

Report to Congressional Requesters

February 1989

TAX ADMINISTRATION

Accessibility,
Timeliness, and
Accuracy of IRS'
Telephone Assistance
Program





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United States General Accounting Office Washington, D.C. 20548

General Government Division

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February 2, 1989

The Honorable J. J. Pickle Chairman, Subcommittee on Oversight Committee on Ways and Means House of Representatives

The Honorable Doug Barnard, Jr.
Chairman, Subcommittee on Commerce,
Consumer, and Monetary Affairs
Committee on Government Operations
House of Representatives

At your request, we reviewed the accessibility, timeliness, and accuracy of the Internal Revenue Service's (IRS) telephone assistance program. This report updates and supplements the preliminary results of work we reported in testimony before the House Subcommittee on Oversight on February 23 and April 13, 1988, and before the House Subcommittee on Commerce, Consumer, and Monetary Affairs on July 13, 1988.

As arranged with the Subcommittees, we are sending copies of this report to the House Committee on Ways and Means, the Senate Committee on Finance, and the Joint Committee on Taxation. We are also providing copies of this report to IRS and will make copies available to others upon request. The major contributors to this report are listed in appendix III.

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Jennie S. Stathis

Executive Summary

Purpose

Because our income tax laws are complicated, taxpayers often need assistance in understanding the tax laws and in preparing their returns. This was particularly true for the 1988 filing season, when most of the provisions of the 1986 Tax Reform Act were implemented. The act, the most sweeping tax legislation in three decades, changed over 2,000 subsections of the Internal Revenue Code and necessitated changes in over 200 forms and instructions. IRS expected these changes to affect most taxpayers.

In response to requests from the Chairman, Subcommittee on Commerce, Consumer, and Monetary Affairs of the House Committee on Government Operations and the Chairman, Subcommittee on Oversight of the House Committee on Ways and Means, GAO reviewed the

- accessibility and timeliness of IRS' toll-free telephone assistance program
- accuracy of IRS assistors' answers to selected tax law questions.

Background

IRS has assisted taxpayers through its toll-free telephone program for over two decades. Historically, IRS has considered telephone assistance to be the most efficient method of helping taxpayers. Accordingly, it has devoted substantial resources—over 4,300 telephone lines and 4,300 staff—to telephone assistance and encourages taxpayers to use the telephone as a means of getting answers to their tax law questions.

During the 1987 filing season, 84 percent of IRS' contacts with taxpayers having tax law and account-related questions were handled by telephone. The other contacts were either face-to-face or through correspondence. Currently, IRS operates toll-free telephone systems in 32 different locations serving all the states, the District of Columbia, and Puerto Rico. According to IRS, 20 million toll-free telephone calls were answered during the 1988 filing season. (See p. 9.)

During the 1988 filing season, GAO attempted 1,908 calls to 29 IRS toll-free sites, completing 1,776 calls and receiving 1,733 answers to its test questions. GAO's sample of calls to IRS telephone sites was designed to project the results nationwide and be 95-percent certain that the sampling errors would be no greater than 2.5 percent. IRS agreed the questions GAO asked were reasonable and ones IRS telephone assistors should be able to answer correctly. (See p. 13.)

Results in Brief

Overall, GAO was more successful in accessing IRS' toll-free telephone system this year than in 1987. GAO's ability to reach IRS within five call attempts improved from 88 percent last year to 93 percent this year. The improvement was most noticeable on the first call, which was 25 percent more successful this year. After calls reached the toll-free sites, they were placed on hold almost half the time—but 4 percent less often than last year—and the time waiting on hold decreased by 29 percent. (See pp. 16 to 25.)

IRS assistors correctly responded to GAO's questions 64 percent of the time and incorrectly responded 36 percent of the time. The questions that posed the greatest difficulty for assistors were those requiring them to probe for pertinent facts before answering the questions, a situation they frequently encounter, and those related to recent tax law changes. The survey results, while projectable to the universe of answers to taxpayer questions such as those posed by GAO, do not necessarily reflect the overall accuracy of assistors' answers to the full range of questions taxpayers actually asked.

Last year, using a substantially different set of questions, GAO received correct responses 79 percent of the time. Because of the changes in the set of questions asked and the proportion of questions requiring assistors to probe taxpayers for more information, GAO cannot conclude how much of the difference in accuracy was attributable to changes in the mix of questions, their degree of difficulty, or the quality of IRS' service. (See pp. 27 to 35.)

Principal Findings

Ability to Access Telephone Sites

The improvements in accessibility and timeliness this filing season occurred because IRS was able to provide a higher level of service to tax-payers. IRS estimates that it responded to 85 percent of all callers this filing season compared to 78 percent last year. Furthermore, taxpayers could expect few differences in accessing IRS call sites no matter where or when they called.

The volume of telephone calls at surveyed sites had little effect on accessibility. GAO compared accessibility rates at the 10 largest and 10 smallest sites and found the rates to be 78 and 71 percent respectively on the first call attempt and 94 and 89 percent for up to five calls. These

rates were comparable to the overall rates of 76 and 93 percent for the first and up to five calls.

GAO also found no appreciable difference in accessibility when measured by month. The first call attempt accessibility rates for the days surveyed during February, March, and April were 77, 78, and 73 percent respectively. For up to five calls, the respective monthly rates were 94, 93, and 92 percent.

For the days of the week, calls made on Mondays had the least chance of getting through but were still successful 70 percent of the time on the first call and 90 percent within five calls. (See pp. 16 to 22.)

Time Spent Waiting for Help

GAO callers were placed on hold for about half of the calls and the wait time averaged about 39 seconds. Callers were most likely to be placed on hold on Mondays and least likely on Fridays. In 1987, GAO callers were placed on hold slightly more often and the wait time averaged 55 seconds. (See pp. 23 to 25.)

Assistors' Failure to Probe Contributed to Inaccurate Responses

IRS assistors' failure to probe for all of the pertinent facts before answering GAO's questions was a primary reason for the 36 percent inaccuracy rate. Of 20 test questions, 17 required assistors to probe to correctly understand and answer the question. For these questions, the accuracy rate was 61 percent compared to 78 percent for questions that required no probing. (See pp. 32 to 35.)

