Internal Revenue Service

Advancing *E-file* Study
Phase 1 Report

Achieving the 80% *E-file* Goal Requires Partnering with Stakeholders on New Approaches to Motivate Paper Filers

September 30, 2008

Approved for Public Release; Distribution Unlimited.
Case Number 08-1062.

Version 1.3

Document Number 0206.0210

THIS PAGE INTENTIONALLY LEFT BLANK

Table of Contents

List of Figures

THIS PAGE INTENTIONALLY LEFT BLANK.

List of Tables

1. Introduction

Contents of Chapter 1:

The Internal Revenue Service (IRS) Advancing *E-file* Study Phase 1 Report is a major effort to collect, synthesize, and analyze all substantial data in one document on the IRS *e-file* program — including its history, stakeholders, taxpayer and preparer behaviors, related programs and efforts, and options for expansion — to help the IRS validate and launch future studies, research, and other activities to meet the congressionally-set goal of an 80% *e-file* rate. As Phase 1 of a multiphased approach for addressing this goal, this report does not include recommendations on selecting or implementing specific options for advancing *e-file* but lays the foundation for doing so in future phases.

During this phase, the following themes were identified and merit keeping in mind as the reader progresses through the report:

- **There is no silver bullet**. An advancing *e-file* strategy must take into consideration many complex factors, and there is no quick fix or any single option approach for the IRS to convert remaining paper filers.
- **The IRS cannot meet the goal without help**. The multifaceted landscape of the US tax system, by its very nature, requires that the IRS rely on strong partnerships with third party partners, stakeholders, and Congress to advance *e-file*.
- **Technology is secondary to motivating behavior**. Even the most innovative technology will not help the IRS achieve the 80% *e-file* goal unless it is grounded in a thorough understanding of the intricacies of filer behavior — their motivators, concerns, and relative positions on the technology adoption curve.

This report synthesizes existing information on factors influencing electronic filing of individual tax returns. It provides the foundation for future IRS efforts to evaluate, plan, and execute solutions to achieve the 80% e-file *goal set by Congress.*

1.1 Purpose of This Report

Through this advancing *e-file* report, the IRS is taking the first step toward defining a comprehensive strategy and set of actions to achieve the 80% *e-file* goal established in the Internal Revenue Service Restructuring and Reform Act of 1998 (RRA98)[1]. The primary purpose of this report is to gather substantiated information related to *e-filing* in one place and analyze it to ascertain the facts and considerations that the IRS, its third party partners, and the US Congress must address to achieve the 80% *e-file* goal.

[1] The 80% *e-file* goal derives from Title II, Section 2001 of the Internal Revenue Service Restructuring and Reform Act of 1998 (RRA98):

(a) IN GENERAL.—It is the policy of Congress that—

(1) paperless filing should be the preferred and most convenient means of filing Federal tax and information returns,

(2) it should be the goal of the Internal Revenue Service to have at least 80% of all such returns filed electronically by the year 2007, and

(3) the Internal Revenue Service should cooperate with and encourage the private sector by encouraging competition to increase electronic filing of such returns.

This report also serves as input to future efforts to specify, evaluate, plan, and execute actions to meet the 80% *e-file* goal.

The question of how to achieve the 80% *e-file* goal has been a subject of much discussion and debate. Like any issue with diverse constituents, various opinions and perspectives must be considered before any decisions are made about where to focus attention and scarce resources. While each point of view seems reasonable on its own, looking at the ideas and opinions on the whole provides the best means of evaluating the relative impacts and merits of each. The IRS and its third party partners have made significant progress to date — 60% of individual tax returns were *e-filed* during the 2008 tax filing season[2]. The remaining 40% highlights the need to explore multiple options to reach the 80% *e-file* goal.

1.2 Origin and Approach

This report was prepared by The MITRE Corporation, a not-for-profit organization that operates three Federally Funded Research and Development Centers (FFRDC), one of which — the Center for Enterprise Modernization (CEM) — serves the IRS. The report was prepared pursuant to guidelines and specifications provided by the IRS Office of Electronic Tax Administration and Refundable Credits (ETARC). This work was performed under Contract TIRNO-99-D-00005, Task Order 0163, from 17 January 2008 to 30 March 2008, and Task Order 0206 from 31 March 2008 to 6 June 2008.

In addition to being driven by the IRS's desire to meet the 80% *e-file* goal and to improve taxpayer service overall, the report results from the specific interest of members of Congress and other stakeholders in increasing and improving electronic service for filing tax returns. The report originated as a kind of meta-analysis (review and synthesis) of existing information on *e-file*. By design, original research was out of scope for this report, though it was agreed that gaps in available information would be noted.

To conduct the analysis needed for this foundational first phase, the approach involved two related and overlapping workstreams: (1) identify, obtain, and synthesize existing information on taxpayer and preparer filing behavior and characteristics and (2) identify, obtain, and synthesize existing information on potential options to reach the 80% *e-file* goal. The IRS requested that the report outline be socialized with numerous stakeholder groups internal and external to the IRS. Meetings were held with more than a dozen stakeholders, and more than 500 source documents provided information for the report. All of these are noted in the back matter of the report. Since the intent of this phase was to survey currently available information, no original research was conducted. However, the final Chapter identifies gaps in available information and suggests areas where new research should be considered in future phases.

1.3 Scope and Organization

This report contains a synthesis of information from existing documents, reports, and studies and an assessment of the implications of potential *e-filing* options. To provide a solid foundation for future study and decision-making, the existing research results and study findings were combined into various topic areas:

---

[2] IRS (2008) *IRS e-file Up Sharply in 2008*

- How *e-filing* works, *e-file* stakeholders, and the IRS relationship with third parties.
- IRS progress toward the 80% *e-file* goal and the effect of technology adoption on *e-file* (including a comparison of the IRS and banking industry experiences in promoting online service).
- Taxpayer and preparer perceptions of *e-file* and motivations to file electronically.
- Experiences of States and foreign countries on electronic filing of taxes.
- Information regarding options for increasing the electronic filing of taxes, including offering incentives, setting mandates for specific groups of paid preparers, developing electronic filing systems (e.g., direct file), and implementing ways to automate transfer of information from paper to electronic format (e.g., 2D barcodes).

The report concludes with a high-level discussion of research gaps noted through the course of this study. The IRS and its key stakeholders should work together to address these additional research opportunities prior to developing detailed recommendations for addressing the 80% *e-file* goal. This report contains 15 Chapters along with an acronym list, glossary, and list of references as described in Table 1-1.

Table 1-1 Organization of This Report

Chapter Number and Title	Contents
1. Introduction	Defines this report's purpose, scope, and organization. Also explains the report's origin and approach, and introduces conventions used in this report.
2. *E-file* Goal, Stakeholders, and History	Establishes the basis for the 80% *e-file* goal and its interpretations, defines the US tax system and its stakeholders, including the roles of third parties and States, and provides a synopsis of IRS *e-file* since it began in 1986.
3. IRS *E-file* and Technology Adoption	Introduces the concept of technology adoption as a driving force behind *e-file* (and other technology) use, provides historical and projected IRS *e-file* statistics, and compares *e-file* to online banking and online bill pay.
4. Introduction to Research on Filer Motivators and Concerns	Notes IRS research related to filer motivators and concerns and introduces studies that will be discussed by topic in Chapters 5 and 6 and referenced throughout this report.
5. Taxpayer Motivators and Inhibitors	Topically synthesizes information that characterizes taxpayers and their motivations to file electronically.
6. Preparer Motivators and Inhibitors	Topically synthesizes information that characterizes preparers and their motivations to file electronically.
7. State Electronic Filing Experiences	Summarizes the various electronic filing efforts States have used and provides statistics on their usage.
8. International Electronic Filing Experiences	Summarizes the various electronic filing efforts of foreign countries; provides a comparison of the United States, United Kingdom, Canada, and Australia; and describes these foreign electronic filing efforts in case studies.

Chapter Number and Title	Contents
9. Introduction to Options Chapters	Describes how Chapters 2 through 8 relate to the upcoming option Chapters (10 through 14), explains the structure of the option Chapters, and summarizes the options for quick reference.
10. Incentive-Based *E-filing* Options	Defines incentives for purposes of this report, provides a history of incentive-based *e-filing* at the IRS, presents related State experiences, and proposes incentive-based options to advance *e-file* (including for each option the targeted audience, potential contribution to the 80% *e-file* goal, and considerations).
11. Mandate-Based *E-filing* Options	Defines mandates for purposes of this report, provides a history of mandate-based *e-filing* at the IRS, presents related State experiences, and proposes mandate-based options to advance *e-file* (including for each option the targeted audience, potential contribution to the 80% *e-file* goal, and considerations).
12. Internet-Based *E-filing* Options	Defines Internet filing for purposes of this report, provides a history of Internet-based *e-filing* at the IRS, presents related State experiences, and proposes incentive-based options to advance *e-file* (including for each option the targeted audience, potential contribution to the 80% *e-file* goal, and considerations).
13. Phone-Based *E-filing* Options	Defines telephone filing for purposes of this report, provides a history of phone-based *e-filing* at the IRS, presents related State experiences, and proposes phone-based options to advance *e-file* (including for each option the targeted audience, potential contribution to the 80% *e-file* goal, and considerations).
14. Paper-Based Filing Options	Defines paper filing for purposes of this report, provides a history of paper-based filing at the IRS, presents related State experiences, and proposes options to modernize processing of paper returns (including for each option the targeted audience, potential contribution to the 80% *e-file* goal, and considerations).
15. Other Options and Research Opportunities	Identifies other options for possible analysis/consideration in the future (by design, these options do not have the depth of analysis or consideration as those in preceding Chapters). Notes gaps identified from the review of current research and information.
Appendices/Back Matter	Includes a list of contributors, meanings of acronyms, a glossary, and a list of references.

By synthesizing existing information in the preceding areas, this report represents the first step of an iterative process to develop a comprehensive strategy to advance *e-file*. This report — by design — does not include the in-depth analysis (e.g., systems engineering feasibility studies, detailed cost/benefit analysis, security/privacy risk analysis) necessary to draw conclusions and formulate concrete recommendations. Instead, the overview and options discussed herein provide a framework for crafting such recommendations in the future.

Furthermore, this report is by definition limited in scope to the goal of advancing *e-file*. Other objectives — such as improving IRS taxpayer service — are only discussed to the extent that they overlap with advancing *e-file*. Such goals, along with clear analysis of costs and benefits from a macroeconomic perspective, warrant close consideration and balance as the IRS proceeds to develop an *e-file* strategy.

1.4 Conventions

This Section contains conventions used in this report and is intended to make the navigation and understanding of this report easier.

Reading This Report

To the fullest extent possible, this report uses a consistent organizational and visual design for presenting information. Figure 1-1 describes the use of Headings, Chapter-specific Tables of Contents, informational and thematic callouts, and footnotes in this report.

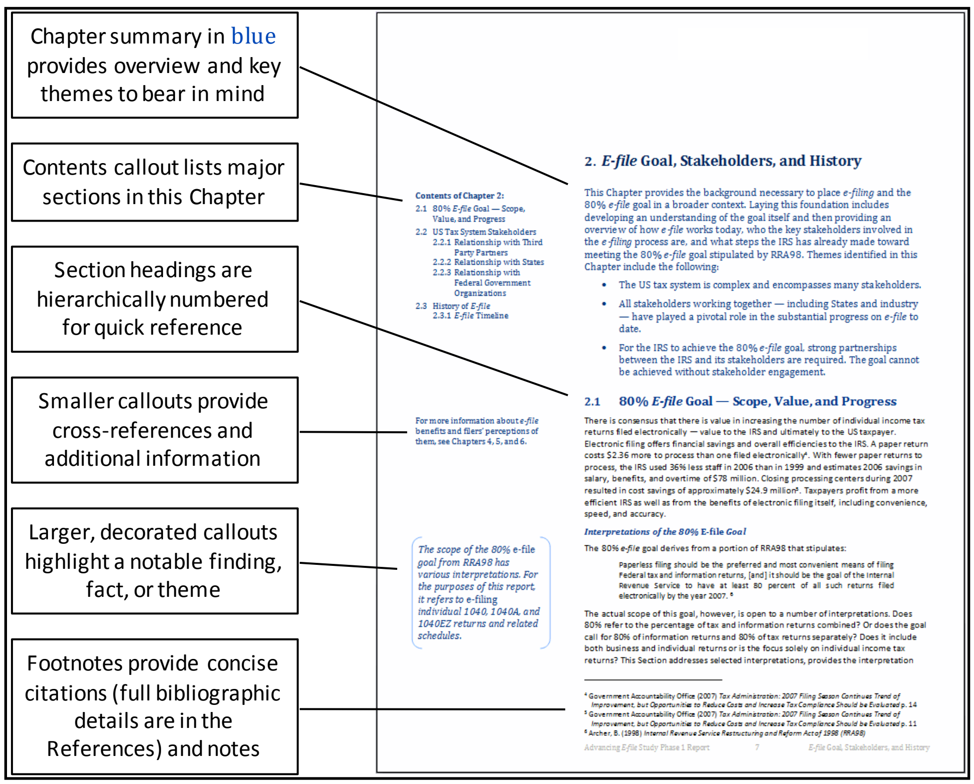

Figure 1-1 Navigational and Informational Features of this Report

Data

To the fullest extent possible, this report uses the most current authoritative data available for a given subject. Unless noted otherwise, the inclusion of slightly older data for a given subject may be because: it was the most current authoritative data available (authoritative data is preferred to draft, unofficial, projected, proprietary, or estimated data); and/or it was the most current complete data set available (complete data — a single source and derivation — for a given topic is preferred to piecing separately sourced/derived data together to form a point).

Dates

Dates are Calendar Year (CY) unless otherwise specified. Note that the Tax Year (TY) for individual returns is behind the CY by a year (TY = CY – 1). For example, during the 2008 filing season (e.g., 1 January – 15 April 2008), individuals filed their tax returns for TY2007. As returns are received, they are processed; the Processing Year (PY) for individual returns is the same as the CY (PY = CY). Note that a PY may include a small proportion of returns beyond those from the most recent tax year (e.g., amended returns from 2 or more tax years ago).

Use of Footnotes and Citations

Wherever possible, citations to the source materials are provided in footnotes for purposes of information sharing and traceability. This document uses two main conventions regarding citations:

- For a sentence containing a fact, quote, or idea that should and can be attributed to a source, a footnote is included just inside the period.
    - Example: This sentence contains a quote that is derived from the footnote indicated “at its end”[1].
    - Example: This sentence illustrates how the first time a Figure or Table is referenced, the citation and/or data source for that Figure or Table is included in its footnote[2].
- For a paragraph that derives from the same source, a footnote is included after the period of the last sentence in a paragraph and before the colon preceding a bulleted list. That footnote applies to all content in that paragraph or list unless modified by a sentence-level citation as described above.
    - Example: This paragraph has three sentences, the first of which contains a fact or idea from a specific source. This sentence in the same paragraph also contains a finding from that same source that should be cited. This final sentence also comes from the same source.[2]

Nomenclature

“IRS” refers to the US Department of the Treasury Internal Revenue Service.

“Returns” and “tax returns” refer to Federal individual income tax returns unless specified otherwise.

The terms “*e-file*,” “*e-filed*,” “*e-filer,*” “*e-filers,*” and “*e-filing*” all refer to the IRS-branded electronic filing program.

“V-Coders” prepare their returns on a computer but file on paper.

“Preparers” are persons who assist taxpayers in completing their tax returns.

References to States as a group are not exclusive of the District of Columbia, because its electronic filing programs “operate exactly like those in the States”[3].

---

[3] Duncan, H. T. (2006) *Preparing Your Taxes: How Costly Is It?* p. 1

2. *E-file* Goal, Stakeholders, and History

Contents of Chapter 2:

This Chapter provides the background necessary to place *e-filing* and the 80% *e-file* goal in a broader context. Laying this foundation includes developing an understanding of the goal itself and then providing an overview of how *e-file* works today, who the key stakeholders involved in the *e-filing* process are, and what steps the IRS has already made toward meeting the 80% *e-file* goal stipulated by RRA98. Themes identified in this Chapter include the following:

- The US tax system is complex and encompasses many stakeholders.
- All stakeholders working together — including States and industry — have played a pivotal role in the substantial progress on *e-file* to date.
- For the IRS to achieve the 80% *e-file* goal, strong partnerships between the IRS and its stakeholders are required. The goal cannot be achieved without stakeholder engagement.

