcaobus.org/oversight/inspections/firm-inspection-reports>.

¹⁵ Some of the filters available for inspection reports were released in July 2023. See <https://pcaobus.org/news-events/news-releases/news-release-detail/pcaob-launches-new-online-tools-to-help-users-find-and-compare-inspection-report-data>. The PCAOB expanded the machine-readable datasets containing inspection report information in April 2025. See <https://pcaobus.org/news-events/news-releases/news-release-detail/pcaob-makes-available-new-downloadable-datasets-featuring-pcaob-inspection-findings-from-audit-firm-inspection-reports>.

¹⁶ Enforcement actions are currently available at: <https://pcaobus.org/oversight/enforcement/enforcement-actions>.

actions in our sample), adjudicated disciplinary orders (6.2% of enforcement actions in our sample), and termination of bars (4.2% of enforcement actions in our sample).

Enforcement action documents are accessible through the PCAOB’s website and, similar to inspection reports, include search and filtering tools to assist users in finding specific actions. Each enforcement action is provided as a PDF with a dedicated URL such that, when a user clicks on the desired report, the PDF opens directly in the user’s browser with a URL in the address bar. The archived Google Analytics data provides hourly page-view counts for each enforcement action PDF URL.

To address potential double counting due to website redesigns, changes in PDF hosting directories, or the presence of multiple related documents (e.g., PCAOB orders and associated SEC or court reviews), we manually match all historical PDF URLs to a list of all current enforcement actions listed on the website. We then aggregate page views at the individual enforcement action level (rather than the unique URL level), which helps ensure accurate measurement of stakeholder engagement.

2.5. AuditorSearch

The PCAOB maintains a public database known as AuditorSearch, which provides detailed information about engagement partners and audit firms participating in audits of public companies.¹⁷ AuditorSearch compiles data from PCAOB Form AP, which registered audit firms are required to submit to disclose the names of engagement partners and other accounting firms that participated in their audits of public companies. Users can search AuditorSearch by issuer (name, CIK, or ticker), audit firm (name, PCAOB ID, or country), engagement partner (name), or date (filing date range). The search results display Form AP filings matching these criteria, allowing users to view individual filings or explore further connections by issuer, audit firm, or engagement partner.

Existing academic research has not identified significant investor responses to Form AP filings (e.g., Doney et al., 2021). However, direct measures of stakeholder access and engagement with AuditorSearch have thus far been unavailable. Our dataset allows us to address this gap.

Due to how Form AP filings are hosted on the PCAOB website, Google Analytics cannot directly track user views of the individual Form AP PDFs as it does for inspection reports and enforcement actions. However, Google Analytics captures user interactions with the AuditorSearch tool itself, as each user-generated search produces a unique URL containing the specific search terms or the filtering criteria entered by the user. Additionally, clicking on a particular search result directs users to a summary page of the selected Form AP filing. Thus, our analyses focus on AuditorSearch URLs indicating that a user actively performed a search for Form AP information (which we term “active search URLs”), rather than general AuditorSearch landing pages or reference documents.¹⁸

¹⁷ AuditorSearch is currently available at: <https://pcaobus.org/resources/auditorsearch>.

¹⁸ Specifically, AuditorSearch generates a unique URL for each set of search terms (e.g., “pcaobus.org/resources/auditorsearch/search?keyword=XXX”, where “XXX” represents the search input). To quantify actual stakeholder engagement with specific search activities, we categorize AuditorSearch URLs into two subsets: (1) general AuditorSearch landing pages and related resources (753,259 page views), and (2) URLs explicitly reflecting active search queries by users (1,937,251 page views). Our analyses in Section 3 only include the second subset (active search URLs). As a result, the total AuditorSearch page-view statistics we report in Section 3 differ from overall usage statistics reported on the PCAOB’s AuditorSearch webpage. Specifically, the website reports a total of 2,242,068 AuditorSearch queries as of December 2022,

These active search URLs can be categorized into three groups: (1) URLs containing a “keyword” tag followed by specific search terms entered by users, which were recorded only from AuditorSearch’s inception in February 2017 until April 2021; (2) URLs containing unique Form AP filing identifiers selected directly from search results by users, which we match with supplemental AuditorSearch metadata, such as filing dates and audit firm locations;¹⁹ and (3) URLs generated from user selections of identifiers for specific audit firms, engagement partners, issuers, or other filtering criteria (e.g., dates or countries). In Section 3, we explicitly indicate whether each AuditorSearch analysis utilizes the complete set of active search URLs or focuses on a narrower subset.

3. ANALYSIS

Our analysis spans four progressively granular levels of data aggregation—annual, monthly, daily, and hourly—to offer a more comprehensive view of stakeholder engagement with PCAOB data. We begin at the annual and monthly levels to establish broad trends in stakeholder use of three key resources: inspection reports, enforcement actions, and AuditorSearch. At the daily level, we examine stakeholder engagement with inspection reports, enforcement actions, and Form AP summaries following their publication dates. We also examine weekday-specific engagement patterns. At the hourly level, we leverage differences in global time zones to infer international stakeholder interactions. We also explicitly analyze stakeholder demand for audit-related information regarding audit firms located outside the U.S.

3.1. Annual Page Views

Panel A of Table 1 presents the annual total page views and unique document views for inspection reports, enforcement actions, and AuditorSearch over June 2016 to August 2023. As we discuss in Subsection 2.1, our data includes periods of missing or partial information that affect the annual totals. We indicate these in Table 1 by shading the respective cells and expanding on the exact missing data in the table footnotes.

On an annual basis, we find that inspection reports have higher total views than enforcement actions. Annual views of inspection reports range from approximately 49,000 in 2016 (partial year) to a peak of around 97,000 in 2022. The number of unique inspection reports accessed in each year ranges from just over 2,200 inspection reports in 2016 (partial year) to just under 3,700 inspection reports in 2022.

Total annual views of enforcement actions range from just under 22,000 in 2020 (partial year) to just under 59,000 in 2017. The number of unique enforcement action documents accessed annually varies from 206 in 2016 (partial year) to 432 in 2023 (partial year). As expected, the unique views increase yearly as the PCAOB brings new enforcement actions.

while our dataset contains 2,690,780 combined page views for both landing pages and active search terms through August 2023. This difference is due partly to the differing sample periods and partly because the PCAOB website reports a custom “search event” metric from Google Analytics, whereas we rely on the standard page-views, which provides a consistent metric for our analyses.

¹⁹ The dataset of all Form AP filings is available for download at: <https://pcaobus.org/resources/auditorsearch>.

For AuditorSearch, we examine all active search URLs and exclude recorded views of just the AuditorSearch landing page.²⁰ Total annual page views of active search URLs grew substantially from 176,000 in 2017 (partial year) to over 399,000 in 2020. Following the website redesign in late 2020, total page views declined for AuditorSearch but remained above 215,000 for 2021, 2022, and 2023 (partial years). The reduction after the website redesign may indicate improved search functionality, allowing users quicker access to relevant information and thus generating fewer intermediate searches.²¹

Table 1
Descriptive Statistics by Year

Panel A: Annual Total Page Views and Unique Documents Accessed or Searches Performed

| <i>Total (Unique)</i> | 2016 ^a | 2017 ^b | 2018 | 2019 | 2020 ^c | 2021 ^{c,d} | 2022 ^d | 2023 ^e |
|-----------------------|-------------------|---------------------|---------------------|---------------------|----------------------|---------------------|---------------------|---------------------|
| Inspection Reports | 48,687 (2,238) | 76,530 (2,856) | 73,446 (3,070) | 74,742 (2,907) | 55,489 (2,700) | 68,317 (2,859) | 97,153 (3,635) | 79,032 (2,693) |
| Enforcement Actions | 34,013 (206) | 58,846 (262) | 35,077 (287) | 27,817 (319) | 21,913 (334) | 28,499 (363) | 55,707 (408) | 42,980 (432) |
| Active AuditorSearch | - - | 176,109 (56,780) | 267,577 (81,240) | 321,506 (90,609) | 399,516 (102,119) | 276,296 (67,309) | 264,113 (46,925) | 215,353 (42,079) |

Panel B: Annual Mean and Median Page Views

| <i>Mean (Median)</i> | 2016 ^a | 2017 ^b | 2018 | 2019 | 2020 ^c | 2021 ^{c,d} | 2022 ^d | 2023 ^e |
|----------------------|-------------------|-------------------|---------------|--------------|-------------------|---------------------|-------------------|-------------------|
| Inspection Reports | 21.8 (5) | 26.8 (7) | 23.9 (6) | 25.7 (5) | 20.6 (3) | 23.9 (4) | 26.7 (4) | 29.3 (3) |
| Enforcement Actions | 165.1 (96) | 224.6 (113) | 122.2 (82) | 87.2 (60) | 65.6 (44) | 78.5 (29) | 136.5 (52) | 99.5 (28) |
| Active AuditorSearch | - - | 3.1 (1) | 3.3 (1) | 3.5 (1) | 3.9 (1) | 4.1 (1) | 5.6 (2) | 5.1 (2) |

This table presents annual descriptive statistics on page views for three PCAOB website resources: inspection reports, enforcement actions, and AuditorSearch. Panel A presents annual total and unique page views; Panel B presents annual mean and median page views.

^a The first complete month of data for inspection reports and enforcement actions is June 2016.

^b The first complete month of data for AuditorSearch is February 2017.

^c Google Analytics data for inspection report and enforcement action PDFs are unavailable from late November 2020 through early April 2021 due to the PCAOB website redesign; AuditorSearch was unaffected.

^d After April 2021, the archived data does not include AuditorSearch URLs of keyword strings entered by users, leaving only URLs of filtering criteria and search results (e.g., Partner IDs, Firm IDs, Issuer IDs, and Form AP filing IDs).

^e The last complete month of data for all webpages is August 2023.