Questions on Recent Tax Law Changes Less Likely to Be Answered Correctly

Fifteen of the test questions addressed changes resulting from the Tax Reform Act of 1986. GAO found that these questions were less likely to be correctly answered than the five not affected by recent changes in tax law. Questions affected by recent tax law changes were answered correctly 59 percent of the time compared to a 72 percent accuracy rate for questions that were not affected by these changes. Of the 15 questions, 14 required assistors to probe before providing responses. Thus, it is likely that incorrect responses on these questions were due to a combination of inadequate knowledge of tax law changes and failure to probe. (See pp. 34 and 35.)

Recommendations

GAO is making no recommendations.

Agency Comments

IRS agreed with the report's conclusions and noted its efforts to improve assistors' probing skills. IRS also said it is refining its own test call survey system. GAO supports IRS' efforts to measure the quality of the assistance it provides to taxpayers and believes IRS should be the primary monitor of the quality of its services. The test call survey system IRS is developing, if well conceived and implemented, could serve such a function. GAO's monitoring of the system's development, however, indicates that as of January 25, 1989, it is too early to tell if it will. (See pp. 26 and 40.)

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Abbreviations

GAO General Accounting Office IRS Internal Revenue Service

Introduction

Because our income tax laws are complicated, taxpayers often need assistance in understanding the tax laws and in preparing their returns. This was particularly true for the 1988 filing season, when most of the provisions of the 1986 Tax Reform Act were implemented. The act, the most sweeping tax legislation in three decades, changed over 2,000 subsections of the Internal Revenue Code and necessitated changes in over 200 forms and instructions. IRS expected these changes to affect most taxpayers.

IRS has assisted taxpayers through its toll-free telephone program for over two decades. Historically, IRS has considered telephone assistance to be the most efficient method of helping taxpayers. Accordingly, it has devoted substantial resources—personnel and equipment—to telephone assistance and encourages taxpayers to use the telephone as a means of getting answers to their tax law questions. During the 1987 filing season, 84 percent of IRS' contacts with taxpayers having tax law and account-related questions were handled by telephone. The other contacts were either face-to-face or through correspondence. Currently, IRS operates toll-free telephone systems in 32 different locations serving all the states, the District of Columbia, and Puerto Rico. According to IRS, 20 million toll-free telephone calls were answered during the 1988 filing season.

IRS' Toll-Free Telephone Assistance Program

According to IRS officials, its toll-free assistance is provided primarily by two groups of employees—frontline and back-up assistors. Generally frontline assistors initially take taxpayers' calls and refer questions they cannot answer to back-up assistors who usually have more experience and additional research materials on hand.

Frontline assistors have a variety of information to rely on when answering taxpayers' questions. They receive at least 5 weeks of classroom training when first employed as well as a period of on-the-job training and have reference manuals and various publications at their disposal. They are generally classified as General Schedule grades 4, 5, and 7 and are referred to as Taxpayers Service Representatives. Employees at these levels earn \$6.50 to \$11.70 per hour or \$13,513 to \$24,342 per year, if employed full time.

Taxpayer Service Specialists, also referred to as backup assistors are General Schedule grades 5, 7, and 9. Employees at these levels earn \$7.27 to \$14.32 per hour or \$15,118 to \$29,783 per year, if employed full time. Back-up assistors are expected to have a wider range of tax

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knowledge than frontline assistors and should be able to answer technical questions in detail. They have a library of detailed resources within close proximity to their work space. These resources include tax code manuals, training manuals, and tax forms and publications.

IRS Has Increased Its Resources for Providing Toll-Free Telephone Assistance

As shown in table 1.1, to improve its responsiveness to taxpayers, IRS, since the 1986 filing season, increased the number of phone lines and staff committed to its toll-free telephone system.

Table 1.1: Comparison of Toll-Free Telephone Operations for Filing Seasons 1986 Through 1988

	1986	1987	1988
Number of sites	34	32	32
Number of lines	3,372	3,469	4,359
Toll-free staff	3,329	3,527	4,383
Calls answered (in millions)	19.1	17.5	20.0

IRS increased the number of telephone lines and staff during the 1988 filing season in anticipation of a higher demand for assistance because of the number of changes and complexities contained in the Tax Reform Act. The number of lines were increased by 26 percent as IRS estimated the demand for telephone assistance would increase by 26 percent from fiscal year 1987 to 1988. In addition, IRS increased the number of assistors by 24 percent. Assistors are hired on either a permanent or seasonal basis and work either full or part time.

IRS' toll-free telephone assistance is supplemented by Tele-Tax—multifunctional telephone equipment that provides recorded tax information as well as automated refund information. Tele-Tax provides information on about 150 topics ranging from general tax information to specific tax issues. Table 1.2 shows the size and extent of use of the Tele-Tax system for filing seasons 1986 through 1988.

Table 1.2: Size of the Tele-Tax System for Filing Seasons 1986 Through 1988

	1986	1987	1988
Telephone lines	1,504	1,484	1,660
Calls answered (in millions)	4.8	7.8	9.1

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Taxpayers have used Tele-Tax primarily to obtain refund information. Of the 9.1 million calls made to the Tele-Tax during the 1988 filing season, 7.4 million, or 81 percent, involved refund inquiries.

Objectives, Scope, and Methodology

At the request of the Chairman, Subcommittee on Commerce, Consumer, and Monetary Affairs of the House Committee on Government Operations and the Chairman, Subcommittee on Oversight of the House Committee on Ways and Means, we reviewed the accessibility, timeliness, and accuracy of IRS' Telephone Assistance Program during the 1988 tax filing season.