2.1 80% *E-file* Goal — Scope, Value, and Progress

For more information about *e-file* benefits and filers' perceptions of them, see Chapters 4, 5, and 6.

There is consensus that there is value in increasing the number of individual income tax returns filed electronically — value to the IRS and ultimately to the US taxpayer. Electronic filing offers financial savings and overall efficiencies to the IRS. A paper return costs $2.52 more to process than one filed electronically (about eight times more)[4]. With fewer paper returns to process, the IRS used 36% less staff in 2006 than in 1999 and estimates 2006 savings in salary, benefits, and overtime of $78 million. Closing processing centers during 2007 resulted in cost savings of approximately $24.9 million[5]. Taxpayers profit from a more efficient IRS as well as from the benefits of electronic filing itself, including convenience, speed, and accuracy.

Interpretations of the 80% E-file *Goal*

The scope of the 80% e-file *goal from RRA98 has various interpretations. For the purposes of this report, it refers to* e-filing *individual 1040, 1040A, and 1040EZ returns and related schedules.*

The 80% *e-file* goal derives from a portion of RRA98 that stipulates:

> Paperless filing should be the preferred and most convenient means of filing Federal tax and information returns, [and] it should be the goal of the Internal Revenue Service to have at least 80 percent of all such returns filed electronically by the year 2007. [6]

The actual scope of this goal, however, is open to a number of interpretations. Does 80% refer to the percentage of tax and information returns combined? Or does the goal call for 80% of information returns and 80% of tax returns separately? Does it include both business and individual returns or is the focus solely on individual income tax

[4] IRS (2005) *Summary for Weighted Averages of the Paper Form 1040, 1040A, 1040 EZ and e-File Form 1040, 1040A, & 1040 EZ for Submissions Processing Costs Labor costs (FY 2005 IRM 3.30.10)*

[5] Government Accountability Office (2007) *Tax Administration: 2007 Filing Season Continues Trend of Improvement, but Opportunities to Reduce Costs and Increase Tax Compliance Should be Evaluated* p. 11

[6] *Internal Revenue Service Restructuring and Reform Act of 1998 (RRA98)*

returns? This Section addresses selected interpretations, provides the interpretation used by this report, and notes the benefit — regardless of specific interpretation — of the goal as a motivator.

Interestingly, as of 2006, combining information returns with tax returns — for individuals, businesses, and all other filing entities — yields an overall *e-file* rate of 88%[7].

Interestingly, as of 2006, combining information returns with tax returns — for individuals, businesses, and all other filing entities — yields an overall e-file rate of 88%.

Key stakeholders have offered varying interpretations of the 80% *e-file* goal:

- While the legislation refers to the filing of both tax and information returns, the staff of the Joint Committee on Taxation, in its report *General Explanation of Tax Legislation Enacted in 1998*, referred only to tax returns: "The Act states that the policy of Congress is to promote paperless filing, with a long range goal of providing for the filing of at least 80% of all tax returns in electronic form by the year 2007"[8].
- The Electronic Tax Administration Advisory Committee's (ETAAC) 2007 *Annual Report to Congress* seems to interpret the goal more broadly. "In 1998 Congress established a goal for the IRS that, by 2007, 80% of *all* returns are filed electronically" [emphasis ETAAC's][9]. The emphasis on the word "all" implies that the goal includes both tax *and* information returns.
- The IRS Oversight Board in its *Electronic Filing 2007: Annual Report to Congress* describes the goal with reference to individual returns, stating that its "achievement…has been commonly measured by the number of individual tax returns filed electronically"[10]. In the same report, however, the Board recommends extending the goal to 2012 and expanding the scope of the 80% *e-file* goal to include "individuals, businesses and tax exempt organizations"[11].

For the purposes of this report, the goal of 80% refers to the electronic filing of Federal individual income tax returns using 1040, 1040A, or 1040EZ and related schedules.

This report's use of the term "electronic filing" or "e-filing" refers to the process of submitting a tax return from a taxpayer/preparer to a tax-collecting entity in which the return information is transmitted digitally. However, other approaches to filing, such as on paper or by telephone, which may not intuitively be considered electronic filing, can achieve comparable benefits in terms of convenience to the taxpayer and reduced cost and increased efficiency for the IRS. In its November 2007 Tax Administration report, the Government Accountability Office (GAO) refers to bar coding as "another option to increase electronic filing"[12]. Because of the ability to achieve benefits similar to those of electronic filing, this report includes a review of a wide range of approaches, including paper-based methods along with the more conventional incentives, mandates, and Internet-based and phone-based options.

---

[7] IRS (2007) *Calendar Year Projections of Information and Withholding Documents (2007-2015)* pp. 3-5; IRS (2007) *Calendar Year Return Projections for the United States and IRS Campuses CY 2007-2014* pp. 8-9

[8] Joint Committee on Taxation (1998) *General Explanation of Tax Legislation Enacted in 1998*

[9] Electronic Tax Administration Advisory Committee (2007) *Annual Report to Congress* p. 1

[10] IRS Oversight Board (2008) *Electronic Filing 2007: Annual Report to Congress* p. 5

[11] IRS Oversight Board (2008) *Electronic Filing 2007: Annual Report to Congress* p. 24

[12] Government Accountability Office (2007) *Tax Administration: 2007 Filing Season Continues Trend of Improvement, but Opportunities to Reduce Costs and Increase Tax Compliance Should be Evaluated* p. 15

Progress to Date

Regardless of its specific scope interpretation, the 80% *e-file* goal has been effective in focusing attention on increasing electronic filing. Figure 2-1 illustrates Federal individual income tax return preparation and filing figures as of TY2006, the most recent data available[13].

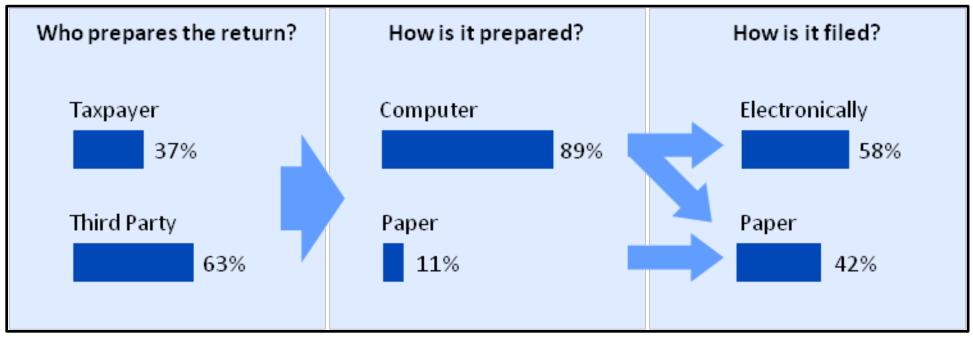

Figure 2-1 Federal Individual Income Tax Return Preparation and Filing Data (as of TY2006)

Whether returns are initiated by taxpayers or preparers, there are a number of ways that tax returns can be prepared and filed using paper or electronic means. Figure 2-1 simplifies the complex array of choices into three main combinations of preparation and filing of individual tax returns:

- **Prepared on a computer and filed electronically** — Regarding the 80% *e-file* goal, the IRS must maintain, if not grow, this segment.
- **Prepared on a computer, then printed and filed on paper** — The IRS calls these types of filers V-Coders[14]. Regarding the 80% *e-file* goal, the IRS seeks to motivate this segment to transition to *e-file*.
- **Prepared on paper and filed on paper** — Regarding the 80% *e-file* goal, the IRS must convince this population to transition to *e-file* (as well as automate the processing of the residual paper).

It is desirable to convert V-Coders — those who prepare their returns on a computer but file on paper — to e-filing *since most of the work has already been done: the data is already digital.*

Given the likelihood that the last category, returns prepared and filed on paper, will never completely disappear, it is worth considering whether the 80% *e-file* goal should be revised to explicitly include those options that achieve benefits similar to *e-filing* or whether including non-electronic options would detract from commitment to the goal.

In his report funded by the IBM Center for the Business of Government, Steven Holden, a former official in the Electronic Tax Administration (ETA) at the IRS, noted that the 80% *e-file* goal as currently defined “was likely never attainable… [because] …the proportion of users who will not adopt an innovative technology, especially one involving the transmission of their tax data electronically to the IRS, surely exceeds 20%”[15]. The IRS Oversight Board is more optimistic, although cautiously so. According to

---

[13] IRS (2006) *Tax Year 2006 Taxpayer Usage Study*

[14] The term V-Coders originates from the submission (tax return) processing practice of marking returns with return processing codes based on characteristics of the return. The letter V was associated with computer-generated paper returns because it was the next unused letter. See (IRS (2008) *Internal Revenue Manual - 3.11.3 Individual Income Tax Returns (Cont. 10): Exhibit 3.11.3-3 Return Processing Codes*).

[15] Holden, S. H. (2006) *A Model for Increasing Innovation Adoption: Lessons Learned from the IRS e-file Program* p. 26

its 2007 report, "given current progress and strategic planning, the Board believes that the IRS can meet an 80% *e-file* goal by 2012 — but will need the help of the professional tax community and the Congress to do so"[16].

2.2 US Tax System Stakeholders

The *IRS Strategic Plan 2005–2009* describes the IRS vision as one that "anticipates a dynamic world filled with new demands for service"[17]. In laying out this vision, the IRS also offers a glimpse of the tax landscape within which the IRS strives to continue to provide top-quality services to America's taxpayers:

> The IRS must be prepared to respond to an increasing and more demanding population, a more global and multi-lingual environment and an increasing number of taxpayers with complex financial holdings and the means and motive to resist the payment of taxes. In addition, we face frequent tax law changes, more numerous and complex tax schemes and, internally, an aging IRS workforce.[18]

It is within this context that the IRS faces the challenge of meeting the 80% *e-file* goal for electronic filing of individual tax returns.

This Section takes a closer look at this landscape, focusing particularly on the diverse group of stakeholders, including professional, commercial, and government entities that interact with the IRS and play an important role in the IRS's delivery of quality services such as electronic filing. The Section looks more closely at three key relationships — with a wide range of third party partners, with the 42 States (including the District of Columbia) that administer personal State income taxes, and with other government entities, such as those with legislative and oversight roles. Each of these stakeholders brings a varied set of perspectives and interests that contribute to the overall makeup of the US tax system.

2.2.1 Relationship with Third Party Partners

The complexity of the tax code and the use of third parties to help prepare and file taxes have grown in parallel. In 2005, 85% of individual returns were filed with assistance from third parties (professionals and software).

With the passage of RRA98, Congress issued a call for modernization at the IRS, not only establishing the 80% *e-file* goal, but also legislating a major restructuring of the organization. According to the IRS, this legislation "prompted the most comprehensive reorganization and modernization of IRS in nearly half a century," in which it restructured itself to "closely resemble the private sector model of organizing around customers with similar needs"[19].

For all this internal restructuring, however, the idea of a third party model is not a new concept as it relates to IRS interactions with its various partners in the private sector, community organizations, and other government entities (especially the States). In general, the IRS tends to operate on this model, creating the forms that tell people what information is needed and in what format to enable them to comply with the tax code, and then allowing people to comply as they see fit (e.g., on their own, with third party assistance, with third party tools).

---

[16] IRS Oversight Board (2008) *Electronic Filing 2007: Annual Report to Congress* p. 6
[17] IRS (2004) *IRS Strategic Plan 2005-2009* p. 4
[18] IRS (2004) *IRS Strategic Plan 2005-2009* p. 4
[19] IRS (2008) *Today's IRS Organization*

As the IRS tax code continues to grow in complexity, the role of third parties also grows. In 2005, 58% of individual tax returns were filed by third parties (paid preparers). This number increases to 85% if calculations include the number of returns prepared by individuals using third party–developed tax preparation software[20].

Another IRS report tracking returns with a paid preparer signature shows growth over time in use of a preparer (as well as growth in paid preparers' use of a computer to prepare returns), as summarized in Table 2-1[21].

Table 2-1 Taxpayer Use of Paid Preparers (1997–2006)

Tax Year	Paid Preparer Returns (% of All Returns)	Computer-prepared Returns (% of Paid Preparer Returns)
1997	54.68%	86.79%
1998	56.21%	93.14%
1999	56.19%	95.03%
2000	57.51%	96.31%
2001	59.43%	97.03%
2002	60.29%	96.48%
2003	61.98%	97.36%
2004	60.92%	98.03%
2005	62.00%	98.45%
2006	62.79%	98.68%

The notion that taxpayers feel the need for help from the private sector has been a point of contention in discussions of the tax process, but the fact remains that third party partners are a part of the Federal tax system, and research suggests that these partners also add value to the overall tax process[22].

---

[20] IRS (2007) *The 2007 Taxpayer Assistance Blueprint, Phase 2* p. 27

[21] IRS (1997) *Tax Year 1997 Taxpayer Usage Study;* IRS (1998) *Tax Year 1998 Taxpayer Usage Study;* IRS (1999) *Tax Year 1999 Taxpayer Usage Study;* IRS (2000) *Tax Year 2000 Taxpayer Usage Study;* IRS (2001) *Tax Year 2001 Taxpayer Usage Study;* IRS (2002) *Tax Year 2002 Taxpayer Usage Study;* IRS (2003) *Tax Year 2003 Taxpayer Usage Study;* IRS (2004) *Tax Year 2004 Taxpayer Usage Study;* IRS (2005) *Tax Year 2005 Taxpayer Usage Study;* IRS (2006) *Tax Year 2006 Taxpayer Usage Study*

[22] For example, research suggests that taxpayers who use third party representation to deal with the IRS for Earned Income Credit (EIC) cases are more likely to have favorable outcomes. See (National Taxpayer Advocate (2007) *2007 Annual Report to Congress, Volume Two;* Olson, N. E. (2008) *The 2008 Tax Return Filing Season, IRS Operations, FY 2009 Budget Proposals, and The National Taxpayer Advocate's 2007 Annual Report to Congress*):

- Taxpayers who use representatives are nearly twice as likely to be found eligible for the EIC as compared to taxpayers who are not represented during the audit process.
- Over 40% of all taxpayers with representatives emerged from their audit with their full EIC intact, whereas less than one in four taxpayers without a representative kept their full EIC.
- The taxpayers without representation were more likely to end up owing additional tax than taxpayers with representation (41% versus 23%).

2.2.1.1 Third Parties and *E-filing*: Overview and History

Third party partners perform key roles in the e-filing *process from start to finish.*

When it comes to electronically filing individual tax returns with the Federal government, third parties are even more heavily involved than with handling paper. The current environment *requires* third party involvement with the electronic transmission process, meaning third party partners play key roles in the process from start (preparation) to finish (filing).

Figure 2-2 shows how this works in its most simplified form. An individual taxpayer uses a preparer, who in turn uses tax software to prepare State and Federal tax forms, or the taxpayer uses tax software to self-prepare the returns. The returns are then submitted electronically to a transmitter. The transmitter then sends both returns to the IRS if the State participates in the Federal/State (Fed/State) program or sends the Federal return to the IRS and the State return to the State tax authority.

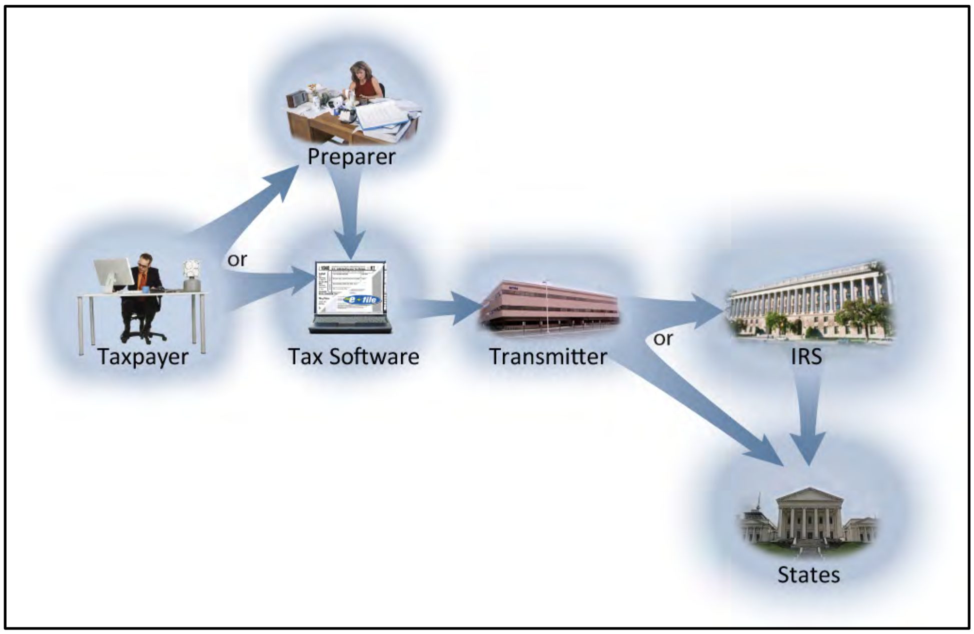

Figure 2-2 Roles Performed by Key Stakeholders in Electronic Filing

For more information on key stakeholders' roles, see Section 2.2.1.2 or the Glossary.