Panel B of Table 1 displays the mean and median annual page views per document for inspection reports and enforcement actions, and per active search URL for AuditorSearch. The reported means are higher than the reported medians for all three resources, suggesting that some information receives far higher views. Inspection reports have an average yearly view per document ranging from 20.6 in 2020

²⁰ We describe our process for identifying active search queries in Subsection 2.5.

²¹ As noted in Subsection 2.5, the group of active search URLs that contain keywords users have entered ceases to be recorded after April 2021. This is an alternative explanation for the reduction in the total page views post-website redesign.

(partial year) to 29.3 in 2023 (partial year). The median yearly views of inspection reports range from three to seven per year.²²

Enforcement actions have higher average yearly views per document, particularly in the earlier portion of the sample period. The average views range between just under 66 in 2020 (partial year) to approximately 225 in 2017. The median yearly views of enforcement actions range from 29 in 2021 (partial year) to 113 in 2017.

For active search terms in AuditorSearch, the average ranges between 3.1 in 2017 (partial year) and 5.6 in 2022 (partial year), with a median between one and two. Across the full sample period, there are 337,792 unique search terms in AuditorSearch URLs. This implies that stakeholders use many different search terms and filtering criteria in AuditorSearch, which we investigate further in Subsection 3.2.2.

3.2. Monthly Page Views

We next analyze monthly page views to examine how stakeholder engagement varies around specific events. Shorter time intervals allow us to observe activity after the release of certain information and evaluate how stakeholder engagement patterns change following the late-2020 website redesign.

Our monthly analysis employs three complementary metrics to capture stakeholder engagement from multiple angles: (1) total page views, which reflects aggregate interest in type of information; (2) average page views, which captures engagement intensity; and (3) unique documents viewed or searches, which measures the variety of information accessed by stakeholders.

3.2.1. Inspection Reports and Enforcement Actions

We first analyze stakeholder engagement with inspection reports and enforcement actions. As we discuss in Section 2, these two disclosure types provide stakeholders with information about audit quality and compliance.²³ Our analysis covers three periods emerging from trends in the data: (i) June 2016 to late 2017 or early 2018; (ii) early-to-mid 2018 to late 2020 (just prior to the website redesign and inspection report format change); and (iii) early 2021 to August 2023 (just after these changes).

Figure 1 plots monthly total page views for inspection reports (solid line) and enforcement actions (dashed line) from June 2016 through August 2023 (excluding late November 2020 to early April 2021 due to data limitations from the website redesign). Inspection reports tend to attract higher total monthly page views (around 2,200 to 3,700 during our sample period) than enforcement actions (around 200 to 430), likely because there are more inspection reports that can be accessed annually.

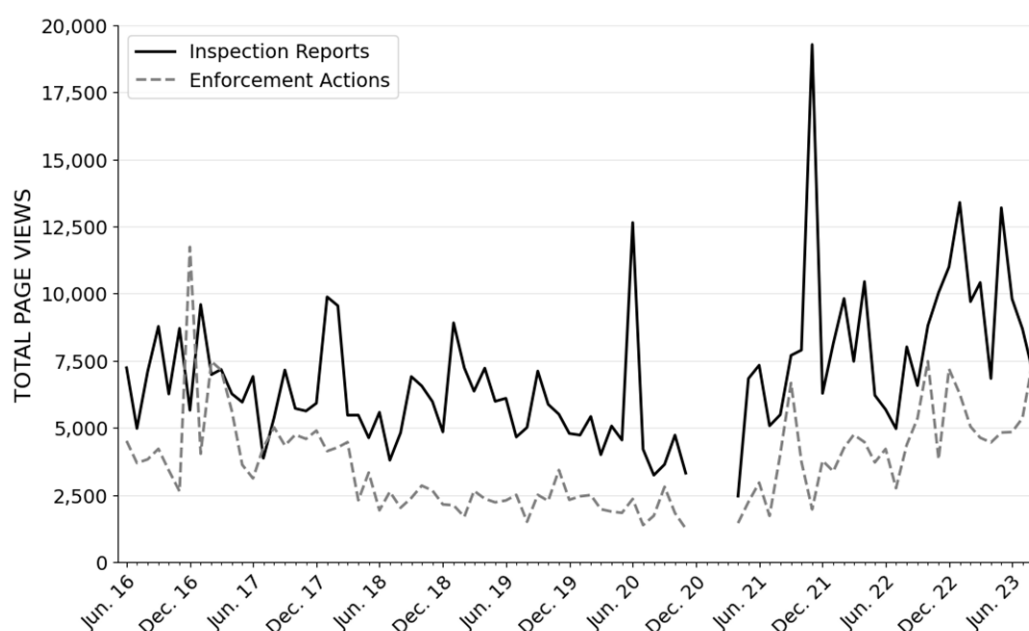
From June 2016 to early 2018, enforcement actions hover around 4,000 monthly views but display some volatility, including a large spike in December 2016 that reaches nearly 12,000 views. This spike aligns

²² We also investigate whether average page views differ for Global Network Firms (GNFs) versus non-GNF audit firms. In untabulated analyses, we find that inspection reports related to GNFs receive an average of 71.1 page views per year while non-GNFs receive an average of 12.5 page views per year.

²³ For academic research documenting relation between PCAOB oversight activities and audit quality, *see*, for example, Lamoreaux et al. (2023), Lamoreaux (2016), DeFond and Lennox (2017), Gung et al. (2017), and Krishnan et al. (2017).

closely with the release of a Deloitte Brazil enforcement action order in December 2016—involving the largest PCAOB fines at the time for violations including the issuance of materially false audit reports—followed by an EY Indonesia order in February 2017 reaching nearly 7,500 views.²⁴ Monthly inspection report views tend to be higher than those for enforcement actions. Total views tend to range between 5,000 and 10,000 during this period but do not reach the same peak as seen with enforcement actions.

Figure 1
Total Page Views – Inspection Reports and Enforcement Actions



This figure plots trends in monthly total page views for inspection reports and enforcement actions on the PCAOB’s website from June 2016 to August 2023, excluding late November to early April 2021 when data were not captured due to the website redesign. The solid black line represents the total page views of inspection reports. The dashed gray line is the total page views for enforcement actions.

Between mid-2018 and late 2020, just prior to the website redesign and inspection report format revision, the engagement pattern stabilizes for enforcement actions at around 2,000 per month. Inspection reports consistently attract higher total monthly views compared to enforcement actions.

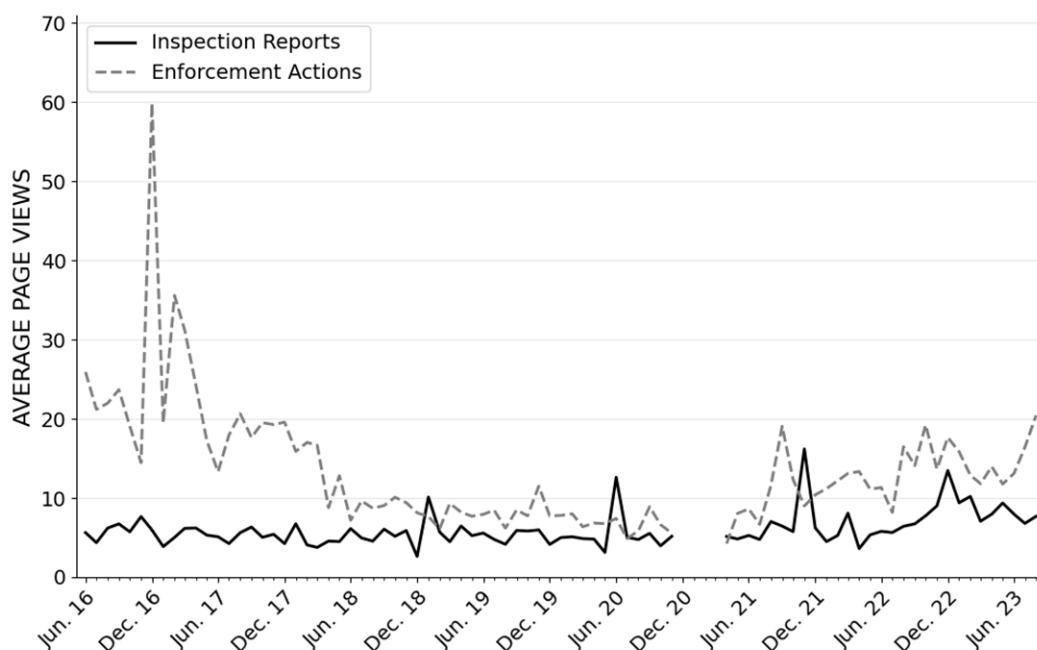
²⁴ The Deloitte Brazil orders in December 2016 involved unprecedented sanctions at the time, including an \$8 million civil penalty imposed on the firm and sanctions against 12 former partners and other audit personnel of the firm. See <https://pcaobus.org/news-events/news-releases/news-release-detail/pcaob-announces-8-million-settlement-with-deloitte-brazil-for-violations-including-issuing-materially-false-audit-reports-and-12-individuals-also-sanctioned-for-various-violations> 601. The EY Indonesia order in February 2017 imposed a \$1 million penalty on the firm and sanctions against the former professional practice director for the EY network’s Asia-Pacific region and a former EY Indonesia engagement partner. See <https://pcaobus.org/news-events/news-releases/news-release-detail/pcaob-announces-1-million-settlement-with-indonesian-member-of-ernst-young-network-for-audit-failure-noncooperation-and-violations-of-quality-control-standards> 605. These cases attracted high-profile media coverage, which may have increased stakeholder traffic to the PCAOB website. See <https://www.cnn.com/2016/12/05/deloitte-brazil-unit-hit-with-record-fine-over-false-audit-reports.html> and <https://www.reuters.com/article/business/ernst-youngs-indonesia-affiliate-to-pay-1-million-to-settle-audit-failure-idUSKBN15POIY/>.