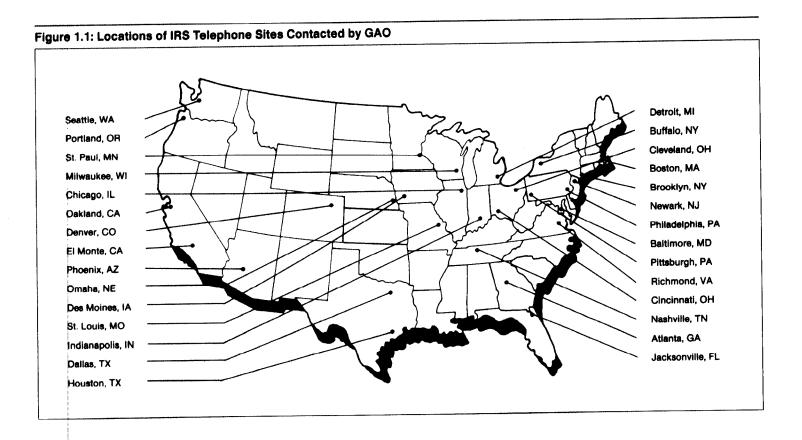
To accomplish our objectives, we developed 20 tax law questions. IRS reviewed our questions and agreed that (1) they were reasonable, (2) they were ones IRS would expect assistors to answer correctly, and (3) the answers we sought were correct. Four of the questions were the same as and one was similar to those asked during our 1986 and 1987 reviews. Fifteen were new questions to reflect changes made as a result of the Tax Reform Act.

Our sample of calls to IRS telephone sites was designed so that we would be 95-percent certain that the sampling errors would be no greater than 2.5 percent. To allow for better predictability and to cover possible problems in completing calls, we drew a stratified random sample of 1,927 calls and scheduled them at 15-minute intervals over 48 calling days. The sample allocated the 1,927 calls proportionate to each site's projected volume of calls during the 1988 filing season. We were unable to make 19 of our planned calls and thus attempted 1,908 calls. Of these, we were able to complete 1,776 calls and received answers to 1,733 of our test questions.

Figure 1.1 shows the locations of the IRS telephone sites we contacted. We did not call the Alaska, Hawaii, and Puerto Rico telephone sites because of time differences and/or difficulty of placing calls to these locations. Our scope and methodology are discussed in greater detail in appendix I.

Our review was done between December 1987 and April 1988 in accordance with generally accepted government auditing standards.

IRS provided written comments on a draft of this report. These comments are discussed in chapters 2 and 3 and are included in appendix II.



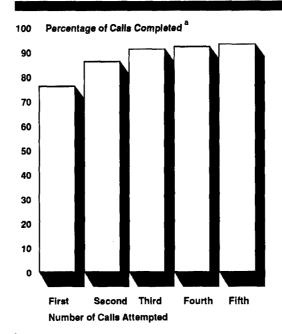
Accessibility and Timeliness of IRS' Telephone Assistance Improved This Year

Our 1988 review of IRS' Toll-Free Telephone Assistance Program showed that for a high percentage of our calls, we were able to contact IRS assistors. In about half of our calls, we were initially placed on hold for an average of 39 seconds until an assistor was available to answer our questions. Overall, our ability to access IRS' toll-free telephone sites and the timeliness of IRS' assistance improved over the results of our 1987 review of IRS' telephone assistance program.¹

Accessibility of IRS Telephone Assistors

Our analysis of the 1,908 calls we attempted during the 1988 filing season showed we were successful in reaching an IRS assistor on the first call 76 percent of the time. When making multiple calls, we had a 93-percent chance of reaching an assistor within five calls. We defined accessibility as successfully reaching an IRS assistor within five call attempts. Figure 2.1 shows the rate of calls completed according to the

Figure 2.1: Accessibility Rates of Calls to IRS Assistors



^aThe accessibility rate for each call attempt is first attempt--76 percent, second attempt--86 percent, third attempt--91 percent, fourth attempt--92 percent, and fifth attempt--93 percent.

¹Accessibility, Timeliness, and Accuracy of IRS' Telephone Assistance Program (GAO/GGD-88-17, Dec. 3, 1987).

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Telephone Assistance Improved This Year

number of attempts necessary for us to reach IRS on successive call attempts.

Our ability to reach IRS assistors improved over the rate we found in our 1987 telephone assistance review. In 1987, we were able to reach assistors on our first call 61 percent of the time and within five calls 88 percent of the time. The improvement in our ability to access IRS assistors was notably due to (1) IRS' increases in the number of assistors and lines assigned to its toll-free assistance sites and (2) demand for assistance was about 6.4 percent less than IRS had originally anticipated at the start of the filing season. As a result, IRS' level of service (the number of calls it answered compared to the estimated number of people calling) improved from about 78 percent for the 1987 filing season to about 85 percent this filing season. Figure 2.2 compares the accessibility rates for our first and our subsequent call attempts for the past three filing seasons.

Accessibility Not Affected by Call Volume or Month in the Filing Season

The volume of telephone calls at surveyed sites had little effect on assistor accessibility. We compared accessibility rates at the 10 largest sites, which were expected to handle 57 percent of the estimated total calls, with the 10 smallest sites, which were expected to handle 17 percent of the estimated total calls. The average accessibility rates on our first call attempt were 78 and 71 percent for large and small sites, respectively. For up to five attempts, the average accessibility rates were 94 and 89 percent, respectively, for the large and small sites.

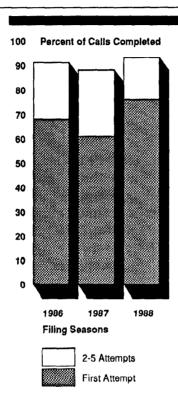
We also compared site accessibility for the months surveyed during the filing season. We wanted to determine if accessibility increased or decreased as the tax filing period progressed. We found no appreciable difference in accessibility when measured by month. As shown in table 2.1, the accessibility rates for February, March, and April were 94, 93, and 92 percent.