Here, "transmitter" generically refers to any third party entity that sends returns to the IRS or States after the returns are prepared. In addition, other third parties may be involved in this process, including Electronic Return Originators (ERO), which originate the electronic submission of income tax returns to the transmitters, and Intermediate Service Providers, which process the tax return information and either forward the information to a transmitter or send the information back to the ERO. To provide these services, transmitters, EROs, and Intermediate Service Providers must complete an application with the IRS and be registered as authorized IRS *e-file* providers. Other authorized IRS *e-file* providers include software developers and reporting agents.[23]

[23] IRS (2007) *Become an Authorized e-file Provider*

Third party involvement in e-file *has its roots in the early days of the program and has strengthened as the program has grown. RRA98 calls for continued IRS cooperation with these partners and encourages competition to drive* e-filing *volumes.*

Today's third party involvement in electronic filing is shaped by the fact that the demand for *e-filing* originated in the preparer community and prompted the development of partnerships between the IRS and preparers. When the electronic filing of tax returns began in 1986, it started with these partnerships. The early program consisted of tax returns *e-filed* by a handful of preparers through third party transmitters. At that time, the IRS identified data standards and transmission standards and created a gateway for receiving batch transmissions of returns, while private sector partners created the external infrastructure consisting of data entry software, origination networks for sending return records to transmitters, and transmission centers where returns were formatted, bundled, and sent to the IRS in batches over telephone lines. Transmitters also received the acknowledgments from the IRS and distributed the results back to the EROs.

As the program developed, third party roles and offerings grew. Large commercial preparers, commercial software developers, and the banking industry saw opportunities to create new filing products and introduced a new level of competition to the business of helping taxpayers. Concurrently with individual electronic filing, electronic filing for business started in 1987 using the same third party business model.

The IRS has leveraged its relationship with the private sector to advance electronic filing. One of the key strategies in the 2005 document, *IRS e-Strategy for Growth*, was to "encourage private sector innovation and competition"[24]. Indeed, the subtitle of this e-Strategy is *Expanding e-Government for Taxpayers and Their Representatives*. In discussing the ETA and its interactions with third parties, the IBM Center for the Business of Government study noted:

> By working effectively with external stakeholders, the ETA was able to create a powerful "innovation directive" for *e-file*. It may be somewhat rare among Federal agencies, but the alignment of stakeholders and the IRS to increase *e-file* adoption was a direct result of the business opportunity from increased *e-filing* for the stakeholders. The IRS realized that it could use the mutual interest in increasing *e-file* adoption to all parties' benefit instead of working against the stakeholders just because they happened to make money from *e-file*.[25]

For more information on the history of *e-filing*, see Section 2.3.

Congress seems to recognize the relationship between the IRS and its third party partners and the value of leveraging that relationship in the advancement of *e-filing* in the future. As part of the RRA98 description of the 80% *e-file* goal, Congress explicitly called on the IRS to "cooperate with and encourage the private sector by encouraging competition to increase electronic filing"[26].

This relationship between third party partners and the IRS, aimed at providing a full range of *e-filing* services to taxpayers, is explored as a key theme throughout the rest of this document — particularly in Chapter 4, which looks at how the IRS motivates and encourages third party partners, and in later Chapters, which explore, among other considerations, options for the IRS to draw on these partnerships to further advance *e-file*. To provide context for continued discussion throughout the remainder of the

[24] IRS (2005) *IRS e-Strategy for Growth: Expanding e-Government for Taxpayers and Their Representatives* p. 9
[25] Holden, S. H. (2006) *A Model for Increasing Innovation Adoption: Lessons Learned from the IRS e-file Program* p. 27
[26] *Internal Revenue Service Restructuring and Reform Act of 1998 (RRA98)*

report, the following Sections provide detailed descriptions of each third party role and the stakeholders fulfilling those roles.

2.2.1.2 Detailed View of Stakeholders in the Third Party Model

Some tax businesses may fall into more than one stakeholder category (e.g., EROs may be preparers and transmitters).

The terms used in this report to describe the categories of third parties have a natural hierarchy in that some terms are broader (more inclusive) than others. Figure 2-3 shows the relationships among the terms used in this report. Note that some organizations may serve more than one role (e.g., H&R Block may function both as a commercial preparer and a transmitter).

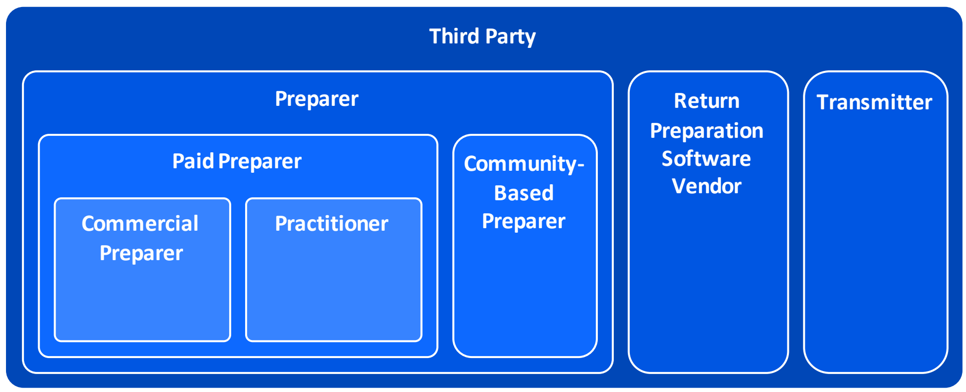

Figure 2-3 Hierarchical Relationship Among Definitions of Third Parties

Definitions for each of these terms are provided in Table 2-2 for the reader's convenience (and appear the Glossary located in the back matter of this report).

Table 2-2 Definition of Terms Used in Third Party Model

Term	Definition
Third Party	An entity external to the taxpayer-IRS relationship that helps taxpayers prepare, file, and/or transmit their returns. Includes preparers, return preparation software vendors, and transmitters.
Preparer	Any third party that helps complete a return. Includes commercial preparers, practitioners, and community-based preparers.
Return Preparation Software Vendor	An organization that sells self-assisted software products for tax preparation for individuals and often preparers. These vendors also may provide similar products to certain taxpayer segments for little or no cost.
Transmitter	An entity that sends income tax data to the IRS once the return is prepared. Transmitters must have software and hardware that allow them to directly connect with IRS computers.
Paid Preparer	A subset of "preparer" that excludes community-based preparers. Includes practitioners, and commercial preparers.
Community-based Preparer	An individual who provides free tax preparation (and filing) services to taxpayers at designated support locations through IRS-sponsored programs such as Volunteer Income Tax Assistance (VITA), Tax Counseling for the Elderly (TCE), the Tax Forms and Outlet Program (TFOP), and Low Income Taxpayer Clinics (LITC).

Term	Definition
Practitioner	An individual who is paid by taxpayers to prepare (and file) their returns, is governed by Circular 230, and is authorized to represent taxpayers legally before the IRS. Practitioners include attorneys, certified public accountants, enrolled agents, and enrolled actuaries.
Commercial Preparer	An individual who is paid by taxpayers to prepare (and file) their returns but is not a practitioner. Similar to practitioners, commercial preparers may be employees of corporations, members of partnerships, or self-employed individuals. Commercial preparers are not Electronic Return Originators (ERO) but may be members of an ERO firm.

Table 2-3 adds a layer of detail to the roles described in the model above, providing a list of some key stakeholders in the private sector and describing their purpose (i.e., charter) and roles in the tax system[27].

Table 2-3 Selected Third Party Stakeholders in US Tax System

Organization	Purpose	Role in Tax System
American Institute of Certified Public Accountants (AICPA)	Professional organization for all Certified Public Accountants (CPA), which provides resources, information, and leadership to members to enable them to provide valuable services in the highest professional manner to benefit the public as well as employers and clients.	Works with State CPA organizations and serves as national CPA representatives before government bodies. AICPA web site: http://www.aicpa.org
Council for Electronic Revenue Communication Advancement (CERCA)	Trade association representing a broad cross-section of the electronic tax filing, IRS systems modernization, and State electronic revenue communities.	Provides stakeholder input into IRS decision-making. CERCA web site: http://www.cerca.org
Federation of Tax Administrators (FTA)	Organization to improve the quality of State tax administration by providing services to State tax authorities and administrators.	Serves as a source of information and expertise for State tax authorities and administrators and others on the workings of State tax agencies/systems and issues affecting tax policy and administration. Represents the interests of State tax authorities and administrators before Federal policymakers. FTA web site: http://www.taxadmin.org

[27] American Institute of Certified Public Accountants (2008) *The American Institute of Certified Public Accountants;* Council for Electronic Revenue Communication Advancement (2008) *Council for Electronic Revenue Communication Advancement;* Federation of Tax Administrators (2008) *Federation of Tax Administrators;* Free File Alliance (2008) *Free File Alliance;* IRS (2008) *Free File Home - Your Link to Free Federal Online Filing;* IRS (2008) *Free File: Frequently Asked Questions;* National Association of Computerized Tax Processors (2008) *National Association of Computerized Tax Processors;* National Association of Enrolled Agents (2008) *National Association of Enrolled Agents;* National Association of Tax Professionals (2008) *National Association of Tax Professionals*

Organization	Purpose	Role in Tax System
Free File Alliance (FFA)	A group of tax software companies that provides free commercial online tax preparation and electronic filing services for the IRS.	Works with the IRS to provide free electronic tax filing services. FFA web site: http://freefilealliance.org/dcs Free File start page on IRS.gov: http://www.irs.gov/efile/article/0,,id=118986,00.html Free File Frequently Asked Questions (FAQ) on IRS.gov: http://www.irs.gov/efile/article/0,,id=118993,00.html
National Association for Computerized Tax Processors (NACTP)	Nonprofit association that represents tax processing software and hardware developers, electronic filing processors, tax form publishers, and tax processing service bureaus.	Promotes standards in tax processing and efficient, effective tax filing. Provides expertise in software systems to assist government agencies in implementing new technologies. NACTP web site: http://www.nactp.org
National Association of Enrolled Agents (NAEA)	Association of independent, licensed tax professionals called "Enrolled Agents" (EA) dedicated to helping its members maintain the highest level of knowledge, skills, and professionalism in all areas of taxation.	Fosters the professionalism and growth of members, serves as an advocate for taxpayer rights, protects the interests of its members, and enhances the role of the Enrolled Agent among government agencies, other professions, and the public at large. NAEA web site: http://www.naea.org
National Association of Tax Professionals (NATP)	Nonprofit professional association serving professionals who work in all areas of tax practice, including practitioners, enrolled agents, accountants, CPAs, attorneys, and financial planners.	Provides advice and answers to questions on Federal and State taxation and continuing education for tax professionals. NATP web site: http://www.natptax.com

Several organizations in the IRS focus on fostering third party partnerships.

One way in which the IRS fosters these third party relationships is through the Stakeholder, Partnerships, Education and Communication (SPEC) organization. According to the IRS, the approach SPEC uses to educate taxpayers is as follows:

> …join with other organizations, combining resources for greater impact in the community. Organizations of all types — corporate, faith-based, non-profit, educational, financial, public service, and government — join in these community-based coalitions to educate taxpayers and provide hands-on assistance to help them comply with their tax responsibilities.[28]

The SPEC program was recognized in 2005 as Partner of the Year by Connect America of the Thousand Points of Light Foundation[29]. Other similar IRS organizations include the Stakeholder Liaison (SL) and National Public Liaison (NPL) offices.

[28] IRS (2007) *Become an IRS Partner to Help in Your Community*
[29] IRS (2006) *The 2006 Taxpayer Assistance Blueprint, Phase 1* p. 17

2.2.1.3 Relationship with Free File Alliance

The Free File Alliance provides free preparation and e-filing of individual tax returns to eligible participants. The agreement between the FFA and the IRS clearly defines roles so that the IRS will not compete with these commercial tax preparation services.

The Free File Alliance (FFA) is an important IRS–third party relationship because it currently provides the only widespread mechanism for electronically filing Federal (and some State) personal income tax returns free of charge to some taxpayers. The FFA is a consortium of tax return preparation software companies that allows eligible taxpayers to electronically prepare and file their returns for free through participating return preparation software vendors[30]. Current eligibility rules limit this program to taxpayers with an Adjusted Gross Income (AGI) of $54,000 or less (as of TY2007)[31]. The fact that each vendor may have additional eligibility requirements (and these vary by vendor) further reduces the number of eligible taxpayers. For example, numerous vendors do not offer Free File to taxpayers over age 50[32]. The FFA estimates that 95 million Americans — 70% of all taxpayers — were eligible for Free File in 2007[33].

The IRS manages the agreement under which FFA vendors — not FFA itself — provide tax return preparation software and filing solutions. The IRS does provide links to these services from the IRS.gov web site. In States with personal income tax, Free File is generally available, although every vendor may not support every State.

The IBM Center for the Business of Government study describes how the IRS made choices to partner with third party entities such as FFA:

> [Working with external stakeholders] allowed the IRS and industry to reach an understanding of sorts about the IRS not offering direct *e-filing* for free on its web site. In return for the private sector making this service available for free for millions of taxpayers, the IRS agreed not to compete with the private sector. By not enabling its own direct *e-file* channel to taxpayers, the IRS achieved peace in its distribution channel and realized the benefit of increasing volumes through their indirect channel (i.e., tax preparation firms and PC filers).[34]

This agreement between the IRS and FFA, which contains clearly defined roles for the two entities, has played itself out legally in the public-private partnership agreements between the IRS and FFA. To date, there has been one renewal agreement, with another renewal negotiation planned for 2009. The two agreements are as follows:

- On October 30, 2002, the IRS entered into a 3-year public-private partnership agreement with FFA to provide free electronic filing for at least 60% of all taxpayers who file an individual tax return[35].
- On October 29, 2005, the IRS and FFA reached a new 4-year agreement to continue the Free File program. The new agreement contained certain consumer protections (e.g., shielding taxpayers from being sold products through the IRS Free File web site) and gave the IRS greater leeway in monitoring the program. The agreement also changed coverage to 70% AGI (or $54,000 in 2007, to be adjusted each year based on changes in taxpayer

---

30 IRS (2008) *Free File: Frequently Asked Questions*
31 IRS (2008) *Free File Home - Your Link to Free Federal Online Filing*
32 See IRS web site for list of Free File Alliance Online Tax Preparation Companies and their eligibility requirements (IRS (2008) *Free File Alliance Online Tax Preparation Companies*)
33 Free File Alliance (2008) *Free File Alliance*
34 Holden, S. H. (2006) *A Model for Increasing Innovation Adoption: Lessons Learned from the IRS e-file Program* p. 27
35 Free File Alliance and IRS (2002) *Free On-Line Electronic Tax Filing Agreement*

demographics and income). The FFA agreed to stricter regulation and the IRS agreed not to compete with the FFA in providing free online tax return services to taxpayers.[36]

For more information on FFA with regard to advancing *e-file*, see Chapter 10.