After the mid-2020 revision of inspection report formats (and later the December 2020 website redesign), monthly page views for inspection reports become more volatile, peaking notably in June 2020 and November 2021 (nearly 20,000 views). These peaks coincide with the release periods of U.S. GNF inspection reports, which suggests that stakeholder attention rises during information dissemination periods. Total views for enforcement actions rise steadily from 2021 onward, suggesting there is growing stakeholder interest in enforcement matters over recent periods.

Figure 2 presents average monthly page views per unique enforcement action and inspection report, which provides insights into stakeholder engagement intensity at the individual-document level. While inspection reports exhibit higher aggregate page views in Figure 1, Figure 2 indicates that enforcement actions have greater per-document engagement throughout most of the sample period.

From June 2016 to late 2017, enforcement actions' monthly views average around 23 per document but show volatility, reaching a peak of nearly 60 in December 2016, and a smaller increase to 35 in February 2017. These spikes coincide with the enforcement actions discussed in Footnote 24. During this early period, inspection reports have an average of between four and eight views per document per month. However, there are a larger number of inspection reports compared to enforcement actions (almost 10 times larger), indicating a potential denominator effect could be driving the lower average page views.

Figure 2
Average Page Views Per Document – Inspection Reports and Enforcement Actions



This figure plots trends in the monthly average page views for inspection reports and enforcement actions on the PCAOB's website from June 2016 to August 2023, excluding late November to early April 2021 when data were not captured due to the website redesign. The solid black line represents the average views per inspection report. The dashed gray line represents the average views per enforcement action.

Between early 2018 and late 2020, before the website redesign and revision in the inspection report format, average views for enforcement actions stabilize at a lower level while inspection reports remain

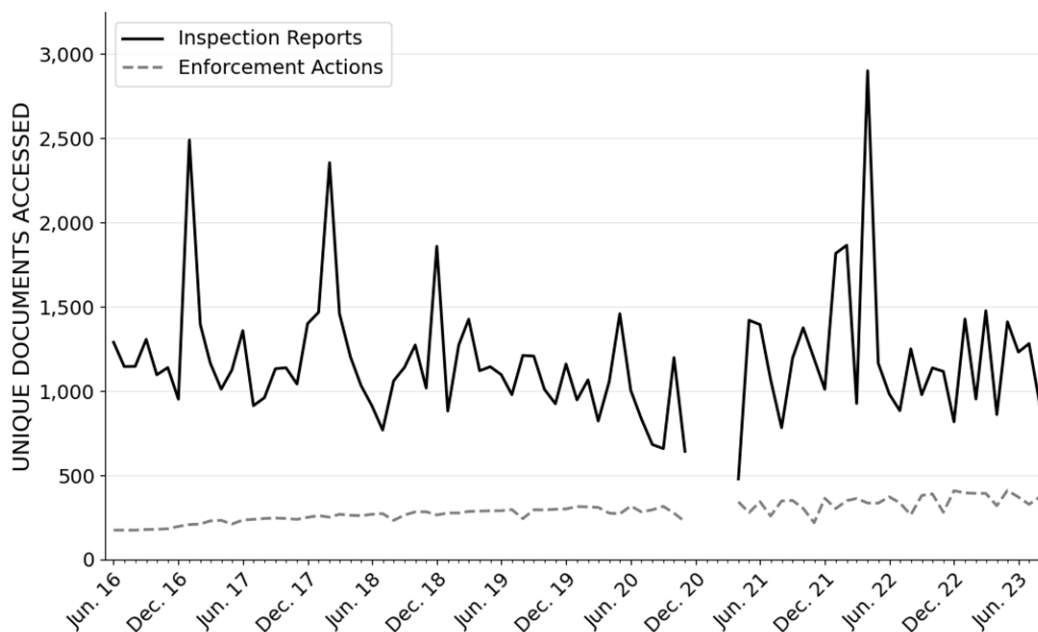
at similar levels to the earlier period. Enforcement actions typically average just under 10 views per document, while inspection reports have a lower average at around four to eight views per document.

Beginning in early 2021, following the website redesign and inspection report format revision, average views per document rise for both disclosure types. Stakeholder engagement with enforcement actions increase to approximately 15 to 20 average monthly views per document by mid-2023. Similarly, engagement with inspection reports increase to around eight to 10 average monthly views per document during this period.

Figure 3 below graphs trends in the monthly number of unique enforcement actions and inspection reports accessed by stakeholders. Throughout the sample period, stakeholders consistently access a greater number of unique inspection reports relative to enforcement actions, likely due to the substantially larger number of inspection reports issued annually by the PCAOB.

From June 2016 to late 2017, the number of unique inspection reports accessed shows noticeable oscillations, with several pronounced spikes. The largest peak during this period occurs in January 2017, reaching approximately 2,500 unique inspection reports accessed. In contrast, the number of unique enforcement actions accessed remains relatively lower and stable at around 100 to 200 per month.

Figure 3
Unique Documents Viewed – Inspection Reports and Enforcement Actions



This figure plots monthly trends in the number of unique inspection reports and enforcement actions accessed on the PCAOB's website from June 2016 to August 2023, excluding late November to early April 2021 due to data limitations from the website redesign. The solid black line represents the number of unique inspection report documents viewed. The gray dashed line is the number of unique enforcement action documents viewed.

Between early 2018 and late 2020, stakeholder access to unique inspection reports continues to show periodic variation. During this same period, access to enforcement actions shows much lower variability and relative engagement.

Beginning in early 2021, following the website redesign and inspection report format revision, we observe an increase in the variation of monthly access to unique inspection reports. There was a large spike in April 2022, with over 2,900 unique inspection reports accessed. Engagement with unique enforcement actions remains relatively lower and more stable compared to inspection reports but does increase some during this latter period.

To better understand the noticeable spikes in stakeholder engagement with inspection reports, we analyze the underlying data download patterns for four periods: January 2017, February 2018, December 2018, and April 2022. We find evidence suggesting the spikes may be partially driven by systematic downloads, rather than individual user searches. Specifically, access to inspection reports tend to cluster tightly within a few consecutive business days in each of these months rather than being spread evenly throughout the month. These patterns resemble the systematic download behavior by “bots” documented in research on search traffic using the SEC EDGAR database (e.g., Loughran and McDonald, 2017).²⁵

3.2.2. AuditorSearch

For the monthly analysis of AuditorSearch, we remove URLs containing keyword strings. These keyword-containing URLs only appear in the archived data from February 2017 to April 2021 and cease afterward, which complicates time comparisons.²⁶ Removing these ensures more consistent analysis and leaves us with AuditorSearch URLs representing final search outcomes and other filtering conditions (e.g., URLs for Form AP summaries and identifiers for audit firms, partners, issuers, dates, or geographies).

Figure 4 graphs monthly AuditorSearch usage from February 2017 (the first complete month of data) through August 2023. We continue to analyze three metrics of engagement: total page views (Panel A), average page views per unique search URL (Panel B), and the number of unique search queries (Panel C).

Panel A displays the total monthly page views of active search URLs on AuditorSearch. Total views increase noticeably throughout the full sample period. Specifically, AuditorSearch views increase from approximately 10,000 to 20,000 per month in the early years (2017 to 2019) to around 25,000 to 30,000 monthly views by 2022 to 2023. Total views dip briefly for several months immediately after the December 2020 website redesign, but the underlying upward trend soon resumes. There are also pronounced peaks each March, reaching approximately 35,000 to 40,000 views in March 2020 and March 2023. These spikes may reflect seasonal engagement linked to periodic events, such as the Form 10-K and Form AP filing seasons, or specific stakeholder inquiries leading to increased search activity.²⁷

²⁵ Specifically, across these four spikes, we find that approximately 55% of inspection reports accesses were downloaded exactly once in the entire month, while an additional 19% were downloaded exactly twice. If these single-download events were individual users accessing specific inspection reports, we would expect these accesses to occur randomly throughout the month. However, analysis at daily level shows clustering around shorter windows of three to five consecutive business days. For example, in April 2022, we find that 96% of the inspection reports that were downloaded exactly once occur within three consecutive days (April 18 to 20). This concentrated retrieval pattern suggests that some of the spike was driven by automated download activities that may take a few days due to daily download limits or coordinated manual efforts to systematically retrieve large quantities of historical inspection reports.

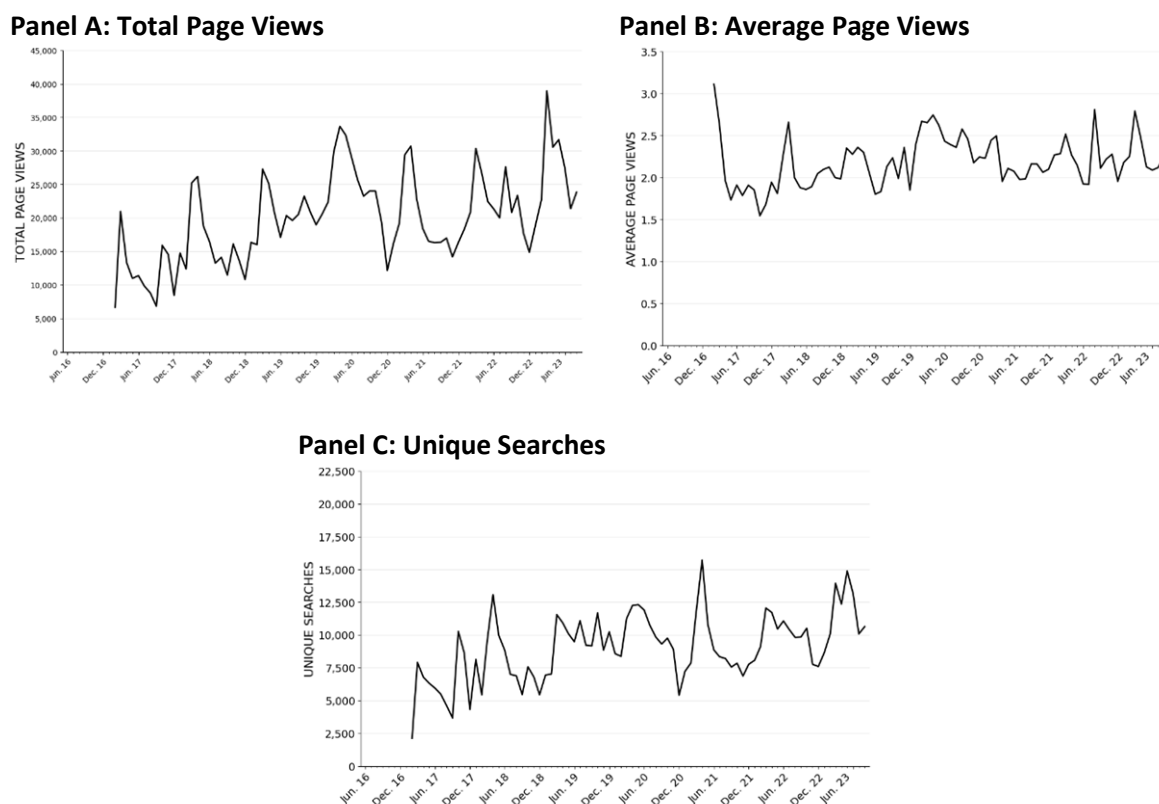
²⁶ The search string URLs are still active and can be seen on the live website as of June 2025.

