

TREASURY INSPECTOR GENERAL FOR TAX ADMINISTRATION



Opportunities Exist to Improve the Quality of Chat Applications

June 15, 2026

Report Number: 2026-308-029

Why TIGTA Did This Audit

In July 2019, the Taxpayer First Act (TFA) was enacted into law, which required the IRS to develop a comprehensive customer service strategy that would meet taxpayers' expectations and expand online services.

Before the passage of the TFA, in November 2017, the IRS began using chat applications by introducing live chat as a pilot program. In December 2021, the IRS expanded its chat applications to include automated chatbots.

The IRS's Inflation Reduction Act Strategic Operating plan incorporated the TFA's recommendations to reimagine the taxpayer experience, enhance employee training, and restructure the IRS to increase collaboration and innovation.

We determined if the IRS's chatbot and live chat applications provided effective and efficient service to help taxpayers meet their tax obligations.

Impact on Tax Administration

The IRS implemented chat applications to improve customer service by promoting the use of online services and providing an alternative communication method for taxpayers in lieu of calling the IRS toll-free line. If they operate efficiently, it could result in increased service provided by the toll-free line. However, if chat applications do not provide accurate and sufficient information, it could lead taxpayers to file an inaccurate tax return or require them to contact the IRS again.

What TIGTA Found

IRS management has not taken sufficient steps to evaluate the effectiveness of the Automated Collection Service (ACS) function's chat applications. Nevertheless, the ACS chat program was expanded. Compounding this issue, the data currently collected to measure program performance is unreliable, limiting the IRS's ability to determine whether the expanded program is operating effectively.

Specifically, the IRS has not analyzed its chat applications and does not have any performance measures. Our review of statistical reports identified outliers and discrepancies that made the reliability of these reports questionable. For example, the reports showed a live assistor handling as many as 603 live chats at the same time, which the IRS agreed was incorrect because the system limits the number of concurrent chats to 3.

We also reviewed 40 live assistors and assessed the transcripts of their live chats. We identified 24 live assistors (60 percent) that worked multiple live chats concurrently. Working multiple chats concurrently can decrease customer service and increase the risk of inappropriately disclosing taxpayer information to the wrong taxpayer.

Further, ACS management only conducted nonevaluative performance reviews of live assistors since they considered live chat to be a pilot program. Nonevaluative reviews cannot be used as part of the employee's performance appraisal. Although there is no agencywide policy that prohibits evaluative performance reviews during a pilot program, ACS management stated that they plan to implement evaluative reviews in April 2026.

Lastly, we identified 29 responses and 44 keywords or questions where the ACS automated chatbot did not provide sufficient information or was not able to recognize the keywords or questions typed into the search box. We notified ACS management and they subsequently began taking corrective actions to address the deficiencies.

What TIGTA Recommended

We made nine recommendations to the IRS, including developing a process to validate the accuracy and completeness of the ACS chat applications' data; establishing standards to assess the effectiveness and efficiency of the ACS chat applications; and implementing guidance for conducting evaluative reviews for live assistors.

IRS management agreed with all nine recommendations and plans to implement corrective actions for five of the recommendations such as validating the accuracy and completeness of ACS chat applications' data. The IRS also stated that it has already implemented corrective actions for the remaining four recommendations such as implementing guidance for managing the ACS live chat application, and evaluative reviews for employees working ACS live chats.



**TREASURY INSPECTOR GENERAL
FOR TAX ADMINISTRATION**

**U.S. DEPARTMENT OF THE TREASURY
WASHINGTON, D.C. 20024**

June 15, 2026

MEMORANDUM FOR: COMMISSIONER OF INTERNAL REVENUE

FROM: Diana M. Tengesdal
Deputy Inspector General for Audit

SUBJECT: Final Audit Report – Opportunities Exist to Improve the Quality of Chat Applications (Audit No.: 2024308023)

This report presents the results of our review to determine if the Internal Revenue Service's (IRS) chatbot applications provide effective and efficient service to help taxpayers meet their tax obligations. This review was part of our Fiscal Year 2025 Annual Audit Plan and addresses the major management and performance challenges of *Improving Operational Efficiencies* and *Improving Taxpayer Service and Protecting Taxpayer Rights*.

Management's complete response to the draft report is included as Appendix II. If you have any questions, please contact me or Matthew A. Weir, Assistant Inspector General for Audit (Compliance and Enforcement Operations).

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Background

Chat applications are web-based interactive tools that enable users to communicate with service providers and have been used in the customer service industry for many years. The Automated Collection System (ACS) function within the Small Business/Self-Employed (SB/SE) Division was the first Internal Revenue Service (IRS) function to pilot the use of chat applications to interact with taxpayers. The ACS function primarily resolves taxpayer inquiries related to balances due or delinquent returns. The IRS's goal in using chat applications is to direct taxpayers to available online or self-help tools in lieu of calling the IRS's toll-free telephone line. These applications allow a live assistor to exchange text messages, files, web pages, and other information, in real-time when addressing taxpayer inquiries. In addition to chat applications, the ACS function also deployed voice bots that allow taxpayers to verbally navigate through an interactive voice response system via telephone. Both live chats and voice bots aim to improve customer service.