This program is not without controversy, however. Due to this program's reliance on commercial partners, some stakeholders — such as the Treasury Inspector General for Tax Administration (TIGTA) and the National Taxpayer Advocate (NTA) — have questioned the role played by the FFA[37]. The 2006 congressional testimony of TIGTA highlighted the conflict between the IRS's goal for the FFA and the business objective of FFA members:

> One of the IRS' principal purposes for establishing the program was to add another avenue for electronic filing with the intent of increasing electronic filing overall. However, Alliance members are businesses that incur a cost to provide free services…. According to representatives of Alliance member companies that TIGTA interviewed, their primary goal is to keep the Federal Government from entering the tax preparation business.[38]

NTA has often recommended that the government make it possible for all taxpayers to prepare and file their returns electronically without incurring fees and has noted the distinction between the government serving those comfortable enough to self-prepare their returns and professionals serving those who seek greater assistance[39]. In its 2006 assessment of Free File products, NTA found numerous faults (which may explain in part the Free File adoption rate):

> The results of our testing demonstrate that Free File is not an easy service for taxpayers to navigate, and it can even result in inaccurate returns. As currently structured, Free File amounts to a Wild, Wild West of differing eligibility requirements, differing capabilities, differing availability of and fees for add-on products, and many sites that are difficult to use.[40]

---

[36] Free File Alliance and IRS (2005) *Free On-Line Electronic Tax Filing Agreement Amendment;* Free File Alliance and IRS (2008) *Third Memorandum of Understanding on Service Standards and Disputes* p. 2

[37] George, J. R. (2006) *2006 Tax Return Filing Season And The 2007 Budget Proposal For The Internal Revenue Service;* Olson, N. E. (2006) *Tax Return Preparation Options for Taxpayers*

[38] George, J. R. (2006) *2006 Tax Return Filing Season And The 2007 Budget Proposal For The Internal Revenue Service*

[39] see e.g., (National Taxpayer Advocate (2004) *2004 Annual Report to Congress, Volume One* p. 472; Olson, N. E. (2006) *Tax Return Preparation Options for Taxpayers* pp. 2, 20)

[40] Olson, N. E. (2006) *Tax Return Preparation Options for Taxpayers* p. 19

The Fed/State program — involving the IRS and 37 of the 42 States that collect personal income taxes — is a joint filing effort in which Federal and State returns are submitted to the IRS, after which the IRS forwards the State returns to the States.

For more information on *e-file* providers, see Section 2.2.1.1.

For more information on the relationship between the IRS and the States, see Chapter 7.

2.2.2 Relationship with States

State tax administrations and the IRS share some objectives for collecting taxes and for increasing electronic filing in particular; therefore, the relationship between the two is important. Table 2-4 describes State stakeholders and their roles in the tax system.

Table 2-4 State Stakeholders in US Tax System

Organization	Description	Role in Tax System
States' and US Insular Areas' Tax Administrations	Tax administrations of the 50 States, the District of Colombia, and insular areas (e.g., American Samoa, Guam, Northern Mariana Islands, Puerto Rico, US Virgin Islands, US Minor Outlying Islands)	Administer State/local sales, income, and business taxes (e.g., State personal income tax)

The Fed/State electronic filing program is an extension of the third party model described above. In the Fed/State program, the IRS effectively acts as the third party in the taxpayer–State tax administrator relationship. Through the Fed/State program, taxpayers can satisfy both their Federal and State tax obligations with a single transmission. The taxpayer files electronically with the IRS, which is then responsible for separating applicable State return information and making it available to the appropriate State via download. The same partnering arrangement between the IRS and the tax industry was maintained in these new offerings because this arrangement applies both to returns coming from a preparer as well as returns filed electronically by an individual taxpayer using approved tax return preparation software that is routed through an ERO.[41]

Authorized IRS *e-file* providers who participate in the Fed/State program must first register with the IRS and comply with particular State requirements[42].

In Figure 2-2, the Fed/State relationship is illustrated by the arrow from the transmitter to the IRS and the arrow from the IRS to the States. States that do not participate in the program receive returns directly from the transmitter, as shown by the arrow from the transmitter to States.

The first Fed/State program was piloted in South Carolina in 1990. As of April 2006, 37 of the 42 States that collect personal income taxes participated in the program. The remaining five States receive their returns directly from the transmitter, effectively requiring two transactions. These States are California, Illinois, Maine, Massachusetts, and Minnesota. Although Illinois receives most of its returns directly, the State also participated in the Fed/State program.[43]

[41] Duncan, H. T. (2006) *Preparing Your Taxes: How Costly Is It?* pp. 1-2
[42] IRS (2007) *Become an Authorized e-file Provider*
[43] Duncan, H. T. (2006) *Preparing Your Taxes: How Costly Is It?* pp. 1-2

2.2.3 Relationship with Federal Government Organizations

In the *e-filing* landscape, organizations in the Federal government also play key roles. As shown in Table 2-5, these roles are primarily legislative, regulatory, and/or oversight[44].

Table 2-5 Selected Federal Government Stakeholders in US Tax System

Organization	Purpose	Role in Tax System
Congress (Senate and House of Representatives)	National legislative body consisting of the Senate and House of Representatives that has the lawmaking power of the United States.	Pass tax laws, require taxpayers to comply with tax laws, and appropriate money for the IRS. US House of Representatives web site: http://www.house.gov US Senate web site: http://www.senate.gov
Department of the Treasury	Executive branch agency that serves the American people and strengthens national security by managing the Federal government's finances effectively, promoting economic growth and stability, and ensuring the safety, soundness, and security of the US and international financial systems.	Manage Federal finances; collect taxes, duties, and monies paid to and due to the United States; pay all bills of the United States; make currency and coinage; manage government accounts and the public debt; supervise national banks and thrift institutions; advise on domestic and international financial, monetary, economic, trade, and tax policy; enforce Federal finance and tax laws; and investigate and prosecute tax evaders, counterfeiters, and forgers. Department of the Treasury web site: http://www.ustreas.gov
Electronic Tax Administration Advisory Committee (ETAAC)	Committee authorized under public law that provides input into the development and implementation of the IRS's strategy for electronic tax administration.	Provide an organized public forum for discussion of electronic tax administration issues in support of the overriding belief that paperless filing should be the preferred and most convenient method of filing tax and information returns. ETAAC web site: http://www.irs.gov/newsroom/article/0,,id=179167,00.html

[44] Department of the Treasury (2008) *U.S. Department of Treasury;* Government Accountability Office (2008) *U.S. Government Accountability Office;* IRS (2008) *Electronic Tax Administration Advisory Committee Information Sheet;* IRS (2008) *Internal Revenue Service;* IRS Oversight Board (2008) *IRS Oversight Board;* National Taxpayer Advocate (2008) *Taxpayer Advocate Service;* Office of Management and Budget (2008) *Office of Management and Budget;* Treasury Inspector General for Tax Administration (2008) *Treasury Inspector General for Tax Administration;* U.S. House of Representatives (2008) *United States House of Representatives;* U.S. Senate (2008) *United States Senate*

Organization	Purpose	Role in Tax System
Government Accountability Office (GAO)	Independent, nonpartisan agency that supports the Congress in meeting its constitutional responsibilities and helps improve the performance and ensure the accountability of the Federal government.	Provide Congress with timely information that is objective, fact-based, nonpartisan, non-ideological, fair, and balanced. GAO web site: http://www.gao.gov
Internal Revenue Service (IRS)	Agency within the Department of the Treasury that serves America's taxpayers by helping them understand and meet their tax responsibilities and by applying the tax law with integrity and fairness to all.	Help the large majority of taxpayers who comply with the tax law, while ensuring that the minority who are unwilling to comply pay their fair share. IRS web site: http://www.irs.gov
IRS Oversight Board	Independent body charged with overseeing the IRS in its administration, management, conduct, direction, and supervision of the execution and application of the tax laws.	Provide experience, independence, and stability to the IRS so that it can move forward in a cogent, focused direction. IRS Oversight Board web site: http://www.treas.gov/irsob
Taxpayer Advocate Service	Independent organization within the IRS to assist taxpayers who are experiencing economic hardships, who are seeking help in resolving tax problems, or who believe that an IRS system/procedure is not working as it should.	Protect individual and business taxpayer rights and reduce taxpayer burden. NTA web site: http://www.irs.gov/advocate/index.html
Office of Management and Budget (OMB)	Office within the Executive Office of the President that oversees preparation of the Federal budget and supervises its administration in Executive Branch agencies.	Evaluate the effectiveness of agency programs, policies, and procedures; assess competing funding demands among agencies; and set funding priorities. OMB web site: http://www.whitehouse.gov/omb
Treasury Inspector General for Tax Administration (TIGTA)	Organization established by RRA98 to provide independent oversight of IRS activities.	Provide audit and investigative services that promote economy, efficiency, and integrity in the administration of tax laws. TIGTA web site: http://www.treas.gov/tigta

IRS e-filing *has progressed even in the context of tax law changes and system modernization.*

2.3 History of *E-file*

The IRS *e-file* program for individual and business tax returns officially debuted in 1986. During that year, 25,000 refund-only returns were accepted via modem from five transmitters in three locations and processed in the Cincinnati Service Center[45]. Electronic filing has grown substantially since its inception. Twenty years later, more than 73 million or 54% (refund and balance due) individual returns were received electronically[46].

The IRS has also experienced a number of other changes related to or affecting its delivery of *e-filing*. Since 1986, the total number of individual income tax returns received by the IRS has grown by 35%, from 99,528,900 to 134,421,400[47]. Table 2-6 shows the extent of major legislation that has affected the IRS since 1986[48].

Table 2-6 Selected Legislation Affecting the IRS and/or *E-file* (1986–2008)

#	Title
1.	Economic Stimulus Act of 2008
2.	Tax Increase Prevention Act of 2007
3.	Pension Protection Act of 2006
4.	Tax Increase Prevention and Reconciliation Act of 2005 (TIPRA)
5.	American Jobs Creation Act of 2004 (AJCA)
6.	Working Families Tax Relief Act of 2004 (WFTRA)
7.	Medicare Prescription Drug, Improvement, and Modernization Act of 2003
8.	Military Family Tax Relief Act of 2003
9.	Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA)
10.	Job Creation and Worker Assistance Act of 2002 (JCWA)
11.	Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA)
12.	Internal Revenue Service Reform and Restructuring Act of 1998 (RRA98)
13.	Taxpayer Relief Act of 1997
14.	[Revenue Provisions of the] Health Insurance Portability and Accountability Act of 1996
15.	[Revenue Provisions of the] Small Business Job Protection Act of 1996
16.	Taxpayer Bill of Rights 2 of 1996
17.	Omnibus Budget Reconciliation Act of 1993
18.	Tax Extension Act of 1991
19.	Omnibus Budget Reconciliation Act of 1990
20.	Omnibus Budget Reconciliation Act of 1989
21.	Medicare Catastrophic Coverage Repeal Act of 1989
22.	Financial Institutions Reform, Recovery, and Enforcement Act of 1989

[45] IRS (2004) *e-file Electronic Tax Filing: a History*
[46] IRS (2007) *Calendar Year Return Projections for the United States and IRS Campuses CY 2007-2014*
[47] IRS (2006) *SOI Bulletin Historical Table 22: Selected Returns and Forms Filed or To Be Filed by Type During Specified Calendar Years, 1990-2007*
[48] Tax Policy Center (2006) *Summary of Major Enacted Tax Legislation from 1940-2006*

#	Title
23.	Technical and Miscellaneous Revenue Act of 1988
24.	Medicare Catastrophic Coverage Act of 1988
25.	Family Security Act of 1988
26.	Continuing Resolution for Fiscal Year 1988
27.	Airport and Airway Trust Fund Extension of 1987
28.	Omnibus Budget Reconciliation Act of 1987
29.	Continuing Resolution for Fiscal Year 1987
30.	Superfund Amendments and Reauthorization Act of 1986
31.	Omnibus Budget Reconciliation Act of 1986
32.	Tax Reform Act of 1986

2.3.1 *E-file* Timeline

RRA98 established the 80% e-file *goal and created the Electronic Tax Administration within the IRS to manage* e-filing *and serve as a focal point for supporting efforts.*

Since 1986, the IRS *e-file* program has been housed in numerous and varied organizations within the IRS. After starting as a research project in a staff organization without line responsibility for processing tax returns, the program eventually moved to the submission processing organization. However, because the vast majority of processing was still on paper, this organization's focus remained on its responsibility for the paper processing pipelines in the 10 service centers.[49]

Management responsibility for the electronic filing program during its initial years was fragmented, and for some time split between operational and product development areas, with decision-making influenced by numerous IRS organizations including Criminal Investigation, Information Systems, and General Counsel. The resulting inconsistent policies and uncoordinated actions strained the IRS relationship with a key stakeholder in the program — the electronic filing industry — and ultimately led to poor results. Electronic filing rates actually declined in the mid 1990s.[50]

The creation of the ETA in 1998 established a strong source of leadership and a focal point for achieving a clear goal. Although the benefits of filing returns electronically were known long before 1998, RRA98 recognized electronic filing as a strategic initiative to transform the IRS.[51]

Table 2-7 lists some key milestones in the development of *e-filing* since electronic filing of tax returns began as a pilot program in 1986, with the electronic transmission of only 25,000 individual returns from a handful of preparers through third party transmitters[52].

---

[49] Holden, S. H. (2006) *A Model for Increasing Innovation Adoption: Lessons Learned from the IRS e-file Program* p. 12

[50] Holden, S. H. (2006) *A Model for Increasing Innovation Adoption: Lessons Learned from the IRS e-file Program* p. 12

[51] Holden, S. H. (2006) *A Model for Increasing Innovation Adoption: Lessons Learned from the IRS e-file Program* p. 15

[52] IRS (2004) *e-file Electronic Tax Filing: a History*; IRS (2008) *2008 Filing Season Data - Returns/Refunds for Week Ending: 6/21/2008*

Table 2-7 Selected Events in the History of IRS *E-file* (1986–2008)

Year	Event
1986	Pilot program transmitted 25,000 refund-only individual income tax returns from five transmitters in three locations (Cincinnati, Ohio; Raleigh-Durham, North Carolina; and Phoenix, Arizona) to the Cincinnati Service Center via modem to be processed using the existing ZILOG system.
1987	The *e-file* system became operational, and forms 1041, 1065, and 5500C/R were accepted electronically.
1988	Sixteen districts were added to the list of electronic filing areas.
1989	IRS *e-file* program participation expanded to 48 out of 66 districts.
1990	Balance due returns were accepted for processing.
1991	The Fed/State electronic filing program began, with the South Carolina State Tax Commission participating in the pilot. By 2003 (and still today), 37 States and the District of Columbia offered Fed/State electronic filing.
1992	Filing from home began with the 1040 Telefile research test, which processed 125,983 Telefile returns from the State of Ohio.
1994	More than 14 million individual and 1.7 million business returns were filed electronically from more than 39,000 transmitters — 15.7 million electronic returns in all.
1996	The Electronic Federal Tax Payment System (EFTPS) was implemented. EFTPS was developed by the IRS and the Department of the Treasury's Financial Management Service (FMS) to enable taxpayers to pay their Federal taxes online or over the phone.
1997	941TeleFile for Employment Taxes became operational for eligible employers.
1998	Congress passed the Internal Revenue Service Reform and Restructuring Act of 1998 (RRA98), establishing the IRS Electronic Tax Administration (ETA) to coordinate *e-file* and related services and setting the 80% *e-file* goal.
1999	The electronic payment program was expanded, and an electronic funds withdrawal (direct debit) payment option was included in tax software, allowing taxpayers to electronically file balance due returns and pay at the same time. The credit card payment option was also introduced, allowing taxpayers to either *e-file* balance due returns and pay by credit card at the same time or pay separately by phone or Internet.
2001	The IRS introduced a new Telefile feature that allowed taxpayers to request an automatic extension of time to file their individual tax returns until August 15. In 2002, 636,215 taxpayers filed extensions over the telephone.
2002	Fed/State Telefile: 296,692 taxpayers filed their State and Federal tax returns with a single phone call. In 2003, eligible taxpayers in seven States could use the Fed/State Telefile system.
2003	More than 53 million individual returns were filed electronically; nearly 37 million were filed by tax professionals.
2004	Modernized e-File (MeF) was launched. This new, improved, award-winning *e-file* program enabled the electronic filing of some returns from corporations and exempt organizations.
2005	IRS discontinued the Telefile program (see Chapter 13 for detailed history).
2008	More than 87 million individual tax returns were filed electronically, a 60% *e-file* rate.

3. IRS *E-file* and Technology Adoption

Contents of Chapter 3:

This Chapter introduces technology adoption theory and defines its implications for *e-file.* It defines how technologies are generally adopted, provides data on historic and projected IRS *e-file* adoption rates, and compares IRS figures with adoption rates for personal computers (PC), Internet use, online banking, and online bill pay — all of which function in the larger context of technology adoption. Themes identified in this Chapter include the following:

- *E-filing* is fundamentally driven by individuals' motivations, concerns, and their position on the technology adoption curve.
- Now that IRS *e-file* adoption has surpassed 50%, adoption will slow at an increasing rate due to the very nature of technology adoption.
- What has worked to date for advancing *e-file* will become increasingly less effective in the future because those most willing to convert have already done so.