²⁷ We examine whether there is systematic access to Form AP filings around their filing dates in Subsection 3.4.

Panel B presents trends in monthly average page views per unique AuditorSearch page. After an initial adjustment period, the average views per search stabilize. Average views per search URL were roughly 1.5 to 2.0 in 2017 through early 2019 and have drifted up to 2.0 to 2.5 in recent years. There are brief increases above 2.5, occurring in late 2019 and mid-2022, but generally, engagement per search remains consistent. This stability is consistent with the notion that AuditorSearch efficiently guides users to relevant information without requiring numerous repeated clicks or redundant queries.

Panel C presents the monthly number of unique AuditorSearch queries entered by stakeholders. Stakeholders steadily broaden their range of search terms over time. Following the 2020 website redesign, unique searches show high volatility, peaking at over 15,000 in early 2021 before declining sharply to below 7,500 in mid-2021. However, unique queries rebound strongly to 12,500 to 15,000 per month in 2022 and early 2023. This resurgence suggests that stakeholders continue to broaden the scope of searches for audit firm, engagement partner, and issuer information, even as the redesigned search tool likely reduces trial-and-error searching.

Figure 4
Monthly Trends in Active Searches on AuditorSearch



This figure plots trends in monthly statistics of active searches on AuditorSearch from February 2017 to August 2023. In Panel A, the solid black line is total page views over time. In Panel B, the solid black line represents the average number of page views per unique active search URL over time. In Panel C, the solid black line represents the number of unique active search URLs accessed each month.

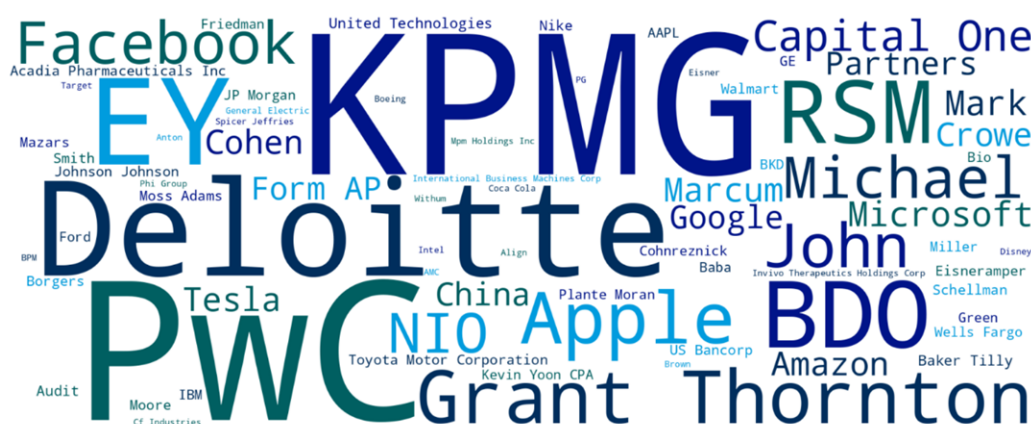
Collectively, the patterns in Figure 4 suggest that AuditorSearch continues to grow as an important resource for stakeholders. Users increasingly rely on the tool, with overall traffic rising steadily and

seasonal peaks highlighting its potential importance for timely information. The rising overall engagement demonstrates ongoing stakeholder interest in exploring a wide range of information on audit firms, engagement partners, and issuers.

Figure 5 presents a word cloud depicting the relative frequencies of 75 most common AuditorSearch keywords entered by stakeholders. We derive these keywords from active AuditorSearch URLs, as described in Subsection 2.5. These data span February 2017 to April 2021, after the website redesign or a change in Google Analytics discontinued the capture of these terms. To construct the word cloud, we extract individual search terms from URL strings and use a fuzzy-matching technique to group related terms. We also aggregate searches for audit firm names with their common abbreviations.²⁸

Consistent with expectations, the six most prominent terms correspond to the six GNF audit firms. Additionally, stakeholders frequently search for specific issuer names, indicating targeted stakeholder interest in issuer-level Form AP information. Finally, the prevalence of individual names among top search terms suggests that stakeholders also seek information about specific engagement partners.

Figure 5
Relative Frequencies of the Top 75 Search Terms on AuditorSearch



This figure displays a word cloud of the 75 most frequently used AuditorSearch terms entered by stakeholders from February 2017 to April 2021. The size of each term indicates its frequency relative to other terms.

²⁸ The raw data include many spelling errors (e.g., “Deloitte” versus “Deloite”) and different references to the same entity (e.g., “EY” versus “EY LLP”). The fuzzy matching technique examines how many character changes are needed to make the two words match each other, assigning a score from 0 to 100, with 100 being a perfect match and 0 indicating no similarity. Terms with a score of 80 or above are grouped to consolidate similar variants.

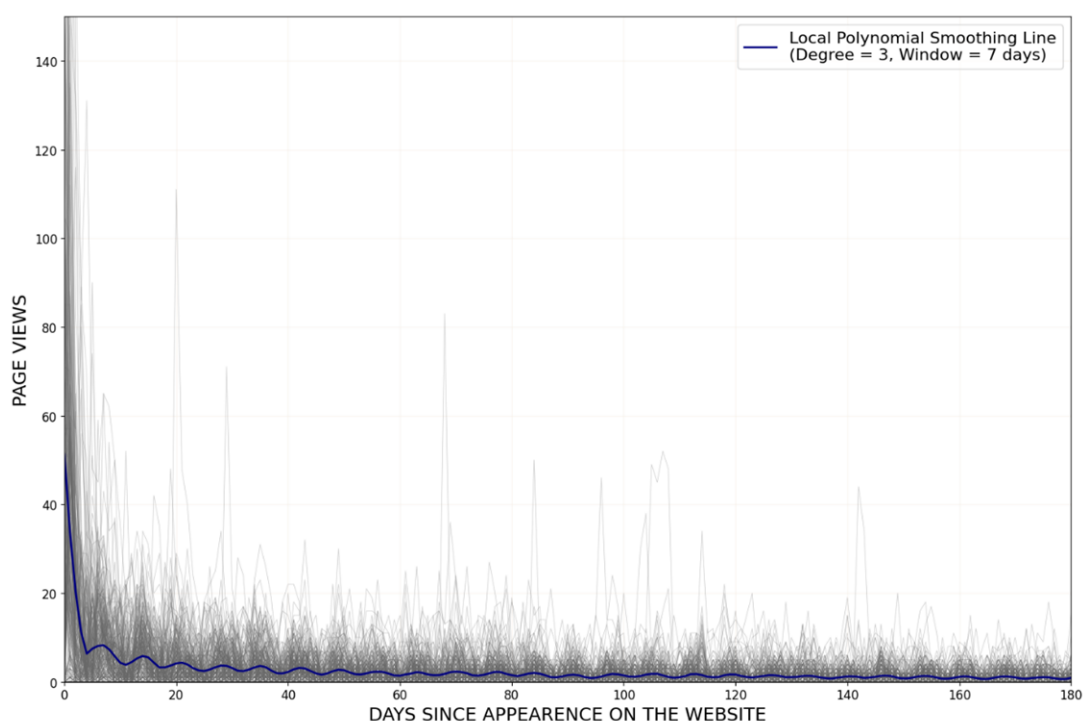
3.3. Daily Page Views

We next examine stakeholder engagement with inspection reports, enforcement actions, and Form AP summaries in event time. Specifically, we plot the event-time distribution of total page views for each disclosure type, starting from the first day (day 0) each document is posted to the website.

3.3.1. Enforcement Actions

Figure 6 depicts stakeholder engagement with enforcement actions. The patterns show a pronounced spike in daily page views of these documents immediately following the initial posting. Stakeholder engagement with enforcement action documents rapidly decline during the first month after release. This engagement pattern aligns with prior evidence from event-driven disclosures on the SEC’s EDGAR database, where initial search traffic is high but decays quickly over time (e.g., Loughran and McDonald, 2017; Boone et al., 2021).