- In November 2017, the IRS piloted a live chat version that did not verify the identity of taxpayers (unauthenticated chats). This limited a live assistor to providing responses to general tax inquiries, such as frequently asked questions.
- In June 2019, the IRS expanded the live chat pilot program to allow authenticated chats. IRS employees are responsible for verifying the identity and authority of the taxpayer to receive tax information before making any disclosure.¹ During an authenticated live chat, the taxpayer verifies their identity allowing the live assistor to answer detailed questions and take specific actions on the taxpayer's tax account, such as establishing payment plans and obtaining information about their tax accounts. Per ACS management officials, the ACS live chat pilot program became permanent in June 2025.
- In December 2021, the IRS implemented an ACS automated chatbot. It provides preprogrammed responses to questions, automated self-help options for taxpayers to make one-time payments, clarification on notices, *etc.* The ACS automated chatbot is available in English and Spanish.
- In January 2022, the IRS deployed an ACS unauthenticated voice bot that answers common questions. In June 2022, the IRS also deployed an authenticated voice bot. The authenticated voice bot allows taxpayers to create and manage installment agreements and make payments through self-service applications.

During this review, we limited our testing to the ACS function's chat applications and did not include testing of the voice bots.

How taxpayers access a live chat session




Taxpayers can access the ACS live chat at the conclusion of an automated chatbot session. These automated chatbot sessions can be found on four different IRS web pages, *e.g.*, the page for making a payment.² The prompts the taxpayer selects during their chatbot session will determine whether they can be authenticated when connected to a live assistor. Initially, connecting to a live assistor through the automated chatbot was the only method in which the

¹ Internal Revenue Code Section (§) 6103 prohibits the disclosure of tax account information to unauthorized persons.

² www.irs.gov/payments.

taxpayer could access an authenticated live chat. Therefore, if a taxpayer did not select the prompts to allow for authentication at the beginning of a live chat, they were not able to be authenticated during the chat. However, in March 2025, the IRS began testing the ability to allow live assistants to authenticate taxpayers after the live chat began. This is referred to as midchat authentication. Specifically, the live assistant can send the taxpayer a link during an unauthenticated live chat session to verify their identity and become authenticated.

When a live chat session concludes, the live assistant is required to document the chat resolution by recording one of three codes. These codes include:

-  **Resolved or deflected:** The taxpayer's inquiry was satisfied, or the taxpayer was referred to another IRS function for further assistance.
-  **Disconnected:** The taxpayer or live assistant left the live chat session or experienced connection issues.
-  **Referred to ACS:** The live assistant could not resolve the taxpayer's inquiry and instructed the taxpayer to call the ACS toll-free phone line for further assistance. This may occur when the live assistant is unable to verify the identity of the taxpayer.

If a taxpayer leaves a live chat session before being connected to a live assistant, the chat is considered abandoned.

Funding for chat applications

The IRS initially received approximately \$79.4 billion in supplemental funding when the Inflation Reduction Act of 2022 (IRA) was signed into law in August 2022.³ As of February 2026, Congress subsequently reduced IRA funding to approximately \$26 billion.⁴ According to ACS management, in Fiscal Years (FY) 2024 and 2025, the IRS spent approximately \$7.2 million of IRA funding to support IRS chatbot and live chat applications.

ACS live assistant resources

Since January 2025, the IRS has taken steps to reduce the size of its workforce to comply with the President's executive orders and Office of Personnel Management guidance.⁵ Between January 2025 and May 2025, the number of IRS employees decreased from approximately 103,000 to 77,000 (25 percent). As of July 2025, ACS management stated that the ACS function experienced a 20 percent (159 to 127) reduction in live assistant employees. As a result, there is a potential for taxpayers to experience an increase in wait times.

³ Pub. L. No. 117-169, 136 Stat. 1818.

⁴ The Fiscal Responsibility Act of 2023 (Pub. L. No. 118-5, 137 Stat. 10) rescinded \$1.4 billion; the Further Consolidated Appropriations Act, 2024 (Pub. L. No. 118-47, 138 Stat. 460) rescinded \$20.2 billion; the Full-Year Continuing Appropriations and Extensions Act, 2025 (Pub. L. No. 119-4) rescinded another \$20.2 billion; and the Consolidated Appropriations Act, 2026, rescinded another \$11.7 billion (Pub. L. No. 119-75).

⁵ Exec. Order 14210, *Implementing the President's "Department of Government Efficiency" Workforce Optimization Initiative Order*, 90 FR 9669 (2025). Memorandum to Heads of Executive Departments and Agencies, *Guidance on Agency RIF and Reorganization Plans Requested by Implementing the President's "Department of Government Efficiency" Workforce Optimization Initiative*, (February 2025).

Multiple laws required the IRS to expand digital and online services

After the IRS began using chat applications, Congress enacted laws mandating certain actions with respect to digital services and customer strategy. In December 2018, the 21st Century Integrated Digital Experience Act was enacted into law.⁶ This Act requires agencies to design digital services around user needs with data-driven analysis influencing management and development decisions, including using qualitative and quantitative data to determine user goals, needs, and behaviors. Furthermore, the Taxpayer First Act (TFA) was enacted into law in July 2019.⁷ The TFA required the IRS to develop a comprehensive customer service strategy that would meet taxpayers' reasonable expectations and include the expansion of online services. To satisfy the TFA mandates, the IRS outlined the agency's strategy in its January 2021 report to Congress.⁸ It is based on a 10-year timeline and encompasses milestones that would deploy and expand the chat applications capabilities to enhance the level of customer service.