3.1 User Adoption of Technology

It is helpful to review the history of and projections for the IRS *e-file* program in the broader context of technology adoption theory and practice. This Section discusses how users generally adopt technology, introduces the concept of segmentation based on how quickly users adopt technology, and describes how the distribution of users leads to an S-curve relationship between adoption and time/cost (diminishing returns later in the adoption cycle).

The profile of Early Adopters of technology is different from even the Early Majority that follows them. Because each group's motivators and concerns vary by type and degree, a tailored marketing approach is required to reach and affect each group.

3.1.1 Diffusion of Innovations

A number of people have written on technology adoption trends. Foremost is Everett Rogers, whose *Diffusion of Innovations* is based on research by Joe Bohlen and George Beal[53]. Rogers describes the adoption or acceptance of a new product or innovation according to the demographic and psychological characteristics of defined adopter groups. The distribution of users against the acceptance rate of new ideas and technologies resembles a classical normal distribution or bell curve (see Figure 3-1).

[53] Bohlen, J. M. & Beal, G. M. (1957) *The Diffusion Process (Special Report No. 18);* Rogers, E. M. (2003) *Diffusion of Innovations, Fifth Edition*

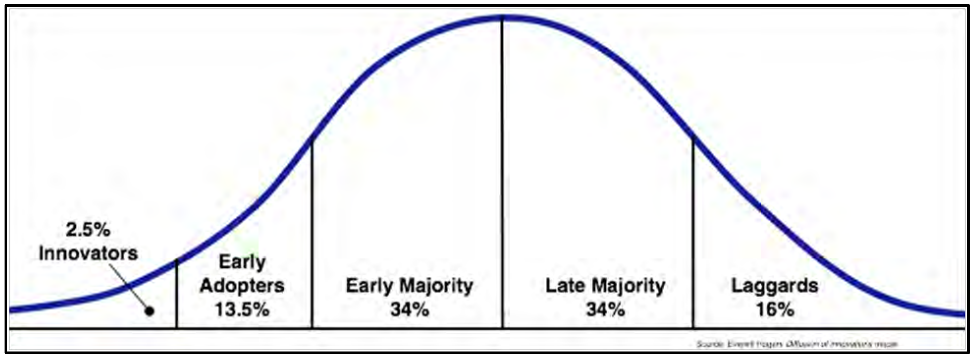

Figure 3-1 Technology Adoption User Segments

Rogers' model describes five user segments and their attributes as follows[54]:

- **Innovators** — Approximately 2.5% of the population, these users are well-informed risk-takers who are willing to try an unproven product.
- **Early Adopters** — Approximately 13.5% of the population, these users tend to be educated opinion leaders.
- **Early Majority** — Approximately 34% of the population, these users are careful consumers who tend to avoid risk.
- **Late Majority** — Approximately 34% of the population, these users are somewhat skeptical consumers who acquire a product after it has become commonplace.
- **Laggards** — Approximately 16% of the population, these users are those who avoid change and may not adopt a new product until traditional alternatives are no longer available.

For more information about marketing and education, see Chapter 10.

Rogers notes that a different marketing approach is needed to target each unique adoption group. In fact, the entire marketing strategy may need to be tailored to get the next group to adopt the technology or product. Others have updated and refined this model (e.g., Geoffrey Moore proposes a chasm between the Early Adopters and Early Majority[55]), but the core principle has stood the test of time.[56]

Beyond the marketing implications of technology adoption segments, the other key idea of Rogers' model defines the relationship between increasing adoption and increasing time. The direct statistical outcome of plotting the normally distributed technology adoption user segment on the basis of cumulative adoption over time is that the graph resembles an S-curve and exhibits the principle of diminishing returns in the latter half of the adoption cycle (see Figure 3-2).

---

[54] Rogers, E. M. (2003) *Diffusion of Innovations, Fifth Edition*
[55] Moore, G. (2002) *Crossing the Chasm*
[56] Rogers, E. M. (2003) *Diffusion of Innovations, Fifth Edition*

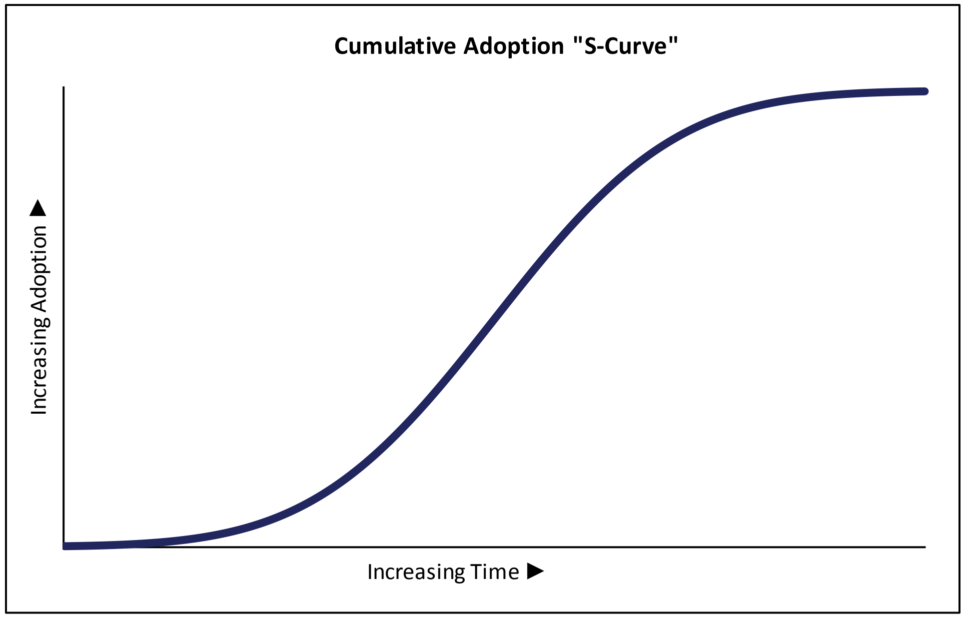

Figure 3-2 Technology Adoption Plotted Cumulatively Against Time (S-Curve)

The technology adoption S-curve shows a slow start, followed by a period of faster growth, followed by a period in which adoption increasingly slows down. The IRS is experiencing this expected slowing of e-file *adoption; new methods for achieving additional growth will be required.*

As shown in Figure 3-2, after a slow start, there is a period of relatively rapid growth, followed by a cooling off period. This latter period exhibits the principle of diminishing returns — effectively requiring an increasingly greater per-unit investment in time/cost/effort to get the same payoff in adoption. For example, if it took 52 units (e.g., of time) to move users from 40% to 60% adoption, reinvesting that same 52 units at the 60% mark would only return a 78% adoption rate, and the payoffs decrease even more dramatically as the adoption curve progresses. Stated another way, in the latter half of the adoption curve, the unit cost of achieving equivalent adoption gains increases quasi-exponentially. For IRS *e-file*, this means that what has worked to date will be increasingly less effective in pursuing higher adoption rates.

3.2 IRS *E-file* Adoption: History and Projections

Since the passage of RRA98, the rate of *e-filing* has increased significantly. Table 3-1 shows the growth in *e-filed* individual tax returns between 1990 and 2006[57]. Figure 3-3 illustrates this increase in electronic filing in comparison with the 80% *e-file* goal.

Table 3-1 Historic Filing of Individual Tax Returns (1990–2008)

Tax Year	Total Returns	80% *E-file* Goal	*E-file* #	*E-file* %	Paper #	Paper %
1990	112,305,000	89,844,000	4,204,200	3.7%	108,100,900	96.3%
1995	116,059,700	92,847,760	11,806,900	10.2%	104,252,800	89.8%
1998	122,546,900	98,037,520	24,580,300	20.1%	97,966,600	79.9%
1999	124,887,100	99,909,680	29,329,500	23.5%	95,557,600	76.5%
2000	127,097,200	101,677,760	35,402,200	27.9%	91,695,100	72.1%
2001	129,444,900	103,555,920	40,206,800	31.1%	89,238,100	68.9%
2002	130,341,200	104,272,960	46,836,100	35.9%	83,505,100	64.1%
2003	130,134,300	104,107,440	52,869,000	40.6%	77,265,300	59.4%
2004	130,576,900	104,461,520	61,428,300	47.0%	69,148,600	53.0%
2005	132,275,800	105,820,640	68,463,900	51.8%	63,811,900	48.2%
2006	134,421,400	107,537,120	73,239,500	54.5%	61,181,900	45.5%
2007 [a]	137,725,325	110,180,260	79,862,083	58.0%	57,863,242	42.0%
2008 [b]	145,625,000	116,500,000	87,104,000	59.8%	58,521,000	40.2%

Notes: (a) 2007 data includes returns submitted to obtain the Telephone Excise Tax Refund. (b) 2008 data as of 25 April 2008 and includes returns submitted to obtain the Economic Stimulus Payment.

The historical *e-file* adoption rates follow the technology adoption curve. The almost triple increase in *e-filing* since 1998 has been noted as "remarkable" and compares favorably to adoption of other technologies, as discussed in Section 3.2.3[58]. However, consistent with the Diffusion of Innovations model, the IRS-projected growth rate for electronic filing is slowing and is not projected to reach the 80% *e-file* goal, even by 2014, as shown in Table 3-2 and Figure 3-3[59].

---

[57] IRS (2006) *SOI Bulletin Historical Table 22: Selected Returns and Forms Filed or To Be Filed by Type During Specified Calendar Years, 1990-2007;* IRS (2008) *2008 Filing Season Data - Returns/Refunds for Week Ending: 6/21/2008;* IRS (2008) *IRS Master File Data on Total and e-filed Individual Returns CY2007 and Q1 CY2008*

[58] Holden, S. H. (2006) *A Model for Increasing Innovation Adoption: Lessons Learned from the IRS e-file Program* p. 26

[59] IRS (2007) *Calendar Year Return Projections for the United States and IRS Campuses CY 2007-2014*

Table 3-2 Projected Filing of Individual Tax Returns (as of December 2007)

Year	Total Returns	80% *e-file* goal	*E-file* #	*E-file* %	Paper #	Paper %
2009	138,951,600	111,161,280	90,210,800	65%	48,740,800	35%
2010	140,420,600	112,336,480	94,630,300	67%	45,790,300	33%
2011	141,875,100	113,500,080	98,478,200	69%	43,396,900	31%
2012	143,309,400	114,647,520	101,904,300	71%	41,405,100	29%
2013	144,717,000	115,773,600	104,872,500	72%	39,844,600	28%
2014	146,108,600	116,886,880	107,440,700	74%	38,667,900	26%

Unless there is a change to the IRS e-file *approach, the 80% e-file goal is unlikely to be reached by 2012. Those most willing to convert already have, and the rest of the population will be more difficult to convince.*

Figure 3-3 combines the actual to-date data from Table 3-1 with the projected data from Table 3-2 into a chart and includes a reference line showing the 80% *e-file* goal established by RRA98. The IRS *e-filing* trend closely tracks the technology adoption S-curve discussed in Section 3.1.1 and illustrated in Figure 3-2.

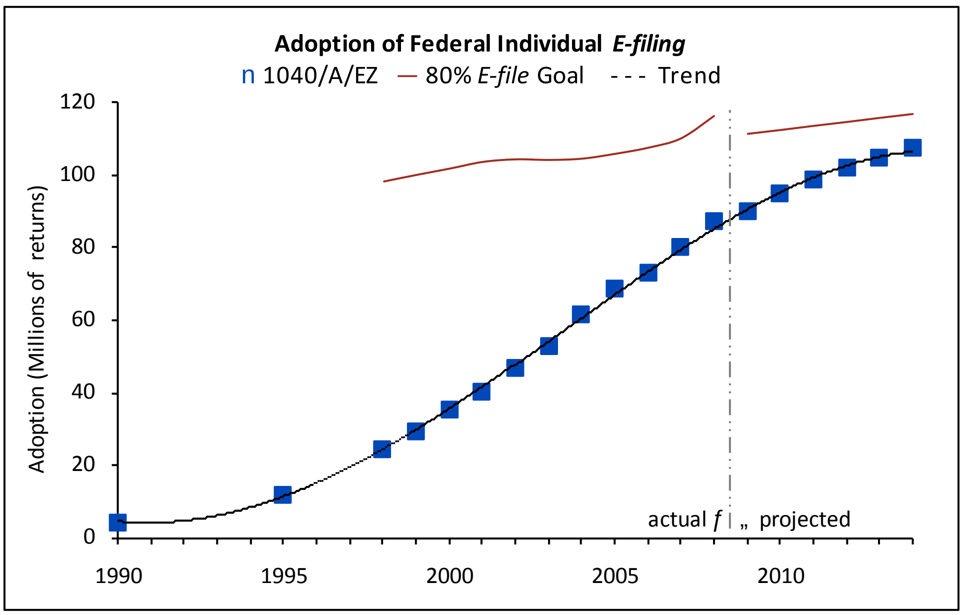

Figure 3-3. Actual and Projected *E-file* Adoption (1990–2014)

The IRS utilizes the technology adoption curve (i.e., Diffusion of Innovation model) in its methodology for calculating these projections[60]:

> In general, [adoption] rates were projected using the diffusion of innovation model. These curves capture the growth patterns typically associated with the introduction of new technology-related products.
>
> The electronic projections do not account for pending legislation or tentative administrative plans. Consequently, the long-run *e-file* projections generally represent baseline projections and should not be interpreted as precluding an alternative *e-file* future.

[60] IRS (2008) *Statement of Methodology: SOI e-file Projections*

The recently released IRS Oversight Board *Electronic Filing 2007: Annual Report to Congress* recommends that the 80% *e-file* goal deadline be extended to 2012[61]. However, IRS projections show that, given current methods, a 2012 deadline is unlikely to be reached (though the IRS may eventually reach the 80% *e-file* goal). This is largely due to the nature of technology adoption and existing constraints (see Section 3.2 for additional details). Some have questioned whether the 80% *e-file* goal is attainable[62]. The discussion of technology adoption in Section 3.3 shows that those most willing to convert to electronic filing have already converted and those who have not converted will be more difficult to convince.

3.3 Related Technology Adoption Trends

As many as 65 million adults will not have a computer or Internet for the foreseeable future.

Among other things, self-prepared *e-filing* depends on access to a computer and Internet connectivity. Figure 3-4 shows the adoption trends for PCs and the Internet at home[63]. The adoption rates of both these *e-file*–enabling technologies illustrate the classic technology adoption S-curve.

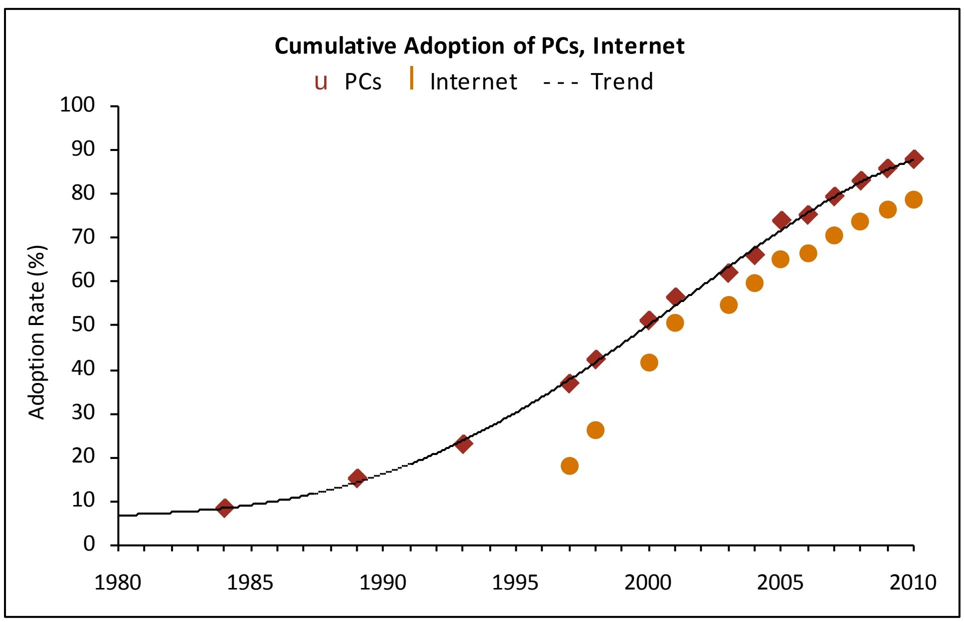

Figure 3-4 Household Adoption of PCs and Internet (1984–2010)

The term "personal computer (PC)," as used in this report, refers to computers running any operating system.