Table 2.1: Accessibility Rates for Months Within the 1988 Tax Filing Season

		Percentage of call	s completed
Month	Calls attempted	First attempt	1-5 attempts
February	558	77	94
March	915	78	93
April	435	73	92

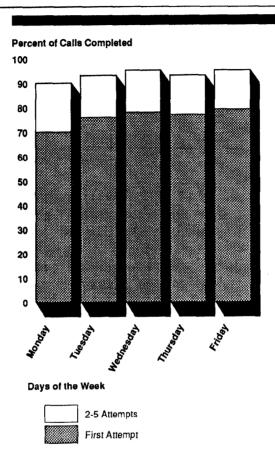
Chapter 2 Accessibility and Timeliness of IRS' Telephone Assistance Improved This Year

Figure 2.2: Comparison of Accessibility Rates, 1986 Through 1988 Filing Seasons



Accessibility Fluctuates by Day of the Week and Time of Day Our analysis of completed calls by days of the week showed that when placing only one call, we had a slightly greater chance of reaching an assistor on Fridays. Mondays were the least accessible days to reach an assistor. When making multiple calls, we were able to reach assistors at least 90 percent of the time on all days. Figure 2.3 shows the Monday through Friday call accessibility rates during our review.

Figure 2.3: Comparison of Accessibility Rates by Day



Our analysis of accessibility by the time of the day calls were made showed that when making one call we had a greater chance of reaching an assistor between 7:00 a.m. and 9:00 a.m. We also found that when making multiple calls we were less likely to reach an assistor during extended evening hours (6:01 p.m. - 10:00 p.m.) than during regular calling hours (7:00 a.m. - 6:00 p.m.). We divided our calling into five time intervals for each IRS site reviewed—early morning (7:00 a.m. - 9:00 a.m.), late morning (9:01 a.m. - 12:00 p.m.), early afternoon (12:01 p.m. - 3:00 p.m.), late afternoon (3:01 p.m. - 6:00 p.m.), and evening (6:01 p.m. - 10:00 p.m.). Table 2.2 shows accessibility rates by time of day.

Table 2.2: Accessibility Rates by Time of Day

	Percentage of call	s completed
Time of day	First attempt	1-5 attempts
7:00 a.m 9:00 a.m.	83	95
9:01 a.m 12:00 p.m.	76	94
12:01 p.m 3:00 p.m.	75	96
3:01 p.m 6:00 p.m.	77	92
6:01 p.m 10:00 p.m.	75	81

Half of Our Calls Were Placed on Hold

In about half of our completed calls to IRS, we initially could not reach an assistor but instead received a recorded message to remain on hold until we could be helped. The likelihood of being placed on hold was about the same during each of the 3 months. However, calls on Mondays and Tuesdays or early afternoon were more likely to be placed on hold. Conversely, calls on Friday or during evening hours were least likely to be initially placed on hold.

Of the 1,776 calls we completed, 872, or about 48 percent when projected, were initially placed on hold until a frontline assistor was available. In our 1987 telephone assistance review, we found that the likelihood of our call being placed on hold was 52 percent, which is slightly greater than this year's 48 percent probability. In addition to being slightly less likely to be placed on hold this year, the amount of time we spent waiting for an available assistor significantly decreased. In 1987, our average wait time was 55 seconds. This year the wait time averaged about 39 seconds, a 29-percent improvement over last year. The maximum amount of time we would wait in both years before terminating a call was 5 minutes.

During our 1988 survey, the likelihood of being placed on hold before reaching an assistor was about the same whether we called in February (49 percent), March (47 percent), or April (51 percent). With regard to the day of the week, we were most likely to be placed on hold if we called on either Monday (55 percent) or Tuesday (52 percent) and least likely to be placed on hold if we called on Friday (43 percent). As far as time of day, we were most likely (51 percent) to be placed on hold if we called between 12:01 p.m. - 3:00 p.m. and least likely (37 percent) to be placed on hold if we called between 6:01 p.m. - 10:00 p.m.

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Telephone Assistance Improved This Year

Conclusions

The accessibility and timeliness of IRS' toll-free telephone system showed an improvement over the results of our 1987 filing season review. Overall, our ability to reach IRS within five call attempts improved from 88 percent last year to 93 percent this year. The improvement was most noticeable in our ability to reach an assistor on our first call attempt. Whereas last year our first call attempts were successful 61 percent of the time, this year they were successful 76 percent of the time. After we reached a toll-free site, we found that this year we were slightly less likely to be placed on hold until an assistor was available to take our call than we were last year. In addition, the time we spent waiting once placed on hold decreased from 55 seconds last year to 39 seconds this year, a 29-percent improvement.

This year's improvement in the accessibility and timeliness of IRS' toll-free telephone system appears to have occurred because IRS was able to improve the level of service it provided to taxpayers. This improvement, in all likelihood, resulted from increases IRS made in staffing and phone lines at the call sites and the fact that demand for assistance did not increase as much as IRS initially estimated it would.

Agency Comments

In responding to this report, the Commissioner of Internal Revenue said that IRS agreed with the report's conclusions. (See app. II.)

Overall, IRS assistors provided correct answers to our questions 64 percent of the time and incorrect answers 36 percent of the time. Insufficient probing by IRS' assistors and tax law changes were the primary reasons assistors' responses to our tax law questions were inaccurate. Our survey of IRS' toll-free sites was composed of 20 tax law questions. Of the questions we asked, 17 required assistors to probe callers for additional information to ensure that they understood the caller's tax situation and 15 pertained to first-time changes in the tax code because of the Tax Reform Act.

We also analyzed assistors' responses by (1) whether the assistor responding was a frontline assistor or a more experienced back-up assistor and (2) whether the site called handled a large or small volume of calls. Our results show that the accuracy rate for back-up assistors was slightly lower than the overall accuracy rate and that the volume of calls a site handled had little effect on accuracy.

How Responses Were Scored

Responses to our tax law questions were scored either correct, correct but not complete, or incorrect. The criteria for how we scored each response was as follows:

- Correct if (1) we could act on the information given and comply with the tax laws or (2) the assistor did not answer the question but offered to recontact us with an answer. IRS assistors are instructed to record questions they cannot answer and offer to recontact taxpayers after determining the correct answer. We therefore scored such situations as correct to retain our anonymity and expeditiously complete our review.
- Correct but not complete if the assistor (1) answered our question without telling us about a related form or additional information we needed to file our return but in our judgment we could nevertheless comply with the tax law or (2) did not offer us a direct answer but referred us to a publication that contained information needed to answer our question.
- Incorrect if (1) in acting on the information provided, we would not be complying with the tax law; (2) the assistor did not probe sufficiently to obtain the facts needed to answer our question; or (3) the assistor neither answered our question nor offered to recontact us with an answer.