Results of Review

Management Has Not Taken Sufficient Steps to Evaluate the Effectiveness of the IRS's Chat Applications

The IRS has not assessed the effectiveness and accuracy of its chat applications

The IRS has not assessed the effectiveness and accuracy of the ACS chat applications, including the impact on its toll-free lines. Despite this, the IRS made the live chat application permanent in June 2025. The IRS's *2023 High Impact Service Provider Customer Experience Action Plan* states that it expanded features of live chat, resulting in saving taxpayers' and employees' time. Further, SB/SE Division officials reported in an internal document that the reduction in telephone demand was related to the use of automated chatbots.⁹ However, without analyzing the performance of the ACS chat applications, the IRS is unable to substantiate these statements.

The ACS chat applications provide statistical reports that track chat metrics, such as the number of live chats, average handle and wait times, number of concurrent chats, and total chatbot sessions. Although ACS management explained that they use these reports to review changes in the metrics, they do not have any performance measures for the application or ensure the accuracy of the report data.

Data captured in the ACS chat statistical reports is not reliable

As previously mentioned, the ACS chat program was expanded without an assessment of whether it was achieving its intended outcomes. Compounding this issue, the data currently collected to measure program performance is unreliable, limiting the IRS's ability to determine whether the expanded program is operating effectively. We reviewed the statistical reports from

⁶ Pub. L. No. 115-336, 132 Stat. 5025 (2018).

⁷ Pub L. No. 116-25, 133 Stat. 981 (2019).

⁸ IRS Publication 5426, *Taxpayer First Act Report to Congress* (January 2021).

⁹ IRS SB/SE Business Performance Review Quarter 3 FY 2023.

February 2023 through December 2024 and identified outliers and discrepancies that made the reliability of these reports and the underlying data questionable.¹⁰ For example:

- **Average number of chats handled concurrently:** The Average Concurrent Chat metric showed unusually high and/or inaccurate values. This metric measures the average number of live chats a live assistor works concurrently based on time frames defined when running the report. For this review, we reviewed reports based on one-hour increments. While live assistors are allowed to work multiple chats concurrently, ACS management stated that there is a systemic control that allows only three chats to be opened at one time. However, we reviewed reports that showed a live assistor working as many as 603 live chats concurrently, which ACS management agreed was incorrect. These statistical reports contained over 16,000 records where the Average Concurrent Chat metric showed potential live chats being worked concurrently, and 193 of these records showed live assistors working between 4 to as many as 603 live chats concurrently. IRS Information Technology (IT) officials explained one possible cause for the inaccurate Average Concurrent Chat metric is because of the error in the calculation of the handle time metric, as explained below.
 - **Inaccurate handle time calculation:** The handle time measures the time it takes for a live assistor to service one live chat. According to IRS IT officials, the handle time metric is being miscalculated. They explained that the miscalculation may be due to live assistors not closing the chats upon completion, causing the Average Concurrent Chat metric to be inflated. Chats that are not closed upon completion are automatically closed by the application after four hours. In May 2025, IRS IT officials stated that a systemic alert was implemented to help ensure that live assistors are closing their chats. ACS Team Leads will receive this alert after a chat has been open for more than 60 minutes.

This miscalculation affects all IRS chat applications that use this system, such as the Automated Underreporter Program Live Chat, and is a key metric for evaluating program efficiency. In July 2025, IRS IT officials submitted a service ticket to the vendor to determine the root cause of the calculation error. As of December 2025, the IRS and the vendor are still working to identify the cause of the issue.
- **Discrepancies in ACS chat application statistical reports:** As previously mentioned, each closed chat session should have one resolution code indicating how it was resolved. However, the number of resolution codes reflected in the statistical reports does not match the actual number of live chats. For example, there were a total of 635,684 resolution codes shown in the Calendar Years (CY) 2023 and 2024 statistical reports, but these reports only reflected 613,056 live chats. ACS management stated they were aware that the numbers did not reconcile, but they did not investigate further to determine the reason for the discrepancy. We determined that live assistors were closing live chats without selecting a resolution code or were selecting multiple resolution codes.

Outliers and discrepancies such as these make it difficult to evaluate the effectiveness of the chat applications. According to the TFA, the IRS is required to develop metrics and benchmarks to quantitatively measure performance of the chat applications. Further, the Government

¹⁰ The January 2023 monthly statistical report was unavailable at the time of our review due to system limitations.

Accountability Office’s *Standards for Internal Control in the Federal Government* state that management should establish activities to monitor performance measures and indicators.¹¹ These activities include comparing and assessing different datasets, so that analysis of the relationships can be made and appropriate actions taken. It is difficult for the IRS to determine the overall effectiveness of the chat applications without improving the quality of the application’s data.

The IRS is unable to determine why over half of live chats went unresolved

We identified 635,684 live chats reported and only 290,181 (46 percent) were classified as resolved; the remaining 345,503 (54 percent) were unresolved.¹² However, as discussed above, weaknesses in the data limit the reliability of the information, therefore we could not determine the precise number of unresolved issues. This further illustrates how the IRS’s lack of reliable information hinders its ability to assess live chat performance.