The adoption trends for PCs and the Internet in US households also track closely to the S-curve described previously. One implication of these trends is that a significant number of households will not have a computer or Internet access in the foreseeable future, because both technologies show signs of entering the period of diminishing returns.

---

[61] IRS Oversight Board (2008) *Electronic Filing 2007: Annual Report to Congress*

[62] see e.g., (Holden, S. H. (2006) *A Model for Increasing Innovation Adoption: Lessons Learned from the IRS e-file Program* pp. 15, 26)

[63] Census (2003) *Computer and Internet Use in the United States: 2003;* Forrester Research (2007) *The State Of Consumers And Technology: Benchmark 2007*

It is also worthwhile to consider the effect of Internet and PC adoption on *e-filing*. For self-filers (those who do not use preparers), the availability of these technologies establishes an explicit ceiling for those who can file online. In its 2007 survey, the Pew Internet & American Life Project found that about 29% of US adults do not use the Internet and 27% do not use a computer at all. The degree to which computer and Internet use are presently intertwined is demonstrated by the finding that only 2% of adults have a computer but do not use the Internet on it. Relatively few (4%) adults use the Internet outside their homes (work and other locations such as libraries are equally represented).[64]

For more information on Telefile use, see Chapter 7 (for States) and Chapter 8 (for foreign countries). A new approach to *e-filing* by telephone is described as an option in Chapter 14.

Because about 65 million adults do not access the Internet, they must use a preparer (paid or volunteer) if they want to file their returns electronically[65]. If members of this group want to self-prepare their returns, they must file on paper, because electronic filing channels other than the Internet — such as the defunct Telefile (see Chapter 11) and potential future mobile phone-based options like those used in other countries (see Section 5.1) — are not currently available.

3.3.1 *E-file* Compared with Online Banking and Online Bill Pay

Despite fewer resources and less flexibility, the IRS has seen e-file *adopted at a greater rate to date compared with online banking and online bill pay.*

It is useful to consider analogues to *e-filing*, such as online banking and online bill pay. This Section presents the similarities between *e-file* and these offerings; points out the differences between the IRS and the banking industry; discusses factors that motivate or concern potential adopters that are paralleled in the IRS studies discussed in Chapters 4, 5, and 6; and illustrates that, despite operating constraints and limitations, the IRS *e-file* adoption rate is comparable to or greater than the adoption rate for online banking and online bill pay.

Online banking refers to the use of the Internet as a delivery channel for banking services such as balance inquiry, statement printing, funds transfer, and bill payment through the banking institution. Online bill pay expands this service to include bill payment not only with one's banking institution but also with billers (via their web sites) and through bill payment portals.

There are a number of similarities among *e-filing,* online banking, and online bill pay. All experienced early adoption in the late 1990s and require the following:

- A sufficiently capable PC in the household.
- A sufficiently fast Internet connection.
- A certain level of computer and Internet proficiency.
- A certain level of financial literacy.
- The sharing of users' sensitive financial and personal information online.

Differences include the relative frequency of interaction (i.e., annually versus monthly or more frequently) and potentially the nature of interaction (e.g., informational, such as balance lookup versus transactional, such as paying bills and filing taxes). Banks are also

---

[64] Pew Internet & American Life Project (2007) *Home Broadband Adoption 2007* p. 3

[65] Calculation based on taking 29% (Pew figure of those who do not use Internet) of U.S. adult population from (Census (2008) *Table 2: Annual Estimates of the Population by Selected Age Groups and Sex for the United States: April 1, 2000 to July 1, 2006*).

constantly introducing new financial products, services, and marketing campaigns, which have a net positive effect on their adoption rate. In addition, online banking requires one to have a bank account, and online bill pay requires one to have some form of personal financial instrument (e.g., a bank account or credit card)[66]. Although a bank account is not necessary to *e-file*, it makes the direct deposit of a refund easier. It is also worthwhile to note operating differences between the IRS and the banking industry, because this speaks to the relative ability of each group to draw on resources to motivate behaviors:

- The IRS operates with a much smaller budget over which it has less control in setting and less discretion in executing against (i.e., certain functions and services are mandated by law).
- The IRS is limited in the incentives it can offer because of its relatively limited budget.
- The IRS by law is precluded from directing or mandating *e-filing* behavior of taxpayers, whereas banks have more leeway in defining the nature of their business models and customer interactions, as illustrated by some online-only banks.
- Although both the banking industry and the IRS are bound by non-discrimination laws, the IRS cannot choose its customers and must serve all taxpayers, whereas banks may select their customers and/or provide different levels or types of services to different groups.

3.3.1.1 Adoption of Online Banking

Though the adoption rate for online banking is approaching 50%, it is showing signs of slowing growth.

In the review of literature on adoption of online banking, two firms were notable in their coverage: the Pew Research Center and Forrester Research. Since 1998, the Pew Research Center has been asking Internet users if they "ever paid bills or banked online"[67]. This broad question includes informational interactions (e.g., checking account balances) as well as transactional interactions (e.g., transferring money). The more appropriate and likely less frequent analogues to *e-filing* are transactional interactions. Forrester Research has tracked similar information and defines online banking customers as those who have done one or more of the following activities at their banks' web site in the past 90 days: checked balances, viewed transaction history, and/or transferred funds. Figure 3-5 shows the results of this research on online banking adoption[68].

[66] For 2004, the most recent year of data available, Census reports that 91.3% of families had transaction accounts including checking, savings, and money market deposit accounts, money market mutual funds, and call accounts at brokerages (Census (2008) *Statistical Abstract of the United States 2008: Section 25: Banking, Finance, and Insurance* p. 727). The online banking adoption figures should thus be mentally reduced about 9% to more accurately extrapolate them to the whole U.S. population.

[67] Pew Internet & American Life Project (2006) *Online Banking 2006: Surfing to the Bank*

[68] Forrester Research (2007) *US Online Banking: Five-Year Forecast;* Pew Internet & American Life Project (2006) *Online Banking 2006: Surfing to the Bank*

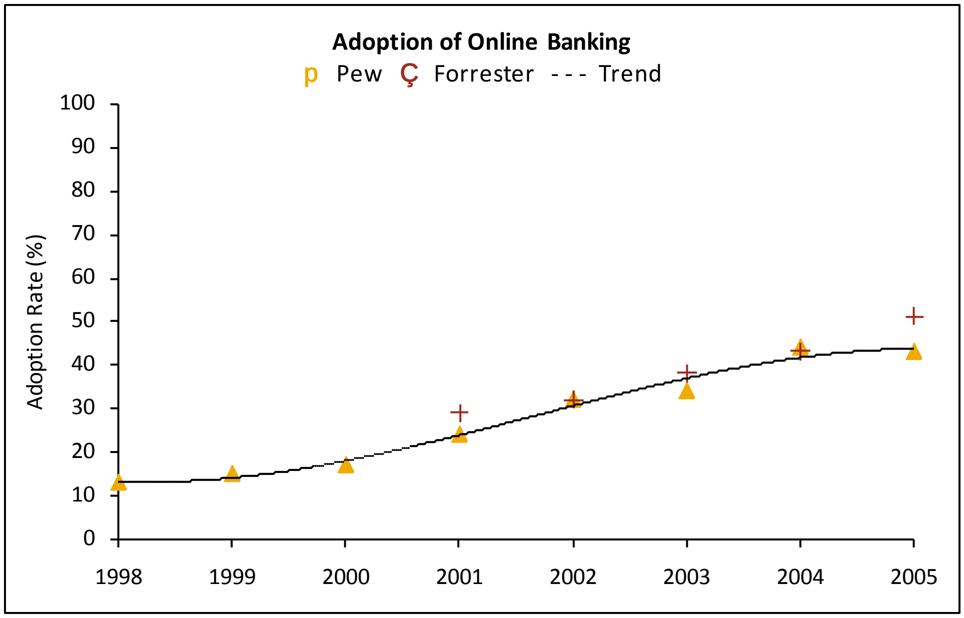

Figure 3-5 Cumulative Adoption of Online Banking (1998–2005)

For more information about generational differences in filing behavior, see Section 4.2.

As shown in Figure 3-5, though the adoption rate for online banking is approaching 50%, it is showing signs of slowing growth. Pew noted that "online banking is holding steady as a mainstream Internet activity, growing along with Internet use generally, though not accelerating as have some other forms of online activities"[69]. This may be due in part to the "trust gap" and security concerns. The Tower Group noted, "Online banking adoption has stalled because consumers are still concerned about security, despite the fact that e-security measures in place at most financial institutions are really very good"[70]. A slowing annual growth rate for online banking adoption is consistent with the position of that technology on the adoption S-curve.

Forrester's report on online banking closely matched Pew's historical figures on a percentage basis, but because Forrester sampled a different Internet population, its adoption figures may lag Pew's if normalized to the same larger population[71]. One finding that parallels the generational differences in *e-filing* noted in Section 4.2 is that the youngest consumers will account for the largest growth in online banking: in 2011, young consumers will account for 59% of all online banking customers[72].

3.3.1.2 Adoption of Online Bill Pay

Forrester publishes separate analyses of online bill pay and online banking, although the populations that use these technologies overlap (i.e., those who pay bills through their banking institutions are common to both studies). As noted previously, the primarily transactional nature of bill payment makes it analogous to filing electronically, though the process of filing a return is more complicated than executing an online bill payment.

---

[69] Pew Internet & American Life Project (2006) *Online Banking 2006: Surfing to the Bank* p. 2
[70] Weeks, R. (2003) *Speak to Concerns, Not Just to Benefits*
[71] Forrester Research (2007) *US Online Banking: Five-Year Forecast* p. 3
[72] Forrester Research (2007) *US Online Banking: Five-Year Forecast* p. 4

Forrester defined online bill payers as those who paid bills online anywhere (at a bank or biller's web site, through a portal, or a combination of these) in the past 90 days. Regardless of how users pay their bills online, Forrester noted the overall actual and projected trend illustrated in Figure 3-6 as well as a generally slowing annual growth rate in later years[73].

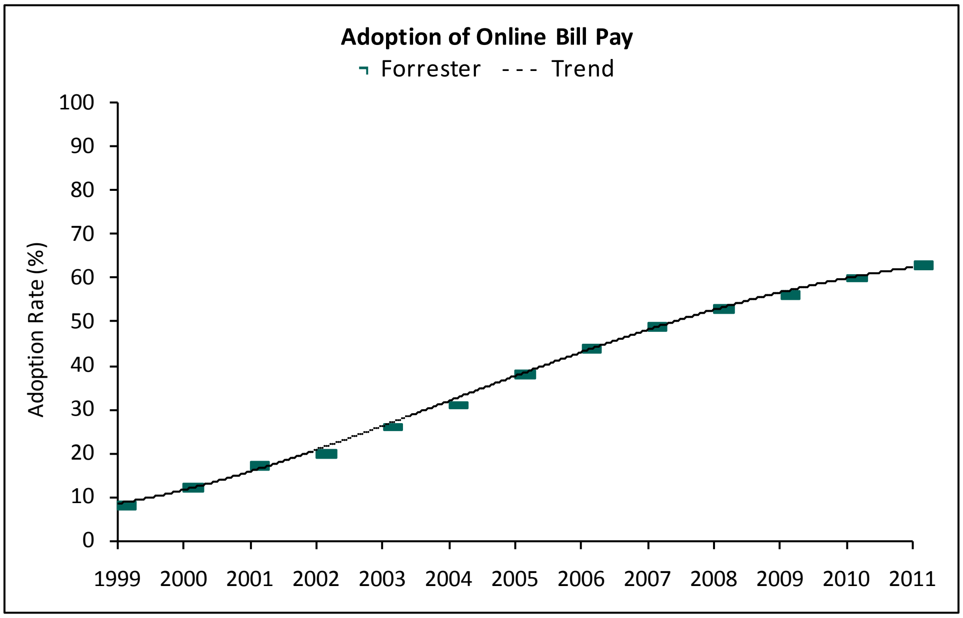

Figure 3-6 Actual and Projected Adoption of Online Bill Pay (1999–2011)

Non-users of online bill pay find paper easier to use, need paper for their records, or are more comfortable with paper, and do not want money deducted from their accounts before it is due.

The following highlights from Forrester's research on non-adopters of online bill pay parallel the studies of filer motivators and concerns addressed in Chapters 4, 5, and 6. Forrester segmented those who do not use online bill pay into three groups and surveyed the reasons why Holdouts and Fence-sitters do not use it[74]:

- **Holdouts** — 71% of non-adopters aligned with the statement "no, and I do not intend to pay bills online in the future."
- **Fence-sitters** — 23% of non-adopters aligned with the statement "no, but I plan to in the future."
- **Quitters** — 6% of non-adopters aligned with the statement "no, but I used to."

When the results are population-corrected based on the total population of non-adopter respondents, an interesting pattern emerged as to why non-users do not pay bills online (see Figure 3-7)[75].

---

[73] Forrester Research (2007) *EBPP Forecast: 2006 To 2011* p. 5

[74] Forrester Research (2007) *Online Bill Pay 2007: Understanding The Mindset Of Holdouts, Fence-Sitters, And Quitters* p. 5

[75] Forrester Research (2007) *Online Bill Pay 2007: Understanding The Mindset Of Holdouts, Fence-Sitters, And Quitters* p. 5

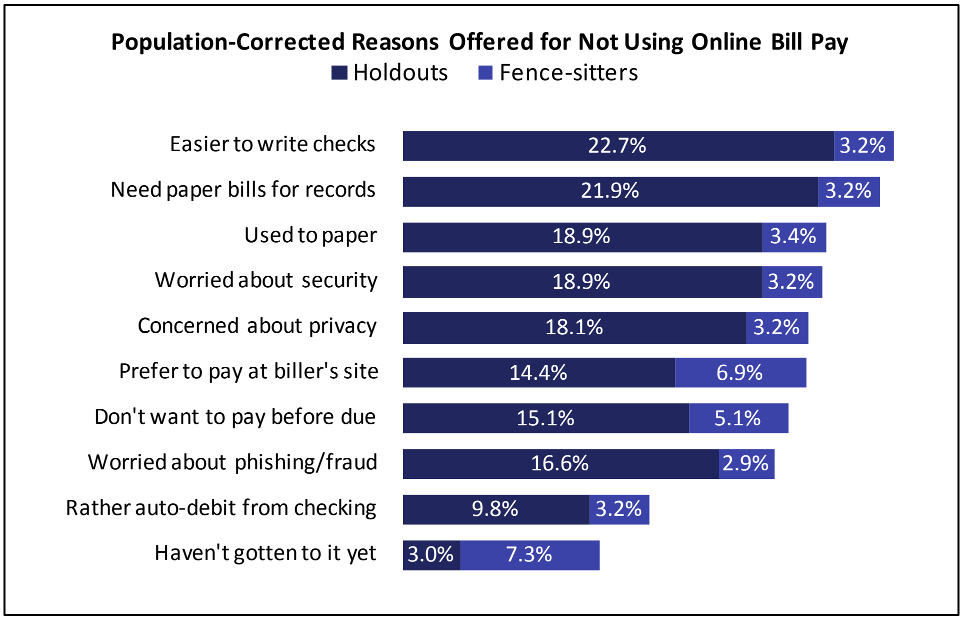

Figure 3-7 Population-Corrected Reasons Users Did Not Use Online Bill Pay

The top three reasons spoke directly to non-users' comfort with paper on the basis of ease of use, being used to paper, and interestingly, the need to retain paper bills for their records. Concerns about security and privacy rounded out the top five. The existence of three separate questions about security, privacy, and phishing and fraud may have inadvertently diluted the importance of this category of concern; together these accumulated 60% of responses. The largest shared concern (21% of Fence-sitters and 20% of Holdouts, non-population-corrected) was not wanting to have the money deducted from their accounts before bills are due — highlighting the importance of holding onto one's money as long as possible and the perception that the online bill pay process undermines this goal. About half of the Quitters could be convinced to use online bill pay again. Eliminating and reducing cost represent the two top motivators for this group to return to online bill pay (online security guarantees were next to last).[76]

Banks that offer a zero cost solution have 150% more online bill payers than banks that charge for it.

Interestingly, Forrester also found that banks with free online bill pay increased their active online bill payers 150% more than fee-charging banks[77].