Figure 6
Decay Rate of Enforcement Action Page Views

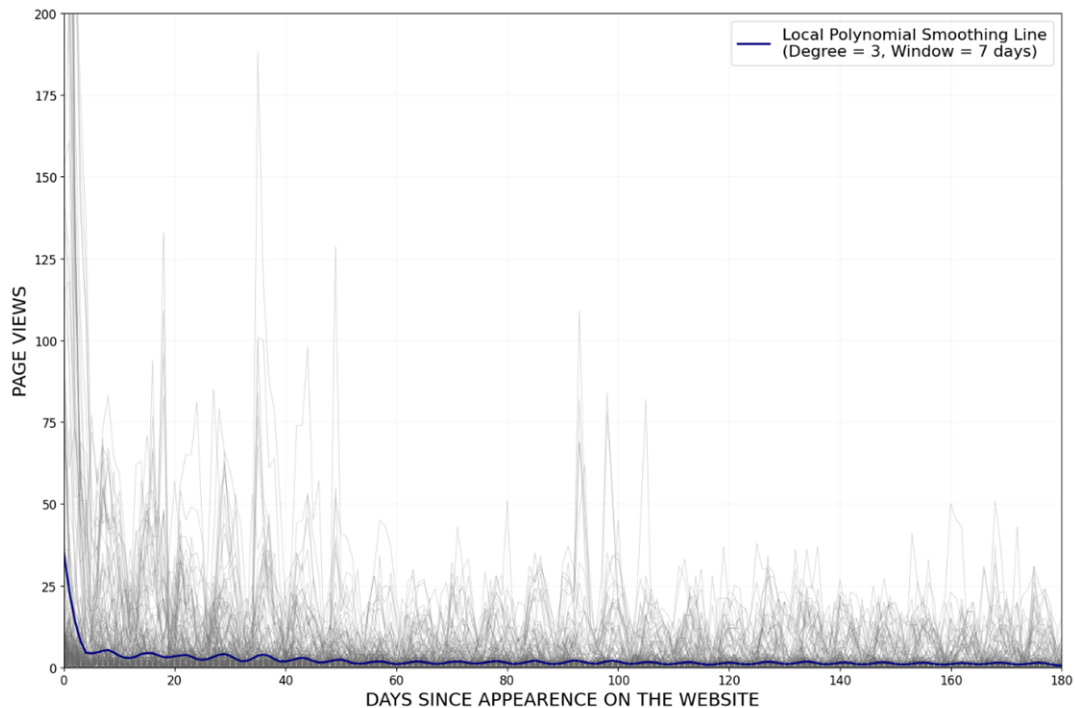


This figure illustrates the decline in total page views for enforcement actions in event time, where day 0 represents the date an enforcement action first appears on the PCAOB’s website over June 2016 to August 2023, excluding late November to early April 2021 when data were not captured due to the website redesign. The light gray lines represent individual enforcement actions in the sample (approximately 430 filings), showing the daily page views for each document. The transparency of the gray lines indicates density. The lighter lines represent isolated documents with unique spikes in views. The darker, more solid areas indicate overlapping trends across multiple documents. The blue line is a smoothed fit using a third-order polynomial with a seven-day window, which serves as a trend line similar to a moving average.

3.3.2. Inspection Reports

Figure 7 shows stakeholder engagement patterns for inspection reports. Similar to enforcement actions, inspection reports experience a strong spike upon initial release. However, the subsequent decline in daily page views occurs at a slower rate. This indicates that inspection reports maintain stakeholder interest over a longer period compared to enforcement actions.

Figure 7
Decay Rate of Inspection Reports Page Views



This figure illustrates the decline in total page views for inspection reports in event time, where day 0 represents the date an inspection report document first appears on the PCAOB’s website over June 2016 to August 2023, excluding late November to early April 2021 when data were not captured due to the website redesign. The light gray lines represent individual inspection reports in the sample (over 3,700 filings), showing the daily page views for each document. The transparency of the gray lines indicates density. The lighter lines represent isolated documents with unique spikes in views. The darker, more solid areas indicate overlapping trends across multiple documents. The blue line is a smoothed fit using a third-order polynomial with a seven-day window, which serves as a trend line similar to a moving average.

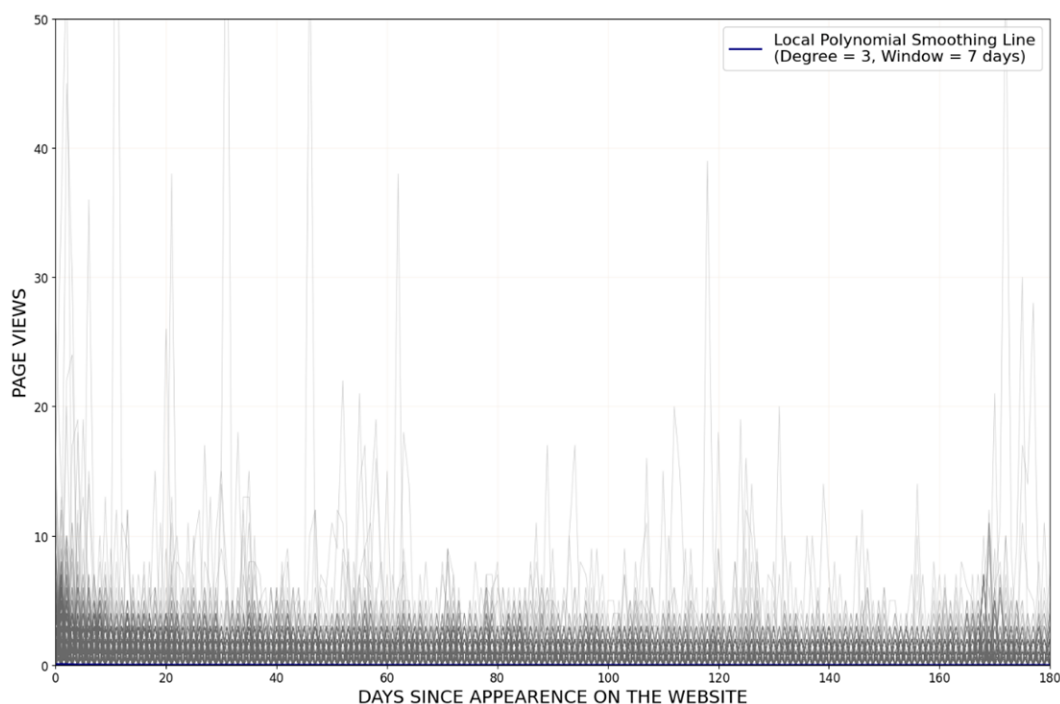
3.3.3. Form AP Filings

For Form AP filings, we focus specifically on active AuditorSearch URLs containing an identifiable Form AP filing ID, which represent the Form AP summary webpages that show as results in AuditorSearch (see Subsection 2.5). These data are available for Form APs filed from February 2017 to August 2023.

Figure 8 plots the daily page views for Form AP summaries over the first 180 days after filing. Unlike the immediate spikes for enforcement actions and inspection reports, Form AP summaries exhibit relatively

stable engagement levels over time without pronounced initial spikes.²⁹ This indicates that stakeholders typically access Form AP summary information as an ongoing reference, which is likely driven by specific informational needs rather than immediate reactions by stakeholders to their initial postings.

Figure 8
Decay Rate of Form AP Summaries



This figure illustrates the daily total page views of Form AP summaries in event time, where day 0 represents the date a Form AP was filed on the PCAOB’s website. The sample includes Form APs filed from February 2017 to August 2023. Each light gray line represents the daily views of an individual Form AP summary (over 70,000 unique filings). The transparency of the gray lines indicates density. The lighter lines represent isolated documents with unique spikes in views. The darker, more solid areas indicate overlapping trends across multiple documents. The blue line is a smoothed fit using a third-order polynomial with a seven-day window, which serves as a trend line similar to a moving average. Due to low average daily views, the blue line remains close to zero near the X-axis.

3.3.4. Distribution of Page Views

To quantitatively compare stakeholder engagement across disclosure types, Table 2 provides the cumulative distribution of page views within the first 400 days of appearance on the PCAOB’s website. We choose this period to be consistent with the analysis of website traffic for SEC EDGAR filings by Loughran and McDonald (2017).³⁰

²⁹ Form APs are posted on AuditorSearch within three days of their filing. Unlike enforcement actions and inspection reports, which the PCAOB announces through news release, Form AP postings are not accompanied by a news release.

³⁰ Loughran and McDonald (2017) find that a substantial percentage of document requests on EDGAR occur within the first month of filing. They find that, depending on the type of filing, 5% to 30% of views occur in the first day, 10% to 48% occur in the first week, and 22% to 63% occur in the first month. More timely filings such as a prospectus on Form S-1 have almost a

The findings in Table 2 reinforce the observation that enforcement actions experience rapid initial engagement, receiving 15% of their total page views during this period on the first two days of the release and 24% within the first week. In contrast, inspection reports exhibit more gradual declines in engagement. Only 6% of their total page views during this period occur on the first two days, with 11% accumulated within the first week. Form AP summaries also exhibit a more evenly distributed pattern than enforcement actions, receiving only 4% of their total page views within two days and about 10% within the first week.

Table 2
Distribution of Page Views within 400 Days of Posting

| Period ending: | Percentage of Page Views Occurring in Days [0,400] | | | | | | Total Views in [0,400] days |
|---------------------|----------------------------------------------------|------------|-------------|---------------|----------------|----------|-----------------------------|
| | Day [0,1] | First Week | First Month | First Quarter | Second Quarter | One Year | |
| Enforcement Actions | 15.4 | 24.4 | 37.9 | 57.7 | 75.2 | 96.9 | 117,564 |
| Inspection Reports | 6.1 | 11.5 | 23.9 | 41.1 | 62.0 | 94.3 | 200,826 |
| Form AP Summaries | 4.0 | 10.4 | 24.1 | 45.6 | 63.3 | 95.6 | 248,623 |

This table provides the distribution of page views occurring within the first 400 days since the inspection report, enforcement action, or Form AP summary first appeared on the PCAOB's website. To calculate these statistics for inspection reports and enforcement actions, we restricted our sample to only those first published from June 2016 to July 2022 (to allow for a 400-day window to the end of our sample period in August 2023). We also removed any inspection report and enforcement action where the 400-day window since publication overlapped by 90 days or more with the blackout period from late November to early April 2021 when Google Analytics did not track page views for the PDFs. For Form AP summaries, we included all Form APs filed from February 2017 to July 2022 (to allow for a 400-day window to the end of our sample period in August 2023); there was no blackout period for Form AP summaries as they were not impacted in the same way as inspection reports and enforcement actions during the website redesign.