According to ACS management, a resolved chat is when the live assistor addresses the taxpayer’s inquiry or refers them to another IRS function for further assistance. An unresolved chat is when the taxpayer is disconnected or referred to call the ACS telephone line. The IRS does not count abandoned chats or consider them as part of the analysis of the chat applications’ performance. An abandoned chat, which occurs before the taxpayer reaches the live assistor, may be due to reasons such as connectivity issues.

When a live chat goes unresolved, it may create additional burden for the taxpayer because they will have to either start another live chat or call the ACS toll-free number. In Figure 1, we included abandoned chats along with disconnected chats and chats referred to ACS to show the true number of unresolved chats for CYs 2023 and 2024. Due to a system limitation, data for the live chat statistical reports was not available before February 2023.¹³

Figure 1: Unresolved Live Chats Significantly Increased From CYs 2023 to 2024

Type of Unresolved Live Chat	CY 2023		CY 2024		Total	
	Chats	Percent	Chats	Percent	Chats	Percent
Abandoned	33,781	28%	103,057	46%	136,838	40%
Disconnected	49,040	41%	78,248	35%	127,288	37%
Referred to ACS	36,363	31%	45,014	20%	81,377	24%
Total	119,184	100%	226,319	100%	345,503	100%

Source: ACS live chat statistical reports. Percentages may not add to 100 percent due to rounding.

The IRS cannot determine why chats are unresolved because the reasons are not documented. For example, when a taxpayer is referred to the ACS telephone line, the live assistor is unable to document why the taxpayer is being referred. Also, when a live chat is abandoned, the taxpayer is not provided an opportunity to provide feedback. ACS management stated that unresolved

¹¹ Government Accountability Office, GAO-25-107721, *Standards for Internal Control in the Federal Government*, Principle 10 – Design Control Activities (May 2025).

¹² We identified 22,628 more resolution codes than live chats. Therefore, the 635,684 total live chats may include live chats that were double counted due to live assistants closing live chats without selecting a resolution code or selecting multiple resolution codes.

¹³ The vendor programmed the system to only provide report data for a period of 18 months; therefore, at the time we began our review data prior to February 2023 were not available.

live chats may be due to long wait times or the inability for unauthenticated taxpayers to receive tax account information.

In March 2025, ACS management stated that they began testing midchat authentication to allow taxpayers to receive tax account information during unauthenticated chats. However, they are concerned that it may result in live assistors experiencing an increase in downtime. Specifically, the live assistor may have to wait approximately 15 to 20 minutes for the taxpayer to create an online account to become authenticated. To help address this concern, the IRS added a notification to the chatbot informing taxpayers that they must have an active online account before a live assistor will provide account information. According to ACS management, this notification was implemented in November 2025. Without adequately evaluating and assessing the chat applications' performance, it makes it difficult for the IRS to identify and make necessary improvements.

The Director, SB/SE Division, Collection Inventory Delivery and Selection, should:

Recommendation 1: Develop a process to validate the accuracy and completeness of the ACS chat applications' data.

Management's Response: IRS management agreed with this recommendation and plans to identify options for validating the accuracy and completeness of ACS chat application data and make recommendations based on the results of that review.

Recommendation 2: Establish standards to assess the effectiveness and efficiency of the ACS chat applications using quantitative performance measures and indicators.

Management's Response: IRS management agreed with this recommendation and plans to evaluate available ACS and chat application data to identify potential performance measures and indicators that may be used to assess the effectiveness and efficiency of the ACS chat applications and make recommendations based on the results of that evaluation.

Recommendation 3: Correct the programming error related to the calculation of the handle time metric.

Management's Response: IRS management agreed with this recommendation and plans to work with the vendor to identify the cause of the programming error related to the calculation of the handle time metric, determine what actions are needed to fix it, and make a recommendation regarding the appropriate steps.

Recommendation 4: Implement a control to ensure the resolution code is not blank and is limited to only one entry.

Management's Response: IRS management agreed with this recommendation. The IRS implemented category and resolution codes in January 2026 and plans to work with the vendor to evaluate system change options to ensure resolution codes are not left blank and are limited to a single entry. Based on the results of that evaluation, the IRS will make recommendations regarding any additional controls or system changes needed.

The IRS does not assess taxpayer feedback to improve its chat applications as required

Since September 2022, the IRS has not offered a survey to taxpayers upon the completion of an ACS live chat session. However, the IRS does offer a simple two-question survey when a taxpayer ends an automated chatbot session that has not been escalated to a live assistor. Specifically, the automated chatbot asks whether the information provided was helpful but it does not allow the taxpayer to provide any written feedback. Furthermore, the final chatbot response states, “Thank you for your feedback. We are collecting the information to help improve our service.” However, when we requested the results of these two survey questions, IRS officials stated that they do not collect or review these responses.

In April 2025, IRS IT officials stated a new live chat survey will be implemented but it needs clearance from the Office of Management and Budget (OMB).¹⁴ As of December 2025, the survey had not been implemented and was still awaiting submission to the OMB for clearance.

OMB Circular A-11, Section 280, mandates federal agencies to manage customer experience through data collection and obtain direct feedback from customers.¹⁵ It also requires federal agencies to implement surveys to taxpayers, ensure that feedback is received, and act upon the feedback to drive performance improvements of designated services. The ACS chatbot and live chat applications are identified as designated services. In conjunction with OMB Circular A-11, the Internal Revenue Manual states that the IRS should review survey results on a regular basis and develop plans that include specific strategies aimed at improving customer satisfaction.