3.3.1.3 Technology Adoption and *E-filing*

The adoption rates for *e-filing*, online banking, and online bill pay are comparable, particularly given the relative advantage of the banking industry in its flexibility to shape its market and to offer incentives. Figure 3-8 overlays the adoption rates for household PCs, household Internet, *e-filing*, online banking, and online bill pay into a single chart. *E-file* adoption rates fall right in the middle — below PC and Internet (which are, in

[76] Forrester Research (2007) *Online Bill Pay 2007: Understanding The Mindset Of Holdouts, Fence-Sitters, And Quitters* pp. 4-8

[77] Forrester Research (2007) *EBPP Forecast: 2006 To 2011* p. 2

effect, a ceiling to this computer- and Internet-dependent technology) and above online banking and online bill pay[78].

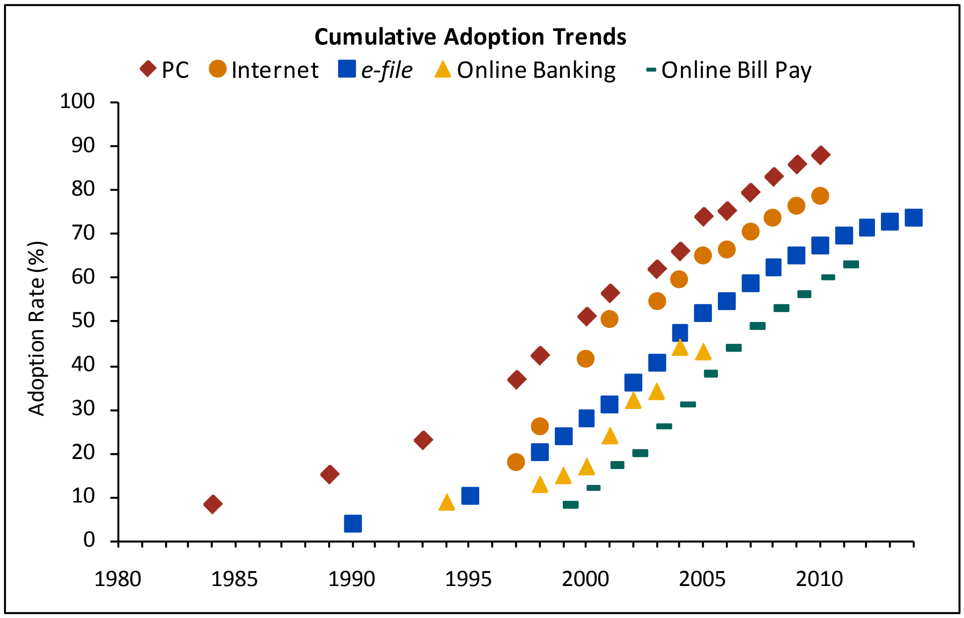

Figure 3-8 Comparison of PC, Internet, *E-file*, Online Banking, and Online Bill Pay Adoption (1984–2014)

IRS e-file *adoption rates compare favorably to online banking and online bill pay. Adoption of* e-file *— or any other technology — is fundamentally an issue of motivating behavior. What has worked to date to attract* e-file *users will become less and less effective in the future.*

All five technologies in Figure 3-8 show an adoption trend consistent with technology adoption theory. Based on that theory, all appear to be near or in the latter half of the adoption cycle, where the cost (in time and/or resources) required to achieve equivalent adoption gains continually increases. This phase of increasing costs underscores the challenge the IRS faces in driving up *e-file* adoption: efforts that have succeeded to date will offer ever-diminishing returns in the future. This condition will hold unless the *e-file* approach itself changes significantly (i.e., results in a new and different adoption curve because the technology offering itself — and the related motivators and concerns — is new and different). The next Chapter will carry forward this theme of technology adoption as a primarily behavioral issue (versus, as some assert, a technology- or solution-driven issue) by discussing studies of filer behaviors and motivators.

---

[78] Census (2003) *Computer and Internet Use in the United States: 2003;* Forrester Research (2007) *EBPP Forecast: 2006 To 2011;* Forrester Research (2007) *The State Of Consumers And Technology: Benchmark 2007;* Forrester Research (2007) *US Online Banking: Five-Year Forecast;* IRS (2006) *SOI Bulletin Historical Table 22: Selected Returns and Forms Filed or To Be Filed by Type During Specified Calendar Years, 1990-2007;* IRS (2007) *Calendar Year Return Projections for the United States and IRS Campuses CY 2007-2014;* Pew Internet & American Life Project (2006) *Online Banking 2006: Surfing to the Bank*

4. Introduction to Research on Filer Motivators and Concerns

Contents of Chapter 4:

This Chapter provides an overview of many of the research efforts conducted over the past decade and highlights findings from those efforts regarding motivators and concerns for both taxpayers and preparers regarding *e-file*. While this Chapter is organized around studies, Chapters 5 and 6 present key findings from these studies and other efforts thematically. These findings on influencing behavior directly relate to the options discussed in Chapters 10 through 14 because they inform the likely perception and adoption of the options. Themes identified in this Chapter include the following:

- Although there is considerable research at present, additional and more up-to-date research may be required to move the analysis of options to the next step.
- The complementary techniques of primary research and statistical analysis of data sets provide insights into filer motivators and concerns.
- It can be difficult to compare studies year to year or study to study due to changes in methodology or definition.

4.1 Overview

The key to understanding motivators is research.

Assumptions about filer behavior are subjective; research and analyses are critical to understanding the actual reasons for choosing *e-file* over paper. This Section provides an overview of the most relevant IRS *e-file* research studies conducted in recent years and highlights findings from those studies regarding historical behavior in both taxpayers and preparers. Several of the key factors that influence and motivate that behavior are then examined as potential opportunities for *e-file* mandates and incentives.

In his 2003 remarks before the IRS Oversight Board, the chairman of ETAAC stated, "The key challenge to increasing *e-filing* is to stimulate demand by taxpayers and tax preparers"[79]. The IRS spent between $2 million and $10 million dollars on communications in past filing seasons[80].

The IRS has conducted a great deal of research into the concerns and motivations of taxpayers and preparers, both primary research (telephone surveys and focus groups) and detailed analyses of IRS data on the flow of returns through the filing season. Among the major research efforts are the following:

---

[79] Belden, K. (2003) *The Future Direction of Electronic Tax Administration* p. 1

[80] The IRS spent $6.1 million in 2002-03 tax season, $10.6 million in 2003-04, $5.9 million in 2004-05; see IRS (2005) *Findings From The 2004-05 Taxpayer Communications Tracking Study*.

- Taxpayer Assistance Blueprint (TAB).
- Taxpayer Communications Tracking Studies.
- Taxpayer Attitudinal Tracking Studies.
- Taxpayer Satisfaction Studies.
- ETA Full Year Database Analyses.
- Practitioner Business Impact Studies.
- One-on-One *e-file* Research Among Taxpayers and Preparers.
- *E-file* Practitioner Attitudinal Tracking Studies.

For more information regarding the need for future research, see Chapter 15.

Recognizing the nature of technology adoption and the pace of change, research of this nature will need to be ongoing and regular. In addition, data on actual taxpayer and preparer behaviors (versus self-reported data or surveyed preferences) may yield actionable insights for strategies to meet the 80% *e-file* goal. Chapter 15 describes potential research opportunities for future consideration.

The References located in the back matter of the report provides bibliographic information for these studies and the many other sources cited in this report. The purpose of this Chapter is to introduce this research and provide selected summaries or key findings from each study. The next two Chapters — Chapter 5 for taxpayers and Chapter 6 for preparers — discuss in greater depth the findings from these studies, but are organized by the major categories of motivators and concerns.

4.2 Taxpayer Assistance Blueprint

The TAB shows a positive correlation between use of a preparer and e-filing.

A major study in two parts, the Taxpayer Assistance Blueprint (TAB) resulted from a July 2005 congressional mandate that the IRS address taxpayer needs and IRS service delivery while ensuring that decisions are informed by research and stakeholder engagement. Published in 2006 and 2007, the TAB examined individual taxpayer filing preferences around service and assistance.[81]

Following are definitions of the taxpayer segmentation framework defined in the TAB1 report, including four income segments and four generational segments:

- **Income Segments:**
  - **Low Income** — AGI less than $36,000.
  - **Moderate Income** — AGI between $36,000 and $62,500.
  - **Moderate High Income** — AGI between $62,500 and $100,000.
  - **High Income** — AGI greater than $100,000.
- **Generational Segments:**
  - **Millennial** — Coming of age 1995 and beyond (ages 0 to 29).
  - **Generation X** — Coming of age 1984 to 1994 (ages 30 to 40).
  - **Baby Boomers** — Coming of age 1963 to 1983 (ages 41 to 60).
  - **Seniors** — Coming of age 1908 to 1962 (ages 61 to 116).

[81] IRS (2006) *The 2006 Taxpayer Assistance Blueprint, Phase 1;* IRS (2007) *The 2007 Taxpayer Assistance Blueprint, Phase 2*

The TAB also defined two additional population segments that span all income and generational segments: limited English proficiency and disabled taxpayers.

Related to *e-filing* specifically, the TAB considered five filing characteristics across the income and generational segments: number of returns filed, percentage of electronically filed returns, percentage of returns prepared by a paid preparer, percentage of refund returns, and percentage of simple returns (1040EZ, Telefile, 1040A with no schedules [can have Earned Income Tax Credit (EITC) but no form attached], or 1040 with no schedules).

E-filing *is least prevalent in the highest income group, which has the most complex returns and the lowest percentage of refund returns.*

Table 4-1 shows the data gathered in the TAB report for the five filing characteristics across the generational and income segments[82].

Table 4-1 Five Filing Characteristics by Income and Generational Segment (as of TY2003)

Segment	Filing Data	AGI Under $36,000	AGI $36,000 to $62,500	AGI $62,500 to $100,000	AGI Over $100,000	Totals
Seniors Ages 61–116	**# Returns**	14,998,000	5,176,000	3,617,000	2,646,000	26,437,000
	% *e-filed*	32%	33%	32%	26%	31%
	% Preparer	69%	70%	69%	76%	70%
	% Refunds	83%	69%	69%	62%	76%
	% Simple	36%	22%	11%	2%	26%
Boomers Ages 41–60	**# Returns**	19,952,000	11,681,000	9,173,000	6,874,000	47,680,000
	% *e-filed*	48%	47%	47%	38%	46%
	% Preparer	63%	60%	59%	63%	61%
	% Refunds	87%	83%	81%	69%	82%
	% Simple	31%	30%	11%	2%	23%
Generation X Ages 30–40	**# Returns**	14,753,000	6,406,000	3,610,000	1,704,000	26,473,000
	% *e-filed*	60%	58%	58%	47%	58%
	% Preparer	61%	56%	55%	61%	59%
	% Refunds	92%	88%	87%	75%	89%
	% Simple	33%	38%	15%	3%	30%
Millennial Ages 0–29	**# Returns**	24,487,000	1,629,000	317,000	60,000	26,493,000
	% *e-filed*	45%	57%	58%	41%	46%
	% Preparer	49%	53%	55%	70%	49%
	% Refunds	92%	87%	82%	68%	91%
	% Simple	63%	49%	23%	7%	62%
Totals	**# Returns**	74,191,000	24,982,000	16,716,000	11,285,000	127,084,000
	% *e-filed*	46%	47%	46%	37%	45%
	% Preparer	59%	61%	60%	66%	60%
	% Refunds	89%	82%	80%	68%	81%
	% Simple	43%	32%	12%	2%	33%

[82] IRS (2006) *The 2006 Taxpayer Assistance Blueprint, Phase 1* pp. 115-116

Some key findings from this study follow:

- *E-filing* is least prevalent among the highest income group, which has the most complex returns and the lowest percentage of refund returns.
- *E-filing* is least prevalent among Seniors and most prevalent among Generation X.

4.3 Taxpayer Communications Tracking Studies

Outreach and communications can improve e-filing *rates and decrease V-Coding.*

Launched in 2003–2004 and repeated in 2004–2005, the Taxpayer Communications Tracking Study combined two separate tracking studies used between 1997 and 2003 (Taxpayer *e-file* Ad Tracking Study and an Attitudinal Tracking Study) and evaluated the impact of each new communications program on taxpayer awareness of, and disposition toward, *e-file*. The study consisted of two parts: a "pre-wave" conducted prior to the start of each new communications campaign and a "post-wave" conducted after the end of each campaign to measure the *e-file* program's impact.[83]

The study analyzed taxpayer segments in several dimensions (*E-file* Usage, Return Type, and Filing Behavior) as defined below:

- ***E-file* Usage**
  - **Users** — Used *e-file* in the past year.
  - **Quitters** — Used *e-file* in the past but said they would not consider using it again.
  - **Non-Triers** — Never used *e-file*.
  - **Lapsed Users** — Used *e-file* in the past (but not the past tax season).
- **Return Type**
  - **Self-Prepared Return** — No paid-preparer identification number appears on the return.
  - **Paid-Preparer Return** — A paid-preparer identification number appears on the return.
  - **Simple** — Form 1040EZ and Form 1040 or Form 1040A without any schedules.
  - **Complex** — Form 1040 with Schedules C, E, F, or other schedules and all other specific Forms 1040 (e.g., 1040 PR).
- **Filing Behavior**
  - "As Soon As I Get My W-2 Forms"
  - "When I Get Around To It"
  - "Late As Possible But Not Last-Minute"
  - "At The Last Minute Possible"

The findings based on these definitions are shown in Table 4-2[84].

---

[83] IRS (2005) *Findings From The 2004-05 Taxpayer Communications Tracking Study;* IRS (2005) *Findings From The Pre-Wave Of The 2004-05 Taxpayer Communications Tracking Study*

[84] IRS (2005) *Findings From The 2004-05 Taxpayer Communications Tracking Study;* IRS (2005) *Findings From The Pre-Wave Of The 2004-05 Taxpayer Communications Tracking Study*

Table 4-2 Attributes of *E-file* Usage Segments (as of 2004)

Attribute	Users	Quitters	Non-Triers	Lapsed Users
Taxpayers in Segment	51% / 54%	3% / 2%	32% / 31%	12% / 13%
Use a Preparer	58% / 68%	71% / 69%	57% / 52%	58% / 48%
Offered *E-file* by Preparer	91% / 96%	65% / 49%	33% / 31%	65% / 57%
V-Coders	n/a	71% / 71%	53% / 52%	73% / 55%
Get Refund	79% / 85%	67% / 68%	66% / 64%	73% / 68%
Have Balance Due	16% / 11%	29% / 32%	26% / 24%	19% / 26%
File As Soon As Possible	55% / 52%	63% / 37%	36% / 37%	42% / 37%
File When Get Around To It	28% / 32%	25% / 23%	35% / 32%	38% / 23%
File Late But Not Last	7% / 7%	0% / 5%	9% / 12%	9% / 5%
File At Last Possible Minute	6% / 8%	13% / 19%	16% / 15%	9% / 19%
Claim Tax Credits	63% / 61%	33% / 56%	38% / 42%	58% / 43%
Age	43 / 43	51 / 43	49 / 48	45 / 45
Sex (% male)	49% / 49%	50% / 66%	47% / 52%	52% / 42%
Income Level	$62K / $63K	$60K / $81K	$66K / $62K	$69K / $66K

Note: Pre-wave data is separated by a slash (/) from post-wave data following it (pre-wave/post-wave).

Non-Triers of e-file *are the least likely group to be offered* e-filing *by their preparers.*

Some key points that can be drawn from the data on taxpayer usage are as follows:

- Outreach and communications can improve *e-filing* rates and decrease V-Coding, especially among Lapsed Users.
- The largest percentage of non–*e-file* Users are the ones who have never tried it, and they are the least likely to be offered *e-filing* by their preparers.

The 2005 Taxpayer Communications Tracking Study also looked at tax returns by complexity (simple, complex) and use of a paid preparer in four categories, as shown in Table 4-3[85]. The study also introduced a new complexity category of Intermediate (Form 1040A with Schedule 1, Child Tax Credit or Education Credit, or Earned Income Credit [EIC]; or Form 1040 with Schedules A, B, or D, Child Tax Credit or Education Credit, or EIC) but did not perform much analysis around this new category.