Accuracy of IRS' Responses

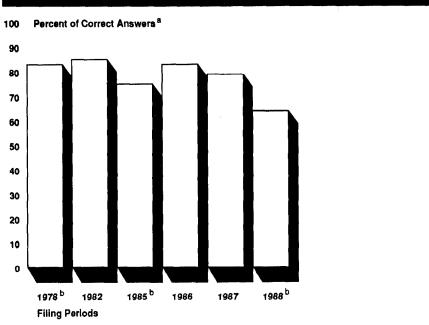
IRS provided responses to 1,733 of our questions, of which 1,110, or 64 percent, were correct and 623, or 36 percent, were incorrect.¹ Of the correct answers, we categorized 111 (6 percent) as correct but not complete, but counted them as correct in calculating the overall 64-percent accuracy rate. Also, we counted a response as correct if the assistor was unable to answer the question but offered to have someone recontact us with a response. This occurred 76 times (4 percent). Of the incorrect responses, we categorized 615 as incorrect because assistors did not answer the questions correctly, and 8 calls as incorrect because assistors were unable to answer our questions and did not offer to have someone contact us with a response.

Figure 3.1 shows the percent of correct answers we received in our 1988 and prior telephone assistance reviews. In reviewing this figure, note that because of the scope of the Tax Reform Act, we changed substantially the sets of questions we used last year and this year. A consequence of this change was that this year, 17 of our questions required assistors to probe us for additional information which would, once obtained, allow them to provide a correct answer. Last year, seven of our questions were of this nature. In both years' reviews, assistors had more difficulty answering correctly questions that required probing. Because a larger proportion of our questions required probing and questions of this nature appear to give assistors more difficulty, the cumulative effect of this change on assistor accuracy would be to moderate the overall rate. For these reasons, a strict statistical comparison between last year's accuracy rate and this year's cannot be made. Thus, we do not know how much of the difference in accuracy rates was due to the change in the mix of questions, their degree of difficulty, or a reduction in the quality of service.

It should also be noted that our set of sample questions are not necessarily representative of the universe of questions asked by taxpayers because the actual questions asked by taxpayers and the frequency with which they are asked are unknown. Accordingly, while our results are projectable in terms of the universe of taxpayers' questions such as ours, our results do not necessarily reflect the overall accuracy of assistors' answers to all tax law questions taxpayers actually asked.

¹An additional 175 calls were attempted but were terminated before IRS answered the questions. We terminated 132 calls before reaching an assistor—63 because the lines were busy, 26 because no answers were received after 10 rings within 5 attempts, 28 because we were on hold for 5 minutes, and 15 which were disconnected. Forty-three other calls were terminated after reaching an assistor because we were disconnected or placed on hold for 5 minutes.

Figure 3.1: Accuracy of IRS' Responses by Filing Period



^a The percent correct for each filing period is 83 percent for 1978, 85 percent for 1982, 75 percent for 1985, 83 percent for 1986, 79 percent for 1987, and 64 percent for 1988.

Assistors' Failure to Probe Was a Primary Reason for Inaccurate Responses As in our 1987 review, we found that assistors did not always probe for all of the pertinent facts before providing answers to our questions. Probing is important because taxpayers who call with questions frequently are not sufficiently familiar with the tax laws to initially provide assistors with all the information needed to answer their questions correctly. Without knowing certain facts about a taxpayer's situation or status, an assistor cannot be certain that the response actually applies to the taxpayer's situation. Assistors, therefore, must elicit that information from the taxpayer.

To answer questions correctly, assistors may be required to inquire about, among other things, the taxpayers', or their dependents', ages, marital status, income, the time period of transactions, or the purposes of the transaction. For example, a subject area in which assistors frequently failed to probe for specific information was the standard deduction. The Tax Reform Act of 1986 allows taxpayers who are 65 or older

For these years, the results are not statistically comparable.

to take a higher standard deduction if they do not itemize deductions on their returns. Under prior law, instead of a higher standard deduction, all taxpayers who were 65 or older could take an additional exemption whether or not they itemized deductions. The assistors' inaccuracy rate for our question relating to the standard deduction was 39 percent. All of the incorrect responses on this question occurred because the assistors did not probe to determine whether the taxpayers were itemizing deductions on their returns. In these cases, the assistors were providing an answer without probing sufficiently to obtain the facts needed to answer the question.

IRS is aware of the importance of adequate probing by assistors and is trying to incorporate probing skills into assistor training. To make its training for new assistors more realistic, in 1987 IRS redesigned training for new recruits to emphasize probing. Probing requirements were interwoven into coursebook questions, job simulations, and classroom exercises. To assess how well assistors were probing for information, we analyzed the 17 of our 20 questions that required assistors to probe to correctly understand and answer our questions. Our analysis of the answers to those questions showed that assistors' failure to probe was a major reason for the 36 percent overall inaccuracy rate. Table 3.1 compares the assistors' accuracy to questions when probing was and was not required.

Table 3.1: Comparison of Assistors' Accuracy on Questions That Did and Those That Did Not Require Probing

		Corr	ect ^a	Incor	rect
	Responses	Number	Percentb	Number	Percent
Questions for which assistor probing was required (17)	1,399	849	61	550	39
Questions for which probing was not required (3)	334	261	78	73	22
Totals	1,733	1,110	64	623	36

^aIncludes answers that were correct but not complete.

Of the 550 incorrect responses to questions requiring probing, 468 resulted from a lack of probing and 7 because assistors could not answer our questions and did not offer to recontact us. The remaining 75 occurred despite probing by assistors.

^bRepresents projected percentages.

Accuracy Rates Were Lower for Questions Relating to Tax Law Changes

Answers to questions relating to changes in the tax law were also less likely to be correct. Of our 20 questions, 15 dealt with areas that were changed by the Tax Reform Act. Our analysis of assistors' responses to our 20 questions showed the questions affected by recent tax law changes were answered correctly 59 percent of the time compared to a 72-percent accuracy rate for questions that were not affected by these changes.