The IRS is not compliant with OMB requirements. It has not implemented surveys for live chats and does not review responses from existing surveys for automated chats. When used, surveys can identify areas of improvement that could increase the taxpayer’s experience and overall performance.

The Director, SB/SE Division, Collection Inventory Delivery and Selection, should:

Recommendation 5: Implement and assess the results of the ACS live chat survey.

Management’s Response: IRS management agreed with this recommendation and plans to evaluate available internal and vendor-supported survey options for the ACS live chat application and assess the potential use of a live chat survey to obtain feedback on the customer experience. Based on the results of that evaluation, the IRS will make recommendations regarding implementation of the survey results.

Recommendation 6: Update the automated chatbot survey to allow taxpayers to provide written feedback at the completion of the session.

Management’s Response: IRS management agreed with this recommendation and stated that they submitted a formal change request to the vendor to update the automated chatbot survey to allow taxpayers to provide written feedback at the completion of the session.

¹⁴ The Paper Reduction Act (44 U.S.C. §§ 3501–3521) governs how federal agencies collect information from the public. It requires that the OMB approve all new surveys prior to being implemented.

¹⁵ OMB Circular No. A-11, *Preparation, Submission, and Execution of the Budget* (August 2025).

Management does not conduct evaluative performance reviews of live assistants working live chats

ACS management stated that although they review one live chat per live assistant per month, these reviews are nonevaluative. During a nonevaluative review, live assistants are not held accountable for their performance. ACS management explained that these reviews are nonevaluative because, until June 2025, the live chat application was considered a pilot program.

However, there is no agencywide policy that prohibits evaluative employee performance reviews based on work conducted in a pilot program. ACS management stated that they plan to implement evaluative reviews in April 2026.

Although there is specific guidance for live assistants to follow when working live chats, there is a lack of guidance for managing the live chat program. For example, the Internal Revenue Manual provides specific guidance on the processes and procedures for managing employees who work the ACS telephone line; however, it does not include live chat. In December 2025, ACS management stated that guidance has been developed and is awaiting approval.

Effective management of human capital is essential to achieving results and an important part of internal controls. Without evaluative performance reviews, it makes it difficult for the IRS to monitor and assess the efficiency and quality of the services being provided to taxpayers.

The Director, SB/SE Division, Collection Inventory Delivery and Selection, should:

Recommendation 7: Implement evaluative reviews for employees working ACS live chats to ensure that live assistant performance is meeting customer service standards.

Management's Response: IRS management agreed with this recommendation. The IRS stated that it implemented evaluative reviews for employees working ACS live chats to ensure that live assistant performance meets customer service standards.

Recommendation 8: Establish policies and procedures for managing the ACS live chat application, including the expectations and duties of ACS managers.

Management's Response: IRS management agreed with this recommendation and stated that they established policies and procedures for managing the ACS live chat application, including the expectations and duties of ACS managers.

Working Multiple Live Chats Concurrently May Decrease the Quality of Customer Service and Increase the Risk of Inappropriate Disclosure of Taxpayer Information

Using the ACS live chat statistical reports dated February 2023 through December 2024, we identified a population of 253 live assistants that potentially worked multiple live chats concurrently. We reviewed a judgmental sample of 40 live assistants and assessed their transcripts of live chats to determine whether multiple live chats were worked concurrently.¹⁶ We identified 24 (60 percent) of the 40 live assistants worked multiple live chats concurrently. Of the

¹⁶ A judgmental sample is a nonprobability sample, the results of which cannot be used to project to the population.

24 live assistants, 12 (50 percent) had at least one authenticated live chat open while working another live chat. As previously mentioned, we identified outliers within the data that limited our ability to easily identify live assistants working multiple live chats concurrently. However, we were able to determine a range of live chats with the highest probability of chat concurrency.

After discussing our preliminary results with ACS management and IRS IT officials, we were informed that there was a control in place that limited live assistants to work a maximum of three live chats concurrently. ACS management also stated that, despite the lack of guidance, there is a general understanding that if working authenticated chats, live assistants are only allowed to work one at a time. However, during walkthroughs at two different ACS locations, two live assistants stated that they are allowed to work multiple live chats concurrently, authenticated and unauthenticated. There is an inconsistency between what management believes is permitted and what live assistants believe they are allowed to work. Conducting multiple chats concurrently can be problematic for several reasons, including decreased customer service and increased risk of inappropriately disclosing taxpayer information, especially when the live chats are authenticated.

ACS management notified us in September 2025 that the live chat application was updated in April 2025 to only allow the handling of one chat, authenticated or unauthenticated, at a time. However, ACS management provided us with an updated statistical report for the months of September through November 2025 that continued to inaccurately show live assistants working multiple chats concurrently. The report contained 181 records associated with 23 live assistants potentially working between 2 to 11 live chats concurrently. Despite the control introduced in April 2025, the reports will continue to show inaccurate metric values until the calculation of handle time metric mentioned above is corrected. As of December 2025, the IRS and the vendor were still working to determine the root cause of the calculation error of the handle time metric.