After 100 days, enforcement actions receive approximately 58% of their eventual 400-day traffic, while inspection reports and Form AP summaries accumulate approximately 41% and 46%, respectively. By the end of one year (fourth quarter), enforcement actions receive almost 97% of their total 400-day page views, whereas inspection reports and Form AP summaries have slightly lower cumulative views (94% and 96%, respectively) at this point. This indicates that a slightly larger portion of stakeholder engagement with inspection reports and Form AP summaries extend beyond the initial year.

Taken together, these patterns imply that enforcement actions function more like event-driven disclosures with immediate relevance and stakeholder engagement, which is similar to patterns observed for news-based disclosures on the SEC's website. Conversely, inspection reports and Form AP summaries appear to serve as more persistent reference materials, attracting more enduring stakeholder interest in their content. This pattern is more similar to web traffic on the SEC's website for periodic financial disclosures by issuers.

third of their views (30%) in the first week and more than half of their views (63%) in the first month. Other filings that can be referenced more often, such as an annual report on Form 10-K, have only 5% of their views in the first day, 10% in the first week, and 22% in the first month. Boone et al. (2021) find similar search patterns for SEC filings by foreign private issuers.

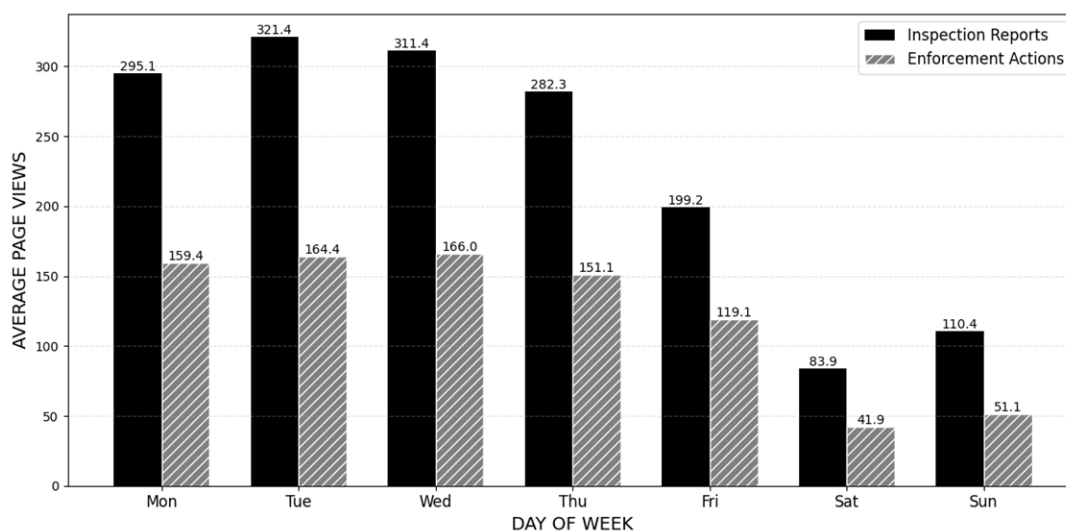
3.4. Temporal and Geographic Patterns in Stakeholder Engagement

This section provides more granular information on temporal patterns in stakeholder engagement with PCAOB information. We first analyze daily website engagement patterns across days of the week, followed by hourly patterns segmented by geographic regions. We also quantify stakeholder interest in audit firms domiciled outside the U.S. by examining Form AP search data. Together, these analyses offer insights into the timing and international scope of stakeholders interactions with PCAOB information.

3.4.1. Day of Week

Figure 9 presents average daily page views for inspection reports and enforcement actions, categorized by each day of the week. The graph reveals noticeable differences between weekday and weekend engagement. Specifically, average daily views are markedly higher from Monday to Thursday, peaking on Tuesday (321 views for inspection reports and 164 views for enforcement actions) and Wednesday (311 and 166 views, respectively). Engagement declines slightly on Thursday and more on Friday. Weekend engagement is much lower, with Saturdays having the lowest average daily activity (83 views for inspection reports and 42 views for enforcement actions). Sundays exhibit slightly higher engagement compared to Saturdays but remain below weekday levels.³¹

Figure 9
Average Daily Page Views of Inspection Reports and Enforcement Actions by Day of Week

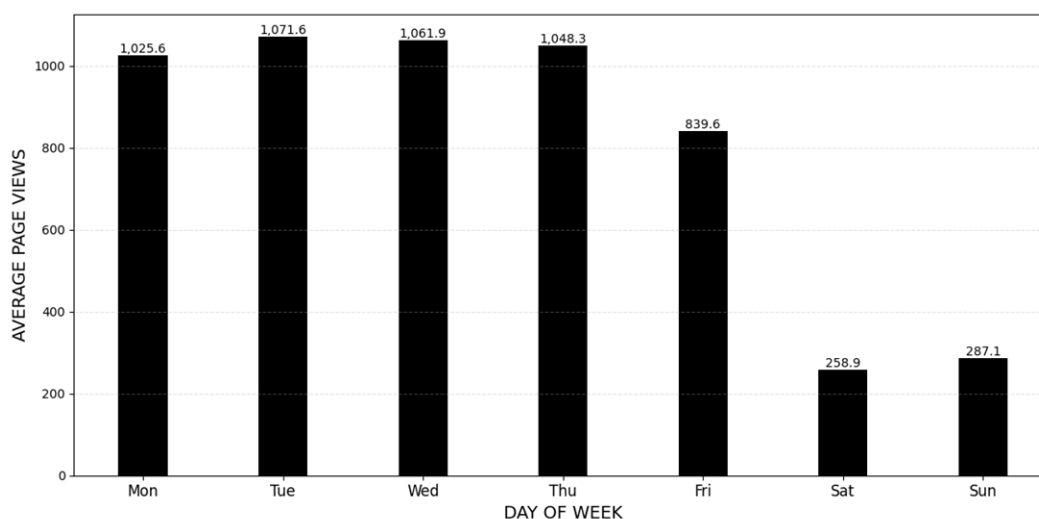


This figure presents the average daily page views for inspection reports and enforcement actions on the PCAOB's website, categorized by the day of the week. The bars represent the average number of page views on each day during the sample period June 2016 to August 2023, excluding late November 2020 to early April 2021 when data were not captured due to the website redesign.

³¹ The day of the week is determined by the timestamps in our data, which are reported using U.S. Eastern Time. However, our data include any users that viewed the PCAOB website, including international users. This may in part explain why there is a drop in average views on Friday, as international business hours end much earlier than U.S. business time in Eastern Time. Thus, the weekend for international users will have begun early Friday based on U.S. Eastern Time. The same possible explanation applies to why there is a slight increase in usage on Sundays. We further exploit these time zone differences to identify possible international stakeholder usage in Subsection 3.4.2.

Figure 10 presents the average daily page views of active search URLs on AuditorSearch by day of the week. Consistent with Figure 9, there is a clear spike in usage during the weekdays, peaking at 1,071 average views on Tuesday, with a notable drop during weekends to 259 average views on Saturday.

Figure 10
Average Daily Page Views of Active Searches on AuditorSearch by Day of Week



This figure presents the average daily page views for active search URLs on AuditorSearch, categorized by the day of the week. The bars represent the average number of page views on each day during the sample period February 2017 to August 2023.

The clear contrast between weekday and weekend engagement in Figures 9 and 10 closely aligns with standard professional working days.³² This pattern is consistent with business professionals constituting a substantial share of PCAOB website users, primarily accessing regulatory information as part of their standard workweek activities.

3.4.2. Hourly by Geographic Region

To understand how global stakeholders interact with PCAOB disclosures, we analyze hourly engagement patterns with inspection reports, enforcement actions, and Form AP summaries. We first aggregate total page views across these three disclosure types and then classify each based on the country where the audit firm or individual respondent(s) listed in the inspection report or enforcement action is domiciled; for Form AP summaries, we use the country listed on the Form AP filing that represents the country where the audit firm who issued the audit report is domiciled.

We then group these countries into regions based on time zones by combining countries whose local business hours typically start within approximately one or two hours of each other. The resulting

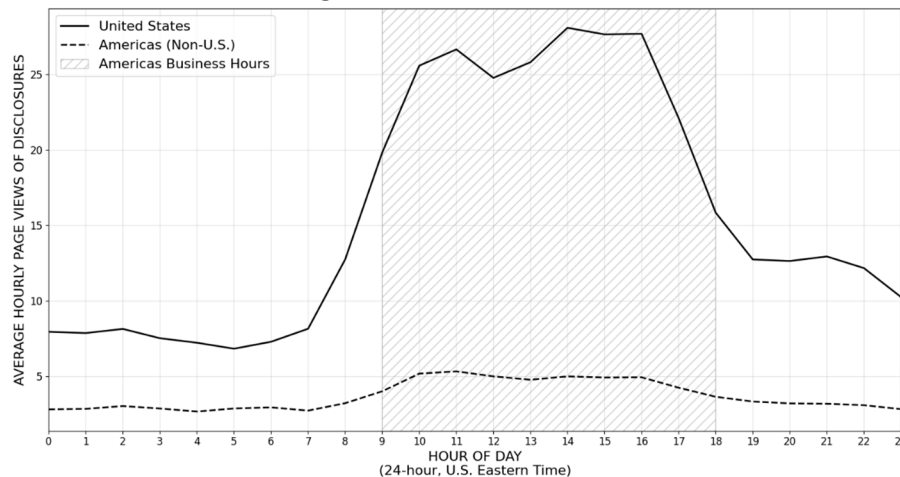
³² The weekday-focused engagement in Figures 9 and 10 is similar to those documented in prior research studying EDGAR access for SEC filings. For example, Drake et al. (2015) report similar weekday heavy access patterns for SEC filings on EDGAR.