It is difficult, however, to conclude that the lower accuracy rates for these questions resulted solely because of the tax law changes. Of the 15 questions changed by the new law, 14 also required the assistors to probe in order to get a correct response. Assistors may have answered these questions incorrectly because of inadequate probing skills or because their knowledge of the new tax law was not sufficient to alert them to the necessity to probe. Thus, it is likely that assistors' errors were due to the combination of inadequate knowledge about law changes and failure to probe. We are unable to specifically quantify the incorrect answers attributable to either reason.

Responses From Back-Up Assistors Were Slightly More Inaccurate

We analyzed assistor accuracy by whether the assistor responding was a frontline or back-up assistor. A back-up assistor is generally expected to have more technical expertise in answering questions than a frontline assistor due to more experience on the job and more training. According to IRS, frontline assistors were trained to refer calls to back-up assistors when they were unsure of the response or were not trained in the tax law relating to the question. The percentage of calls frontline assistors referred to back-up assistors increased from 3 percent in 1987 to 20 percent in 1988. However, the majority of the assistors who answered our questions were frontline assistors. Of the 1,733 answers we received, 1,489 were from frontline assistors. Table 3.2 compares the accuracy of responses provided by frontline and backup assistors.

Table 3.2: Comparison of Response Accuracy Between Frontline and Back-Up Assistors

Assistors	Number of responses	Percent correct	Percent incorrect
Frontline	1,489	65	35
Back-up	244	60	40
Overall	1,733	64	36

As can be seen in table 3.2, frontline assistors' accuracy rate of 65 percent was higher than the back-up assistors' rate of 60 percent. A possible reason for this difference may be that back-up assistors are asked to answer more difficult questions.

Accuracy for Individual Questions Varied Widely

When analyzing accuracy by individual question, we found that the rates ranged from 33 to 99 percent. Responses to 7 of the 20 questions were equal to or exceeded the overall accuracy rate of 64 percent. Questions dealing with capital gains, child care, and scholarships were more likely to receive incorrect responses. Inaccuracy rates for these questions were 67, 64, and 60 percent, respectively. Table 3.3 shows the subjects and the accuracy and inaccuracy rates for each of the 20 questions.

Table 3.3: Accuracy of IRS' Telephone Assistors by Question

			Correct but	
Qu	estion number and subject	Correct ^a	not complete ^a	Incorrect
1	Capital gains ^b	32%	1%	67%
2	Unemployment compensation ^b	79	0	21
3	Student income ^b	46	0	54
4	Individual retirement account ^b	19	32	49
5	Standard deduction ^b	53	8	39
6	Charitable contributions	99	0	1
7	Dependent SSN ^b	59	6	35
8	Dependent exemptions ^b	63	0	37
9	Personal interest ^b	50	0	50
10	Pension income ^b	46	10	44
11	Mortgage interest ^b , ^d	40	21	40
12	Unreimbursed business expense ^b , ^d	16	37	46
13	Moving expense ^b	53	2	45
14	Child care credit ^b ,c	29	7	64
15	Alimony ^c , ^d	98	1	2
16	Business use of home ^{b,c}	71	1	28
17	Earned income credit ^b , ^c	88	0	12
18	Gain on sale of home ^c	43	5	52
19	Scholarship ^b	36	4	60
20	Tax on investment of child under 14b	73	3	24

^aCategories were combined for computing correct response rates.

We also compared accuracy rates for four questions used in both our 1987 and 1988 reviews of the telephone assistance program. The four questions, the answers we sought, and the way we scored them were identical for both years. As shown in table 3.4, we did not find any significant difference in accuracy rates for three of the four questions. We did, however, find a significant difference with the question on gain on the sale of a home. We could not determine why the accuracy rate for this question changed between the two periods.

^bQuestion required probing.

^cQuestions that did not involve change to tax law.

^dTotals do not equal 100 percent due to rounding.

Table 3.4: Comparison of Accuracy Rates for Same Questions Asked in Both 1987 and 1988 GAO Reviews

	Number of res	ponses	Accuracy re	ates
	1987	1988	1987	1988
Alimony	76	132	96	98
Business use of home	57	147	69	72
Earned income credit	75	147	89	88
Gain on sale of home	69	136	90	48

We also analyzed accuracy by the number of calls completed at selected sites to determine whether the volume of calls a site received affected the accuracy of the site. Our analysis found that volume had little effect on overall site accuracy. For the 10 toll-free sites that handled the largest number of calls, the average accuracy rate was 62 percent compared to 66 percent for the 10 sites that handled the smallest number of calls.

Conclusions

This year, IRS assistors correctly responded to our questions 64 percent of the time. Last year, using a substantially different set of questions, our questions were answered correctly 79 percent of the time. Because this year's questions were substantially different and required more assistor probing, caution should be exercised in comparing the results from the 2 years. For those same reasons, we cannot conclude how much of the difference in accuracy rates was attributable to changes in the mix of questions, their degree of difficulty, or the quality of IRS' service.

We believe, however, that the questions that we asked are a reasonable test of the accuracy of IRS assistors' responses. Furthermore, IRS has agreed that our questions were reasonable and ones it would expect assistors to answer correctly. And, although our questions are not necessarily representative of the tax law questions that taxpayers actually asked, no one knows what constitutes a representative set of questions nor are we certain that a representative set of questions can be developed. Moreover, while it may not be realistic to expect assistors to always give a correct answer, clearly there is room for improvement both for frontline and back-up assistors.

In this light, one area where improvement is possible is probing by assistors. We found that assistors' failure to probe for pertinent facts before providing responses was a primary reason many of their responses were incorrect. The fact that a higher percentage of questions assistors answered incorrectly dealt with tax law changes may or may not reflect assistors' knowledge of the new tax law since many of those questions

required probing. Thus, it is not clear whether assistors lacked proper probing skills or their knowledge of the new law was insufficient to alert them to the need for further probing. Although our review was not intended to identify precisely the causes for incorrect responses, it would seem reasonable to conclude that incorrect responses were due to a combination of probing and tax law errors. We are not in a position, however, to recommend specific corrective actions to resolve these problems.