The IRS Began Taking Action to Address Deficiencies With Some Automated Chatbot Responses

The IRS's ACS automated chatbot did not always provide sufficient information or recognize keywords or questions typed into the search box. In March 2025, we identified:

- 29 (14 percent) responses within the 206 process flows we tested could be improved.¹⁷ For example, some of the responses directed taxpayers to a broken hyperlink. Other responses did not provide taxpayers with sufficient detail to help them resolve their concerns. For example, the response provided a link to download an IRS form but lacked instructions for completing the form.
- 44 (83 percent) of the 53 keyword terms we tested were not recognized or had an insufficient response by the ACS automated chatbot when typed into the search box. Examples include:
 - Terms, such as Debit Card and Tax Pro Account, were not recognized and restated the initial prepopulated options.

¹⁷ A process flow begins with the initial default prompt in the chatbot and ends when the taxpayer receives the two-question survey, prior to the escalation to a live assistant. Each process flow is different and may contain multiple default prompts with responses.

Opportunities Exist to Improve the Quality of Chat Applications

- Terms were not recognized by the chatbot and instead provided computer programming code.
- Responses that redirected the taxpayer to another web page that required further research.

Furthermore, unlike the English version, the Spanish version of the automated chatbot does not offer the taxpayer the option to search for information by typing keywords and questions into a search box. This limits the taxpayers' use of the chatbot to the prepopulated options. Both versions should be consistent so that there is fair and equitable treatment among taxpayers. Improvement to the automated chatbot may reduce a taxpayer's need for live assistance and help taxpayers file accurate tax returns.

According to IRS officials, the automated chatbot operates using technology that provides responses based on pre-established topics. This technology does not include the use of Generative Artificial Intelligence (AI).¹⁸ As of November 2024, the IRS's Transformation & Strategy Office, IT, and various other business units were working together to develop the long-term AI strategy and were in the early stages of its development. In March 2025, the Transformation & Strategy Office was eliminated. IRS officials stated the AI strategy is on hold indefinitely due to changes in leadership at the Department of the Treasury and the IRS. According to IRS officials, the Department of the Treasury will be developing a new AI strategy. The IRS is awaiting the Department of the Treasury's strategy, so it can align its resources accordingly.

Recommendation 9: In June 2025, we notified the Director, SB/SE Division, Collection Inventory Delivery and Selection, of our concerns that the ACS function's automated chatbot is not providing taxpayers with adequate customer service in certain situations. Specifically, our concerns were that taxpayers are not having their inquiries and issues adequately addressed through the chatbot's self-help options due to technical problems. We recommended that the IRS update the broken links and insufficient responses within the ACS automated chatbot and its word bank to recognize keywords and questions. We also recommended that the IRS implement the ability to enter keywords or questions for the Spanish language version, allowing for consistency in both versions of the chatbot.

Management's Response: IRS management agreed with this recommendation. The IRS stated it corrected the broken links and the insufficient responses in the word bank. The IRS also stated it submitted a formal change request to the vendor to allow for the ability to enter keywords or questions for the Spanish language version.

¹⁸ Generative AI means the class of AI models that emulate the structure and characteristics of input data in order to generate derived synthetic content. This can include images, videos, audio, text, and other digital content.

Appendix I

Detailed Objective, Scope, and Methodology

The overall objective of this review was to determine if the IRS's chatbot applications provide effective and efficient service to help taxpayers meet their tax obligations. To accomplish our objective, we:

- Determined the applicable policies, procedures, and controls that are in place for the use and management of the ACS automated chatbot and live chat applications.
- Determined the effectiveness of the ACS automated chatbot and live chat programs by evaluating data from the IRS's chat applications and prior survey responses and assessing statements made by the IRS for accuracy.
- Determined if ACS live assistors worked multiple authenticated chats concurrently. For CY 2023, we identified 2,713 records, which listed live assistors with an hourly average concurrent rate between 1.20 through 3.88 and selected a judgmental sample of 20 unique live assistors by reviewing every 135th record (2,713 / 20).¹ For CY 2024, we identified 2,102 records, which listed live assistors with an hourly average concurrent rate between 1.20 through 3.88 and selected a judgmental sample of 20 unique live assistors by reviewing every 105th record (2,102 / 20).
- Determined the accuracy of the responses provided by the ACS automated chatbot by conducting a digital walkthrough and assessing the information provided to taxpayers.

Performance of This Review

This review was performed with information obtained from the ACS functions within the Brookhaven Service Center located in Holtsville, New York, the IRS's Office of Online Services located in the New Carrollton Federal Building in Lanham, Maryland, and the Philadelphia Service Center in Philadelphia, Pennsylvania, during the period August 2024 through September 2025. This review was also performed during the period August 2024 through September 2025. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective.

Data Validation Methodology

We reviewed and analyzed data reports obtained from ACS management and the ACS chat applications. We also obtained survey responses from the IRS Office of Online Services. We evaluated the data reports by (1) testing data elements in the statistical reports by comparing them to the source information in the ACS live chat application, (2) comparing the statistical

¹ CY 2023 included February 2023 through December 2023; January 2023 was unavailable at the time of the data pull due to system limitations. A judgmental sample is a nonprobability sample, the results of which cannot be used to project to the population.

reports to the ACS dashboard reports, and (3) interviewing agency officials knowledgeable about the data.