geographic regions are: (1) U.S., (2) Americas (non-U.S.), (3) East Asia, (4) Australia/New Zealand, (5) India/West Asia, (6) Western Europe/Africa, and (7) Eastern Europe/Middle East.³³

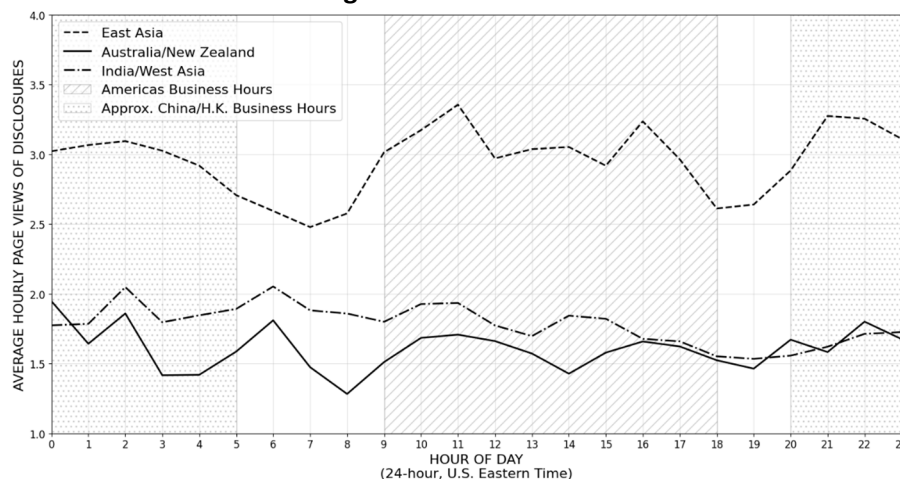
Figure 11 displays average hourly page views in U.S. Eastern Time (ET), with shaded areas indicating the approximate standard business hours for the respective regions. Panel A depicts average hourly engagement from users accessing disclosures related to audit firms and individuals domiciled in U.S. and the non-U.S. Americas region. The average page views of U.S.-focused inspection reports, enforcement actions, and Form AP summaries exhibit a noticeable pattern, rising sharply during typical U.S. business hours, peaking between 11 a.m. and 4 p.m. ET, and declining in the evening. Average views of these three disclosures for the non-U.S. Americas follow a somewhat similar pattern, albeit with notably lower magnitudes of engagement relative to U.S.-focused disclosures.

Figure 11
Average Hourly Page Views of Inspection Reports, Enforcement Actions, and Form AP Summaries, by Region

Panel A: The Americas Regions

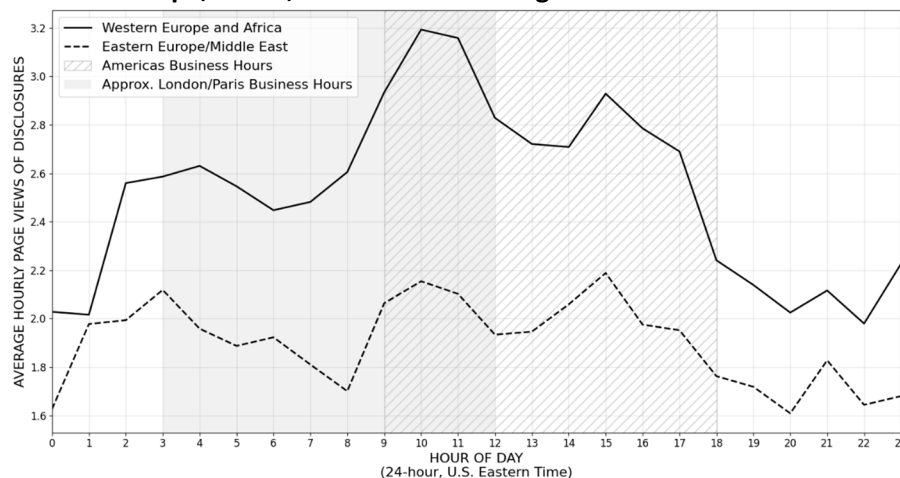


Panel B: The Asia-Pacific Regions



³³ These regional classifications reflect researcher judgment and do not represent formal regional groupings used by the PCAOB.

Panel C: Europe, Africa, and Middle East Regions



This figure plots the average hourly page views of three disclosure types combined: inspection reports, enforcement actions, and Form AP summaries. For inspection reports and enforcement actions, the data covers those disclosures accessed on the PCAOB’s website from June 2016 to August 2023, excluding late November 2020 to April 2021 when data were not captured due to the website redesign, segmented by the region where the audit firm and/or individual respondent(s) are domiciled. For Form AP summaries, the data covers those Form APs filed from February 2017 to August 2023, segmented by the region where the audit firm who issued the audit report is domiciled. The data are presented in 24-hour U.S. Eastern Time zone, with shaded areas highlighting typical business hours in the Americas (diagonals), China/Hong Kong (dots), and London/Paris (solid). The different patterned lines represent users accessing inspection reports, enforcement actions, and Form AP summaries related to firms or individuals domiciled in the seven respective regions: U.S., the Americas (excluding the U.S.), East Asia, Australia/New Zealand, India/Western Asia, Western Europe/Africa, and Eastern Europe/Middle East. Panel A shows the Americas Regions, Panel B displays the Asia-Pacific Region, and Panel C presents Europe, Africa, and Middle East Regions.

Panel B displays engagement patterns for the Asia-Pacific-focused PCAOB disclosures. Those with audit firms or individual respondents based in East Asia, in particular, show a noticeable increase in activity during regional business hours, corresponding approximately to evening times in ET.³⁴ We also observe a separate increase in engagement for East Asia during the start of U.S. business hours and extending through the U.S. workday, suggesting that U.S. stakeholders also have an interest in these East Asia-focused disclosures. Although the peak in the East Asia region at the start of their business day is clear (right side of graph), the overall magnitude of this engagement remains lower than engagement with disclosures focused on only U.S. audit firms and individuals. Australia/New Zealand and India/Western Asia show less pronounced patterns, with relatively modest engagement throughout the day.

Panel C covers Europe, Africa, and the Middle East-focused disclosures. PCAOB disclosures with audit firms or individual respondents based in Western Europe and Africa show an initial increase at the start of their local business hours (early morning in the U.S.), and remain elevated through midday, suggesting that stakeholders in both Europe and the U.S. may contribute to the observed activity. Eastern Europe/Middle East disclosures show a modest but consistent uptick in views during the start of their local business hours (approximately two hours before the local business hours of London and Paris), waning towards the end of their local business hours and rebounding when U.S. business hours begin.

³⁴ For example, 8 p.m. ET corresponds to 9 a.m. in Hong Kong during U.S. standard time. During U.S. daylight savings time, 8 p.m. ET corresponds to 8 a.m. in Hong Kong. As such, the switch between standard time and daylight savings time in the U.S. introduces noise into our time zone analysis.

Overall, the patterns in Figure 11 suggest that a global audience exists for PCAOB inspection reports, enforcement actions, and Form AP summaries, with the most significant uptick in stakeholder engagement occurring during U.S. business hours. This pattern indicates substantial usage by U.S.-based stakeholders. Nevertheless, page views also rise for disclosures involving non-U.S. entities and individuals during times that correspond to the local business hours of their respective region, which suggests there is meaningful international stakeholder engagement with PCAOB information.

3.4.3. Stakeholder Interest in Non-U.S. Audit Firm Information

While the preceding analyses indirectly infer stakeholder locations based on engagement timing, we next directly examine stakeholder interest by quantifying views of Form AP summaries for audit firms in specific locations. For this analysis, we focus on views of Form AP summaries available via AuditorSearch for two reasons. First, views of these summaries reflect organic information demand, as the PCAOB does not actively promote specific Form AP filings through press releases or email alerts, and stakeholders appear to access this information on an as-needed basis based on the results in Subsection 3.3.3. Second, the continuous and consistent availability of Form AP summaries in our dataset from February 2017 to August 2023 mitigates potential measurement concerns arising from changes in Google Analytics tracking methods.

For this analysis, we categorize each Form AP summary according to the auditor’s country of domicile, as reported in Item 3.1 of Form AP. We then aggregate monthly page views by country and sum these views across the entire sample period. Table 3 presents the ten non-U.S. countries whose audit firms attract the highest cumulative stakeholder interest based on Form AP summary views.

Audit firms in China and Canada receive the most page views, followed by the United Kingdom, which ranks third with approximately half as many views as the top two countries. Stakeholders also frequently access information related to auditors based in Hong Kong and Israel.³⁵

Table 3
Top 10 Most Frequently Viewed Non-U.S. Countries Based on Form AP Summaries

| Country | Page Views | Country | Page Views |
|-------------------|------------|--------------|------------|
| 1. China | 11,607 | 6. India | 1,749 |
| 2. Canada | 9,525 | 7. Brazil | 1,325 |
| 3. United Kingdom | 4,490 | 8. Japan | 1,282 |
| 4. Hong Kong | 2,894 | 9. Singapore | 1,198 |
| 5. Israel | 2,892 | 10. France | 1,121 |

This table shows the cumulative page views of Form AP Summaries from February 2017 to August 2023, categorized by the country of the audit firm that issued the audit report, as reported in Item 3.1 of Form AP. The table lists the top ten countries ranked by total page views from AuditorSearch.