Agency Comments and Our Evaluation

In responding to a draft of our report the Commissioner of Internal Revenue agreed with the report's conclusions and noted IRS' efforts to improve assistors' probing skills. The Commissioner said that IRS was refining its own test call survey system to better measure the accuracy and completeness of assistors' answers and suggested that we consider using the IRS survey system. The Commissioner cited increases in the number of test call questions and developing test call questions that were more reflective of taxpayers' questions as two examples of refinements being made to improve the system. The Commissioner also cited IRS' effort to implement regional diagnostic centers as a means to improve assistor probing and accuracy. (See app. II.)

We support IRS' efforts to improve the quality of the assistance it provides to taxpayers and believe that IRS should be the primary monitor of the quality of services it provides. The test call survey system IRS is developing, if well conceived and implemented, could serve such a function. Our monitoring of the system's development, however, indicates that as of January 25, 1989, it is too early to conclude whether it will.

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Sampling and Data Analysis Methodology.

This appendix describes how we selected our sample of calls to IRS telephone sites and how we projected the sample data. Statistical sampling errors for the major figures in the report are included in this appendix.

Sampling Methodology

Statistical sampling allows us to draw conclusions about a population on the basis of information from a randomly selected sample of that population. The calculated sample statistics are estimates of population statistics. However, each estimate has a measure of uncertainty, or sampling error, associated with it because only a portion of the universe has been selected for analysis.

Sampling errors indicate how much confidence we have that the sample estimate matches the population statistic it measures. We can use sampling errors to form an interval around each estimate showing where the average result of all possible samples could be expected to fall. This sample of calls to IRS telephone sites was designed so that we would be 95-percent certain that the sampling errors would be no greater than 2.5 percent for the set of questions we asked.

Sample Selection and Scope

Our sample consisted of telephone calls made to 29 of IRS' 32 telephone sites on 48 days beginning February 9, 1988, and ending April 15, 1988. We placed these calls on Monday through Friday during this time period. We did not make calls to Alaska, Hawaii, and Puerto Rico because of time differences and/or difficulty in placing calls to these locations. Using each site's hours of operation, we calculated the number of 15-minute calling intervals available to the sites on each day to be used for scheduling our calls. Table I.1 shows the geographical areas covered by each of the 29 call sites.

Table I.1: Areas Covered by 29 IRS Telephone Sites GAO Contacted

Site	Area covered by site
Atlanta	Alabama, Georgia, Louisiana, Mississippi, South Carolina
Baltimore	District of Columbia, Baltimore
Boston	Connecticut, Maine, Massachusetts, New Hampshire, Northeast New York, Rhode Island, Vermont
Brooklyn	Brooklyn Metropolitan Area, Long Island, Manhattan Metropolitan Area
Buffalo	Central and Western New York
Chicago	Illinois
Cincinnati	Southern Ohio, West Virginia
Cleveland	Northern Ohio
Dallas	Kansas, New Mexico, Oklahoma, Northern Texas
Denver	Colorado, Wyoming, Utah
Des Moines	lowa
Detroit	Michigan
El Monte	Southern California
Houston	Southern Texas
Indianapolis	Indiana, Kentucky
Jacksonville	Florida
Milwaukee	Wisconsin
Nashville	Arkansas, North Carolina, Tennessee
Newark	New Jersey
Oakland	Northern California, Nevada
Omaha	Nebraska
Philadelphia	Eastern Pennsylvania
Phoenix	Arizona
Pittsburgh	Western Pennsylvania, Delaware, Maryland (except Baltimore)
Portland	ldaho, Oregon
Seattle	Washington
Richmond	Virginia
St. Louis	Missouri
St. Paul	Minnesota, Montana, North Dakota, South Dakota

IRS estimated that the 29 sites in our sample would receive 25,260,000 calls during the 1988 tax filing season and provided a breakdown of this universe for each site. At a confidence level of 95 percent, we determined that we needed to make about 1,900 calls in order to project our results to the 20 tax law questions we asked. To allow for better predictability and to cover possible problems making successful calls, we drew a stratified random sample of 1,927 calls scheduled at 15-minute intervals over our 48 calling days. Sites with evening hours had calls scheduled during those hours. As shown in table I.2, the sample allocated the

1,927 calls proportionate to each site's projected volume of calls during the 1988 filing season.

Table I.2: GAO's Sample of Calls by IRS Telephone Site

IRS telephone site	Estimated number of calls during filing season	Percent of estimated calls	Number of calls scheduled	Sample size
Atlanta	1,680,000	6.65%	128	128
Baltimore	760,000	3.01	58	58
Boston	1,340,000	5.30	103	101
Brooklyn	940,000	3.72	70	70
Buffalo	340,000	1.35	26	25
Chicago	1,220,000	4.83	92	91
Cincinnati	770,000	3.05	56	55
Cleveland	600,000	2.38	47	47
Dallas	1,660,000	6.57	124	123
Denver	770,000	3.05	58	57
Des Moines	210,000	0.83	15	15
Detroit	710,000	2.81	56	56
El Monte	2,100,000	8.31	160	159
Houston	1,250,000	4.95	107	106
Indianapolis	770,000	3.05	60	60
Jacksonville	1,150,000	4.55	94	94
Milwaukee	460,000	1.82	34	33
Nashville	1,210,000	4.79	92	91
Newark	550,000	2.18	41	41
Oakland	1,800,000	7.13	137	135
Omaha	210,000	0.83	15	14
Philadelphia	690,000	2.73	51	51
Phoenix	500,000	1.98	38	36
Pittsburgh	660,000	2.61	46	44
Portland	420,000	1.66	30	30
Richmond	500,000	2.06	39	39
Seattle	640,000	2.53	49	49
St. Louis	580,000	2.30	44	44
St. Paul	250,000	2.97	57	56
Totals	25,260,000	100.00%	1,927	1,908

Although we planned for 1,927 calls, we were unable to make 19 of them, reducing the final sample size to 1,908 calls. This reduction did not affect the confidence level of our projections and the error rates for accessibility and accuracy remained less than 2.5 percent.