We identified outliers and discrepancies in the ACS chat application data reports which make the data unreliable for purposes of managing, improving, and operating a sound program. Despite these outliers and discrepancies, we were able to determine a range of average concurrent chats (CYs 2023 and 2024 between 1.20 through 3.88) with the highest probability of accurate chat concurrency. Specifically, we sorted the average concurrent chat rates from highest to lowest for CYs 2023 and 2024 and compared the rates to the live chat transcripts in the ACS chat applications. As a result, using only the highest probability of accurate chat concurrency noted above, we determined that this data were sufficiently reliable for the purposes of identifying live assistors working multiple chats concurrently.

Internal Controls Methodology

Internal controls relate to management's plans, methods, and procedures used to meet their mission, goals, and objectives. Internal controls include the processes and procedures for planning, organizing, directing, and controlling program operations. They include the systems for measuring, reporting, and monitoring program performance. We determined that the following internal controls were relevant to our audit objective: IRS policies, procedures, and practices to identify the effectiveness of the ACS chat applications. We evaluated these controls by reviewing and analyzing chat applications' statistical and dashboard reports and interviewing IRS management.

Management's Response to the Draft Report



COMMISSIONER
SMALL BUSINESS/SELF-EMPLOYED DIVISION

DEPARTMENT OF THE TREASURY
INTERNAL REVENUE SERVICE
WASHINGTON, D.C. 20224

May 21, 2026

MEMORANDUM FOR DIANA M. TENGESDAL
DEPUTY INSPECTOR GENERAL FOR AUDIT

FROM: Lia Colbert **Kareem Williams** Digitally signed by Kareem Williams
Date: 2026.05.21 15:30:40 -04'00'
Commissioner, Small Business/Self-Employed Division

SUBJECT: Draft Audit Report – Opportunities Exist To Improve the Quality
of Chat Applications (Audit No.: 2024308023)

Thank you for the opportunity to respond to your draft audit report. We appreciate your recognition of our efforts to expand digital services and improve how taxpayers interact with the IRS.

The Automated Collection System (ACS) chat program provides a way for taxpayers to resolve tax issues online, offering an alternative to calling the IRS, reducing wait times, and supporting more accessible, reliable, and efficient service. This program is part of our broader focus on transforming the taxpayer experience—meeting taxpayers where they are with more accessible, digital-first service options while improving efficiency.

Since its launch, the chat program has grown significantly and now serves millions of taxpayers annually. Chatbots offer automated, around-the-clock access to information and services, while allowing taxpayers to transition to a live assistor when more complex support is required. These channels support key service activities, including installment agreement assistance and other account-related actions.

We acknowledge TIGTA's findings on performance measurement, data reliability, and program oversight. The chat program expanded rapidly during a period of workforce changes and increased demand for digital services. While this created challenges, the chat program remains a valuable and widely used service. We agree that stronger performance measures and more reliable data are needed to fully assess and improve performance.

We have already begun making improvements. Since July 2025, we have fixed broken links, improved how the chatbot understands questions, and made instructions easier to

Opportunities Exist to Improve the Quality of Chat Applications

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follow so taxpayers can get the information they need more quickly. We will continue to refine the chatbot to improve accuracy and usability. We also are strengthening oversight by implementing performance reviews, formalizing program management, and setting clear expectations for staff. In parallel, we are developing performance measures and improving data validation so we can better assess results and continue to improve the program.

Attached are our responses to your recommendations. If you have any questions, please contact me or Frederick W. Schindler, Director, Collection, Small Business/Self-Employed Division.

Attachment

Attachment

Recommendations

The Director, SB/SE Division, Collection Inventory Delivery and Selection, should:

RECOMMENDATION 1:

Develop a process to validate the accuracy and completeness of the ACS chat applications' data.

CORRECTIVE ACTION:

We agree. We will identify options for validating the accuracy and completeness of ACS chat application data and make recommendations based on the results of that review.

IMPLEMENTATION DATE:

December 15, 2026

RESPONSIBLE OFFICIAL:

Director, Collection Inventory Delivery and Selection, Small Business/Self-Employed Division

CORRECTIVE ACTION MONITORING PLAN:

IRS will monitor this corrective action as part of our internal management system of controls.

RECOMMENDATION 2:

Establish standards to assess the effectiveness and efficiency of the ACS chat applications using quantitative performance measures and indicators.

CORRECTIVE ACTION:

We agree. We will evaluate available ACS and chat application data to identify potential performance measures and indicators that may be used to assess the effectiveness and efficiency of the ACS chat applications and make recommendations based on the results of that evaluation.

IMPLEMENTATION DATE:

December 15, 2026

RESPONSIBLE OFFICIAL:

Director, Collection Inventory Delivery and Selection, Small Business/Self-Employed Division

CORRECTIVE ACTION MONITORING PLAN:

IRS will monitor this corrective action as part of our internal management system of controls.

RECOMMENDATION 3:

Correct the programming error related to the calculation of the handle time metric.

CORRECTIVE ACTION:

We agree. We will work with the vendor to identify the cause of the programming error related to the calculation of the handle time metric, determine what actions are needed to fix it, and make a recommendation regarding the appropriate steps.

IMPLEMENTATION DATE:

February 15, 2027

RESPONSIBLE OFFICIAL:

Director, Collection Inventory Delivery and Selection, Small Business/Self-Employed Division

CORRECTIVE ACTION MONITORING PLAN:

IRS will monitor this corrective action as part of our internal management system of controls.