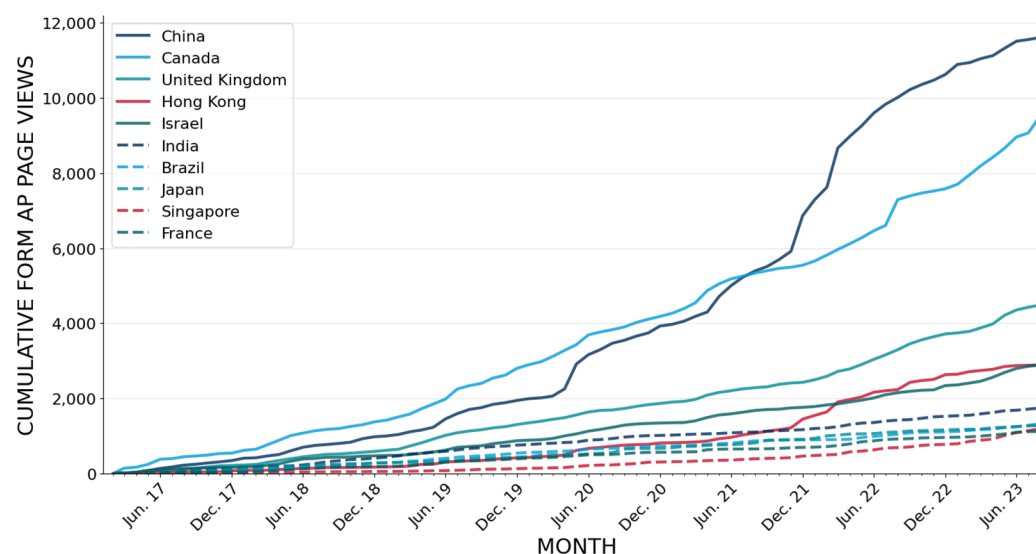
³⁵ Form AP summaries for U.S.-based auditors attract substantially greater attention, accumulating over ten times the page views (276,596) of the most-viewed non-U.S. country (China, with 11,607 page views).

Figure 12 further illustrates cumulative stakeholder engagement trends for the ten most-viewed Form AP summaries for auditors in non-U.S. countries over the study period. Canadian audit firms attract consistently high stakeholder attention throughout the entire period, although interest in Chinese audit firms steadily increases and ultimately surpasses that of Canadian firms by the end of the sample period.

Interest in Chinese and Hong Kong audit firms notably intensifies during periods associated with key developments surrounding the Holding Foreign Companies Accountable Act (HFCAA). Specifically, cumulative Form AP views for China and Hong Kong audit firms markedly increase between 2019 and 2022, with pronounced spikes coinciding with significant regulatory events: (1) June 2019, when the U.S. Senate Committee on Banking, Housing, and Urban Affairs held its initial HFCAA hearing; (2) May 2020, when the U.S. Senate passed its version of the HFCAA; (3) December 2021, when the PCAOB issued its determination report concluding it was unable to inspect or investigate completely registered firms headquartered in mainland China and Hong Kong; and (4) March 2022, when the SEC published its first provisional list identifying five Chinese issuers at risk of delisting under the HFCAA. The Appendix provides additional details regarding these and other relevant HFCAA events.

Collectively, these findings suggest that stakeholders actively use Form AP disclosures to obtain audit-related information about firms domiciled outside the U.S., particularly during periods of intensified regulatory scrutiny.

Figure 12
Top 10 Most Frequently Viewed Form AP Summaries from Non-U.S. Countries Over Time



This figure plots the cumulative Form AP summaries page views from February 2017 to August 2023 for audit firms located in the ten most viewed non-U.S. countries. Countries are identified based on the audit firm's location reported in Item 3.1 of Form AP. The figure excludes the U.S. to clearly illustrate trends in stakeholder interest regarding audit firms domiciled in other jurisdictions.

3.5. Possible Avenues for Future Research

Our findings suggest several possible avenues for future research. Below, we provide a non-exhaustive list of potential future research areas using the detailed PCAOB website engagement data.

Generally, researchers could explore underlying determinants of the observed variation in stakeholder engagement, such as PCAOB dissemination methods, subsequent Part II inspection findings releases, media coverage, regulatory developments, and auditor- or issuer-specific events (e.g., financial restatements).

The noticeable spikes and systematic download patterns associated with inspection reports may warrant additional analysis to better understand their underlying drivers, such as exploring the impact of regulatory cycles or coordinated stakeholder monitoring. Additionally, the gradual but steady rise in stakeholder engagement with enforcement actions could warrant further investigation into factors (e.g., PCAOB inspection activities, external market demands) contributing to this trend.

Future research on inspection reports and enforcement actions could examine whether fluctuations in website engagement are related to weekly cycles or specific events that draw renewed attention to certain inspection reports or enforcement actions. This analysis could help determine whether similar weekday trends exist across different sources of information and how the timing of information releases interacts with stakeholder engagement and related market activity. Future work could also explore whether certain types of enforcement actions (e.g., settled disciplinary orders, adjudicated disciplinary orders, and termination of bars) or certain content disclosed in inspection reports sustain engagement for longer periods and whether news cycles influence the decay rate of views.

Future research could also provide insights into when and why stakeholders turn to the AuditorSearch tool. For example, future research could explore the impact of changes in website functionality (e.g., specific aspects of the PCAOB website redesign) on AuditorSearch usage, examining whether changes in stakeholder behavior over time reflect improved usability, shifts in information demand, or heightened market-wide interest in audit quality. Additionally, understanding the context behind the peaks in usage could provide insights into how stakeholders use the tool in response to auditor-related news, market developments, or regulatory events, while also exploring the seasonality in usage (e.g., spikes in March). Researchers might also examine whether the AuditorSearch tool serves as a complement or substitute for other audit firm or engagement partner information sources.

Finally, leveraging hourly and geographic data offers additional opportunities to further explore international dimensions of stakeholder engagement. Researchers could assess whether enforcement actions involving non-U.S. audit firms attract different levels of attention based on factors such as the severity of sanctions, country-specific investor protections, strength of local audit oversight, or regional media coverage. Insights from such analyses could contribute to understanding global stakeholder participation in auditor oversight and compliance monitoring.

4. CONCLUSION

This paper offers the first comprehensive empirical analysis of direct stakeholder engagement with audit-related information made available on the PCAOB website. Four principal findings emerge from our analysis. First, inspection reports consistently attract higher overall stakeholder engagement relative to enforcement actions, which highlights their key role in informing market participants about audit quality and oversight. Second, while enforcement actions generate substantial immediate attention, this interest quickly diminishes, whereas inspection reports retain stakeholder attention for extended periods, suggesting their use as ongoing reference materials. Third, AuditorSearch experiences sustained growth in stakeholder use, suggesting it is an important stakeholder resource for audit-related

information. Additionally, the relatively steady engagement levels with AuditorSearch suggest stakeholders utilize this tool on an as-needed basis rather than strictly in response to new disclosures. Fourth, analysis of timing and geographic patterns suggest there is global stakeholder interest in PCAOB information on audit firms, engagement partners, and associated individuals. Moreover, stakeholder attention to disclosures involving non-U.S. audit firms notably intensifies during periods associated with heightened regulatory scrutiny.

Collectively, our results highlight the significant influence that both the presentation of regulatory disclosures and their underlying content have on shaping stakeholder interaction. For regulatory agencies, our findings highlight that improvements in user-focused design and accessibility can impact stakeholder use of oversight information. For academics, auditors, investors, and other market participants, our study provides clarity on when and how stakeholders engage with transparency tools and offers insights on how aligning regulatory disclosures more closely with stakeholder informational needs can generate benefits.

Looking forward, future research that integrates detailed PCAOB website engagement data with stakeholder behaviors, auditor or regulator actions, and economic outcomes could deepen our understanding of how stakeholders incorporate oversight information into assessments of audit quality.

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Appendix. Timeline of Events Related to PCAOB's Access to Inspect and Investigate Chinese Audit Firms

| Date | Event | Source |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| June 4, 2019 | U.S. Senate Banking Committee holds initial hearing on S.945, the Holding Foreign Companies Accountable Act (HFCAA). | https://www.congress.gov/event/116th-congress/senate-event/LC64462/text |
| May 20, 2020 | U.S. Senate unanimously passes the HFCAA. | https://www.congress.gov/116/bills/s945/BILLS-116s945es.xml |
| December 2, 2020 | U.S. House of Representatives passes the HFCAA by unanimous voice vote. | https://www.govinfo.gov/content/pkg/CREC-2020-12-02/html/CREC-2020-12-02-pt1-PgH6031.htm |
| December 18, 2020 | President Trump signs the HFCAA into law. | https://www.congress.gov/bill/116th-congress/senate-bill/945/all-actions |
| May 13, 2021 | PCAOB proposes Rule 6100, establishing a framework for Board determinations under the HFCAA. | https://pcaobus.org/news-events/news-releases/fact-sheet-proposing-release-for-pcaob-rule-to-establish-hfcaa-framework |
| September 22, 2021 | PCAOB adopts Rule 6100 on Board determinations under the HFCAA. | https://pcaobus.org/news-events/news-releases/news-release-detail/pcaob-adopts-rule-to-create-framework-for-hfcaa-determinations |
| November 4, 2021 | SEC approves PCAOB Rule 6100 governing Board determinations under the HFCAA. | https://assets.pcaobus.org/pcaob-dev/docs/default-source/rulemaking/docket048/34-93527.pdf?sfvrsn=2c805757_4 |
| December 16, 2021 | PCAOB issues determinations report that it is unable to fully inspect or investigate audit firms headquartered in mainland China and Hong Kong. | https://pcaobus.org/news-events/news-releases/news-release-detail/pcaob-makes-hfcaa-determinations-regarding-mainland-china-and-hong-kong |
| March 10, 2022 | SEC publishes first provisional list identifying Chinese issuers at risk of delisting under the HFCAA. | https://web.archive.org/web/20220309145328/https://www.sec.gov/hfcaa |
| December 15, 2022 | PCAOB secures complete access to inspect and investigate Chinese audit firms for the first time in history. | https://pcaobus.org/news-events/news-releases/news-release-detail/pcaob-secures-complete-access-to-inspect-investigate-chinese-firms-for-first-time-in-history |
| May 10, 2023 | PCAOB releases 2022 inspection reports for audit firms based in mainland China and Hong Kong. | https://pcaobus.org/news-events/news-releases/news-release-detail/pcaob-releases-2022-inspection-reports-for-mainland-china-hong-kong-audit-firms |