Table I.3 shows the subjects of our questions and our sample size by subject.

Table I.3: Subject Areas Addressed by GAO's Question and Sample Size by Subject

Subject area	Sample size	Percent of questions
Capital gains	75	3.9
Unemployment compensation	78	4.1
Student income	63	3.3
Individual retirement account	78	4.1
Standard deduction	79	4.1
Charitable contribution	73	3.8
Dependent SSN	90	4.7
Dependent exemptions	75	3.9
Personal interest	98	5.1
Pension income	84	4.4
Mortgage interest	76	4.0
Unreimbursed business expense	98	5.1
Moving expense	76	4.0
Child care credit	78	4.1
Alimony	145	7.6
Business use of home	165	8.6
Earned income credit	161	8.4
Gain on sale of home	152	8.0
Scholarship	79	4.1
Tax on investment of child under 14	85	4.5
Totals	1,908	100.0

This was our sixth review of IRS' telephone assistance. Our work was done in accordance with generally accepted government auditing standards. This year we asked 20 tax law questions of which four were the same as and one was similar to the ones we used in our 1987 review. The remaining 15 new questions sought answers that were applicable for the first time during the 1988 filing season. As in past reviews, IRS reviewed our questions and answers and agreed that (1) the questions were reasonable, (2) they were ones IRS would expect assistors to answer correctly, and (3) the answers we sought were correct.

Our last two reviews were similar in scope and methodology although 15 of the 20 questions we asked were new questions this year. We changed our survey questions out of necessity as the Tax Reform Act invalidated most of the questions we used last year. Table I.4 compares the sample

sizes, calling days, sites contacted, and number of questions asked in our last three reviews.

Table I.4: Comparison of Review Scopes

Year	Sample size	Calling days	IRS sites contacted	Number of questions
1988	1,908	48	29 of 32	20
1987	1,574	42	29 of 32	21
1986	1,280	32	31 of 34	21

Projection of Sample Results

Each of the 1,927 scheduled telephone calls represented a portion of the total universe and we weighted the data to project to this universe. This allows the sample statistics we reported, with their respective sampling errors, to estimate the universe statistics for the set of questions we asked. The results do not necessarily reflect the overall accuracy of IRS assistors' answers to the full range of questions taxpayers actually asked during the filing season.

Sampling Errors

We computed sampling errors for all estimates in our review. Our sampling plan was designed to provide a sample size that would yield an expected sampling error of not greater than 2.5 percent at the 95-percent confidence level. However, the actual sampling error on any question depends upon the number of responses to the question and the variance of these responses. Table I.5 lists the sampling errors for the major figures in this report.

Table I.5: Confidence Intervals for Major Estimates Reported

	Est		
Category limit	Estimate	Lower limit	Upper
Accessibility on first attempt	76.3%	74.4%	78.29
Accessibility on all attempts	93.3	92.2	94.4
Calls placed on hold	47.2	45.0	49.4
Questions answered correctly	64.0	61.7	66.3
Questions answered incorrectly	36.0	33.7	38.3
Accuracy on questions relating to changes in tax law	59.4	56.5	62.3
Accuracy on questions not relating to change in tax law	72.2	68.7	75.7
Accuracy on questions requiring probing	60.7	58.1	63.3
Accuracy on questions not requiring probing	78.0	73.5	82.5
Accuracy on questions used last year	76.4	72.8	80.0
Accuracy on questions new this year	58.0	55.2	60.8

Saturday Calls

To determine whether accessibility and accuracy rates on Saturday were similar to those during weekdays, we placed 133 calls to the 29 IRS toll-free sites on the last three Saturdays of the filing season. Two calls were excluded from our usable database, which reduced the sample to 131. On each Saturday we contacted the 29 IRS toll-free sites at least once between 9:00 a.m. and 1:00 p.m., and asked each of our questions at least once. The results of Saturday calls are not statistically projectable because information on the total calls per site during the hours we called was not available to develop a universe to project our results.

Comments From the Internal Revenue Service



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

NER

NOV 2 5 1988

Mr. Richard L. Fogel Assistant Comptroller General United States General Accounting Office Washington, DC 20548

Dear Mr. Fogel:

We have reviewed your recent draft report entitled "Tax Administration: Accessibility, Timeliness, and Accuracy of IRS' Telephone Assistance Program".

We agree with the report's conclusions and are pleased that the report clearly states that the results of GAO's survey can only be projected nationwide to a universe of questions and answers similar to those posed by GAO and cannot be projected to the total universe of questions actually asked by taxpayers.

Providing accurate and complete answers to every taxpayer who contacts an assistor is of utmost importance to our Taxpayer Service program. Although the report contains no recommendations, it does suggest that improvement in the accuracy of responses could be accomplished if assistors probed for all of the pertinent facts before providing answers. We agree and, as noted in the report, have expanded assistor training on probing skills. In addition, we continue to emphasize to all managers the need for quality review and providing immediate feedback to assistors who fail to probe completely.

As you know, IRS instituted its own test call survey system this year and made approximately 20,000 calls to assistors. Our system indicated that the overall accuracy rate during the filing season was 72.4 percent. We intend to further refine our system to better measure the accuracy and completeness of assistors' answers. For example, we expect to make over 5,000 more calls this filing season compared to last year. We have also added a number of new questions and made the test calls more reflective of the calls that are actually made by taxpayers. We would encourage GAO to consider using this system to conduct its test-call survey rather than rely on a separate test. In doing so, we believe that Congress, the public, and both agencies will have a common and valid measure for gauging IRS' accuracy.

-2-

Mr. Richard L. Fogel

Also, the implementation of Regional Diagnostic Centers this year should further assist us in improving probing techniques as well as improving accuracy. These Centers will use weekly data from the National Office to identify specific areas of tax law that need improvement in local offices. Targeted offices will receive assistance from the Centers in analyzing areas of difficulty and developing appropriate actions such as training.

The expansion of the Integrated Test Call Survey System and the development of Regional Diagnostic Centers should contribute to what we believe will be measureable improvements in the quality of our telephone assistance to the public.

With kind regards,

Sincerely,

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