RECOMMENDATION 4:

Implement a control to ensure the resolution code is not blank and is limited to only one entry.

CORRECTIVE ACTION:

We agree. We implemented category and resolution codes in January 2026 and will work with the vendor to evaluate system change options to ensure resolution codes are not left blank and are limited to a single entry. Based on the results of that evaluation, we will make recommendations regarding any additional controls or system changes needed.

IMPLEMENTATION DATE:

February 15, 2027

RESPONSIBLE OFFICIAL:

Director, Collection Inventory Delivery and Selection, Small Business/Self-Employed Division

CORRECTIVE ACTION MONITORING PLAN:

IRS will monitor this corrective action as part of our internal management system of controls.

RECOMMENDATION 5:

Implement and assess the results of the ACS live chat survey.

CORRECTIVE ACTION:

We agree. We will evaluate available internal and vendor-supported survey options for the ACS live chat application and assess the potential use of a live chat survey to obtain feedback on the customer experience. Based on the results of that evaluation, we will make recommendations regarding implementation of the survey results.

IMPLEMENTATION DATE:

February 15, 2027

RESPONSIBLE OFFICIAL:

Director, Collection Inventory Delivery and Selection, Small Business/Self-Employed Division

CORRECTIVE ACTION MONITORING PLAN:

IRS will monitor this corrective action as part of our internal management system of controls.

RECOMMENDATION 6:

Update the automated chatbot survey to allow taxpayers to provide written feedback at the completion of the session.

CORRECTIVE ACTION:

We agree. We submitted a formal change request to the vendor to update the automated chatbot survey to allow taxpayers to provide written feedback at the completion of the session.

IMPLEMENTATION DATE:

Implemented.

RESPONSIBLE OFFICIAL:

Director, Collection Inventory Delivery and Selection, Small Business/Self-Employed Division

CORRECTIVE ACTION MONITORING PLAN:

IRS will monitor this corrective action as part of our internal management system of controls.

RECOMMENDATION 7:

Implement evaluative reviews for employees working ACS live chats to ensure that live assistor performance is meeting customer service standards.

CORRECTIVE ACTION:

We agree. We implemented evaluative reviews for employees working ACS live chats to ensure that live assistor performance meets customer service standards.

IMPLEMENTATION DATE:

Implemented.

RESPONSIBLE OFFICIAL:

Director, Collection Inventory Delivery and Selection, Small Business/Self-Employed Division

CORRECTIVE ACTION MONITORING PLAN:

IRS will monitor this corrective action as part of our internal management system of controls.

RECOMMENDATION 8:

Establish policies and procedures for managing the ACS live chat application, including the expectations and duties of ACS managers.

CORRECTIVE ACTION:

We agree. We established policies and procedures for managing the ACS live chat application, including the expectations and duties of ACS managers.

IMPLEMENTATION DATE:

Implemented.

RESPONSIBLE OFFICIAL:

Director, Collection Inventory Delivery and Selection, Small Business/Self-Employed Division

CORRECTIVE ACTION MONITORING PLAN:

IRS will monitor this corrective action as part of our internal management system of controls.

RECOMMENDATION 9 (Email Alert):

In June 2025, we notified the Director, SB/SE Division, Collection Inventory Delivery and Selection, of our concerns that the ACS function's automated chatbot is not providing taxpayers with adequate customer service in certain situations. Specifically, our concerns were that taxpayers are not having their inquiries and issues adequately addressed through the chatbot's self-help options due to technical problems. We recommended that the IRS update the broken links and insufficient responses within the ACS automated chatbot and its word bank to recognize keywords and questions.

We also recommended that the IRS implement the ability to enter keywords or questions for the Spanish language version, allowing for consistency in both versions of the chatbot.

Management Action in Response to Email Alert: IRS officials agreed with the findings and began taking corrective actions to address these concerns in June 2025. They also explained that additional funding may be needed to modify the Spanish version of the chatbot, to ensure consistency with the English version. As of December 2025, corrective actions are still ongoing.

CORRECTIVE ACTION 1:

We agree. We corrected the broken links and the insufficient responses in the word bank.

IMPLEMENTATION DATE:

Implemented.

CORRECTIVE ACTION 2:

We agree. We submitted a formal change request to the vendor to allow for the ability to enter keywords or questions for the Spanish language version.

IMPLEMENTATION DATE:

Implemented.

RESPONSIBLE OFFICIAL:

Director, Collection Inventory Delivery and Selection, Small Business/Self-Employed Division

CORRECTIVE ACTION MONITORING PLAN:

IRS will monitor this corrective action as part of our internal management system of controls.

Abbreviations

ACS	Automated Collection System
AI	Artificial Intelligence
CY	Calendar Year
FY	Fiscal Year
IRA	Inflation Reduction Act
IRS	Internal Revenue Service
IT	Information Technology
OMB	Office of Management and Budget
SB/SE	Small Business/Self-Employed
TFA	Taxpayer First Act
TIGTA	Treasury Inspector General for Tax Administration



**To report fraud, waste, or abuse,
contact our hotline on the web at
<https://www.tigta.gov/reportcrime-misconduct>.**

**To make suggestions to improve IRS policies, processes, or systems
affecting taxpayers, contact us at
TIGTACommunications@tigta.treas.gov.**

Information you provide is confidential, and you may remain anonymous.