[85] IRS (2005) *Findings From The 2004-05 Taxpayer Communications Tracking Study;* IRS (2005) *Findings From The Pre-Wave Of The 2004-05 Taxpayer Communications Tracking Study*

Table 4-3 Attributes of Filers Based on Return Complexity and Use of Preparer (as of 2005)

Attribute	Self-Simple	Self-Complex	Paid-Simple	Paid-Complex
Returns in Segment	18% / 21%	22% / 15%	24% / 26%	28% / 32%
E-filed Returns	46% / 41%	53% / 47%	54% / 67%	46% / 57%
V-Coded Returns	17% / 12%	17% / 23%	31% / 25%	42% / 36%
Offered *E-file* by Preparer	n/a	n/a	74% / 80%	59% / 70%
Get Refund	83% / 77%	70% / 74%	79% / 88%	67% / 66%
Have Balance Due	14% / 16%	25% / 24%	13% / 6%	27% / 26%
File As Soon As Possible	48% / 52%	29% / 36%	65% / 62%	34% / 43%
File When Get Around To It	33% / 36%	38% / 29%	24% / 31%	38% / 33%
File Late But Not Last	8% / 5%	11% / 15%	6% / 1%	12% / 10%
File Last Possible Minute	9% / 7%	18% / 17%	3% / 3%	14% / 11%
Claim Tax Credits	47% / 41%	52% / 51%	60% / 59%	53% / 55%
Age	41 / 43	47 / 46	43 / 41	48 / 47
Sex (% male)	46% / 43%	50% / 53%	50% / 47%	54% / 55%
Income	$49K / $52K	$77K / $81K	$49K / $46K	$76K / $76K
College Educated	70% / 62%	83% / 79%	49% / 36%	67% / 71%
Married	44% / 42%	70% / 77%	52% / 57%	73% / 74%

Note: Pre-wave data separated by a slash (/) from post-wave data following it (pre-wave/post-wave).

Some key findings follow:

- Outreach can increase the number of preparers who *e-file* and decrease the number of V-Coders (those who prepare returns on a computer but file on paper); however, this is not borne out for self-preparers.
- The highest post-wave *e-filing* rate is for simple returns done by a preparer, followed by complex returns done by a paid preparer. This indicates again that preparers provide a key role in increasing *e-filing*.

Many paper filers have not been offered the option to e-file *by their preparers.*

The study also compared V-Coders to *e-file* Users and paper filers and found that[86]:

- V-Coders' use of a preparer is higher than other groups (76% for V-Coders versus 58% for *e-filer*s and 28% for others).
- Only 44% of V-Coders indicated that their preparers offered them *e-file*, compared with 91% of *e-filer*s.
- Most V-Coders (61%) have never tried *e-file*, although the 31% of V-Coders who are lapsed *e-filer*s would consider trying it again.

In short, many taxpayers who do not *e-file* have never tried it and likely have not been offered it by their preparers.

[86] IRS (2005) *Findings From The 2004-05 Taxpayer Communications Tracking Study;* IRS (2005) *Findings From The Pre-Wave Of The 2004-05 Taxpayer Communications Tracking Study*

4.4 Taxpayer Attitudinal Tracking Studies

Adoption of e-file *mirrors taxpayer segmentations by technology adoption group.*

Until 2003, the IRS conducted annual studies to update its understanding of taxpayers' attitudes and how those attitudes relate to adoption of electronic filing. These studies have since been folded into the Taxpayer Communications Tracking Study (see Section 4.3). In addition to looking at the segments such as *e-file* usage, return type, filing behavior, and V-Coders, this study also analyzed taxpayers according to the following technology acceptance segmentation[87]:

- **Tech Leaders** — Comprising 44% of taxpayers, this group is the most comfortable with using technology. Tech Leaders tend to be the first to try new technology and trust technology and wish they could do more of their dealings by computer.
- **Tech Followers** — Comprising 25% of taxpayers, this group is fairly comfortable with technology, but not the first to try new technology, and generally not comfortable putting financial information on a computer.
- **Tech Laggards** — Comprising 32% of taxpayers, this group is the least comfortable with technology, is sometimes scared of computers, and would definitely not put financial information on a computer.

Similar user segments are described in technology adoption theory; see Section 3.1.1.

Table 4-4 shows past *e-file* usage trends for Tech Leaders, Tech Followers, and Tech Laggards across some of the usage categories seen in other studies, including Non-Triers, Lapsed Users, and Quitters[88].

Table 4-4 *E-file* Usage Rates Among Technology Acceptance Segments (as of 2003)

Segment	Never Used	Ever Used	Used in Past Year	Lapsed Users	Quitters
Tech Laggards	53%	47%	34%	11%	3%
Tech Followers	45%	55%	34%	17%	4%
Tech Leaders	36%	64%	46%	16%	2%

Not surprisingly, the TAB technology acceptance segments correlated closely with the filing usage behaviors indicated by technology adoption theory (i.e., Tech Laggards were much less likely to use or have used *e-file*, whereas Tech Leaders were more likely to have recently used *e-file*).

---

[87] IRS (2003) *Findings From The 2003 Wave Of The e-file Taxpayer Attitudinal Tracking Study*
[88] IRS (2003) *Findings From The 2003 Wave Of The e-file Taxpayer Attitudinal Tracking Study*

4.5 Taxpayer Satisfaction Studies

Non e-file *users do not believe in* e-file's *benefits, and likely are not offered* e-file *by their preparers.*

The IRS conducts customer satisfaction research among taxpayers to gauge their satisfaction with various *e-filing* options, understand non-user interest in *e-file*, and understand taxpayer satisfaction with IRS instructions and communications. Following are some findings from the 2005 study[89]:

- Current *e-file* Users are very satisfied with *e-filing* (both commercial software and Free File), but satisfaction with preparer *e-filing* is on a bit of a downward trend.
- Two main reasons for lack of adoption by Non-Triers and Lapsed Users include lack of belief in the products (concerns about ease of use, accuracy, and privacy/security) and preparers not offering *e-file* to their clients.
- Cost was also listed as a key reason for non-use of *e-filing*.

4.6 ETA Full Year Database Analyses

Preparers make a considerable contribution to the e-file *rate.*

The ETA conducts an annual nationwide analysis of individual taxpayers. The most current study available is for PY2006. This study segmented returns based on relative complexity of the returns and use of a preparer and introduced the intermediate level of complexity[90]:

- **Self-Prepared Return** —No paid-preparer identification number appears on the return.
- **Paid-Preparer Return** —A paid-preparer identification number appears on the return.
- **Simple** — Form 1040EZ and Form 1040 or Form 1040A without any schedules.
- **Intermediate** — Form 1040A with Schedule 1, Child Tax Credit or Education Credit, or EIC; or Form 1040 with Schedules A, B, or D, Child Tax Credit or Education Credit, or EIC.
- **Complex** — Form 1040 with Schedules C, E, F, or other schedules and all other specific Forms 1040 (e.g., 1040 PR).

Figure 4-1 shows the number of returns in each of these segments for full TY2005[91].

---

[89] IRS (2005) *Findings From The 2005 Taxpayer Satisfaction Study*
[90] IRS (2007) *ETA Tax Year 2005 Full Year Database Analysis* p. 7
[91] IRS (2007) *ETA Tax Year 2005 Full Year Database Analysis* p. 9

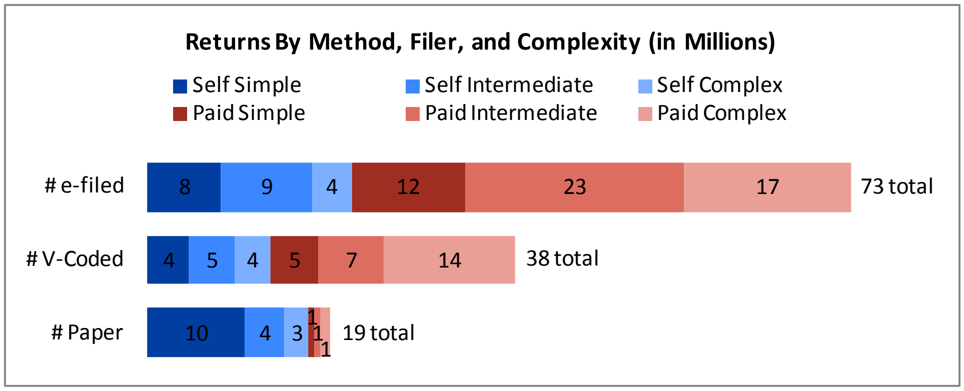

Figure 4-1 Returns by Method, Filer, and Complexity (as of 2005)

The study shows the differences in taxpayers' profiles in each of the six market segments using descriptive statistics including age, AGI, unpaid balance due, and filing method. Some key findings follow:

- Although the paid preparer community has made great strides in moving returns away from paper and V-Coding and toward *e-filing*, about one-third of paid-preparer returns are V-Coded.
- "States with electronic filing mandates, on average, have a higher percentage of electronically filed returns and a lower percentage of V-Coded returns when compared to all States as a whole"[92].

4.7 Practitioner Business Impact Studies

One major difference between preparers who avoid e-file *versus those who embrace* e-file *appears to be lack of knowledge about and belief in the benefits extolled by committed* e-filers.

The IRS conducted Practitioner Business Impact (PBI) research to "examine how *e-file* impacts the Practitioner business model"[93]. As of July 2005, there were 3 PBI studies:

- PBI-1, conducted in July 2004, studied *e-file*'s impact on Committed V-Coders, preparers who V-Code at least 75% of their returns.
- PBI-2, conducted in June 2005, broadened the range of preparers being studied to preparers who V-Code at least 25% of their returns and studied how these preparers compare to the Committed V-Coders of the PBI-1 study.
- PBI-3, conducted in June 2005, revisited the impact of *e-file* on the PBI-1 preparers 1 year later.

[92] IRS (2007) *ETA Tax Year 2005 Full Year Database Analysis*
[93] IRS (2005) *Findings From Practitioner Business Impact Research PBI-2 and PBI-3* p. 2

The PBI-1 study produced the following key findings[94]:

- V-Coding preparers had suggestions for making *e-file* implementation easier: the IRS should provide more training, information, and promotion; change the program (e.g., make it mandatory); and provide incentives to use it.
- V-Coding preparers seemed to lack knowledge about *e-file*: how it works, what benefits it brings, and what effect it will have on their business and their clients.
- V-Coding preparers are not necessarily averse to change; they are interested in business growth.
- V-Coding preparers' resistance to *e-file* is mainly an issue of perception: they see it as a hassle, and they discount or do not recognize the benefits.

The PBI-2 study produced the following key findings[95]:

- 53% of all preparers who filed at least 100 returns V-Coded at least 25% of their returns.
- The preparers indicated that lack of demand and lack of good software stopped them from *e-filing* more returns, but the study determined that lack of demand was something the Committed V-Coders overcame through taxpayer education and that the IRS was working with the software development community to meet software needs.
- Preparers V-Coding at least 25% of their returns did not have the same level of knowledge, understanding, or belief expressed by the Committed *e-file* Users regarding *e-file*, who saw an increase in clients and profits and recognized the appropriateness of *e-file* to more complex returns. The 25% V-Coder group also believed that *e-file* will cause a greater increase in client fees than actually experienced by Committed *e-file* Users.
- The 25% V-Coder group also lacked the belief and acceptance of the Committed *e-file* Users related to *e-file* benefits to their businesses, their job satisfaction, and their clients.
- Communications campaigns targeted at increasing preparer understanding of the benefits of *e-filing* may help but are unlikely to address all the knowledge and belief issues.

The PBI-3 study found the following differences in the Committed V-Coder group from 2004 to 2005[96]:

- 29% migrated from V-Coding to *e-filing.*
- The move to *e-filing* seems to be related to an improved attitude toward *e-filing* and an increased belief in its benefits, such as faster refunds, paper/cost savings, ease of use, accuracy, efficiency, and greater acceptance among clients.

---

[94] IRS (2004) *Final Report, Practitioner Business Impact Study: Committed e-file Users vs. Committed V-Coders*
[95] IRS (2005) *Findings From Practitioner Business Impact Research PBI-2 and PBI-3*
[96] IRS (2005) *Findings From Practitioner Business Impact Research PBI-2 and PBI-3*

4.8 One-on-One *e-file* Research Among Taxpayers and Preparers

Higher-usage preparers are far more likely to recognize the benefits of e-file *than lower-usage preparers.*

In 2003, a study consisting of 375 in-depth telephone interviews of "high opportunity" taxpayers and preparers segmented interviewees as follows[97]:

- "High opportunity" taxpayers were taxpayers who were offered *e-file* by their preparers but did not choose to use it.
- "High opportunity" preparers included the following segments of preparers: those who did not currently *e-file*, those who *e-filed* less than 50% of their returns, and those who *e-filed* more than 50% of their returns.

Taxpayers who chose not to *e-file* when they were offered it by their preparers were older, with predominantly complex returns. They had preconceived notions about *e-file*, including the following[98]:

- Resistance to the additional cost of *e-file*.
- Concerns about *e-file* security.
- Strong preference for tried-and-true paper filing.
- Belief that *e-file* is mainly for those seeking a quick refund (which they generally were not).

Additional findings are as follows:

- Preparers who did not use *e-file* perceived it as involving more time and work for them, and even though 89% said that their clients ask about *e-file*, they turned back inquiries and figured that taxpayers could "go elsewhere if they [wanted to] *e-file*"[99].
- The lower-usage preparers viewed *e-file* as more appropriate for certain taxpayers — those with refund returns, those with simple returns, and those who expressed an interest in *e-file*[100].
- Higher-usage preparers thought about *e-file* "differently," were "far greater believers in *e-file*," and were "far more likely to recognize its benefits"[101].

---

[97] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* pp. 4-6
[98] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 9
[99] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 10
[100] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 11
[101] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 11

4.9 *E-file* Practitioner Attitudinal Tracking Study

Characteristics of practitioners merit updating to include richer demographic and motivational insights.

This study was conducted in 2003 to better understand preparers who file 100 or more returns per year, what motivates them, and how best to communicate with them as the IRS continues to work toward its 80% *e-file* goal. The demographics of preparers who file 100 or more returns a year were identified as follows[102]:

- Typically male, in their early 50s.
- Most (76%) approached tax preparation as an occupation (i.e., were not seasonal workers) and had about 20 years of experience.
- Two-thirds worked in firms that had been in business an average of 32 years and where tax preparation was the primary service.
- They filed a median of 225 returns per year; 79% were individual returns, and 46% of these were *e-filed*.

In short, these preparers were older, more experienced preparers who were very focused on tax preparation. When asked about key benefits of *e-filing*, preparers focused on speed, with less recognition of accuracy and ease of use as *e-file* benefits. Non–*e-file* preparers (accounting for 29% of filing volumes) were identified as "older, more Male-skewed, more likely to be Independents or in smaller firms, and more likely to be involved in AICPA and State trade groups. They also have far less belief in main *e-file* benefits of Speed, Accuracy, and Ease of Use"[103]. Low-volume *e-file* preparers, who *e-file* less than 50% of their returns and account for 19% of filing volumes, indicated that they did not *e-file* more because "clients don't ask for it"[104].

[102] IRS (2003) *Findings From The 2003 e-file Practitioner Attitudinal Tracking Study*
[103] IRS (2003) *Findings From The 2003 e-file Practitioner Attitudinal Tracking Study* p. 11
[104] IRS (2003) *Findings From The 2003 e-file Practitioner Attitudinal Tracking Study* p. 11

5. Taxpayer Motivators and Concerns

Contents of Chapter 5:

This Chapter discusses taxpayer motivators and concerns in a thematic framework. After an overview of taxpayer motivators and concerns, this Chapter specifically discusses Awareness, Availability, Accuracy, Security and Privacy, Ease and Convenience, Cost, Taxpayer Demand, Fear of Audit, Recordkeeping and Acknowledgments, and Perceived Benefits. The points of leverage for influencing behavior directly relate to the options discussed in Chapters 10 through 14 as they inform the likely perception and adoption of the options. Themes identified in this Chapter include the following:

- Motivators and concerns drive or hinder adoption of *e-file* — the challenge to advance *e-file* is motivational, not technological.
- *E-file* holdouts — whether individuals or preparers — are generally unconvinced of the marketed and/or studied benefits of *e-file*.
- Multiple factors influence the decision to *e-file*, including accuracy, cost, ease of use, and security/privacy. In each case, it is difficult to determine whether the benefit is actually derived from computer preparation or *e-filing* itself.
- Research-based findings of filer motivations do not always support popular assumptions.

5.1 Overview

Taxpayers increasingly rely on preparers to prepare and/or file their returns and trust their guidance on whether to e-file. *Chapter 6 provides an in-depth look at preparers' influence.*

This Chapter will look at taxpayers' perceptions of and motivations to file electronically, with an emphasis on self-preparers. As of TY2006, 37% of individual returns were self-prepared (whether manually or through use of computer software) [105]. The other 63% of returns were prepared by a paid preparer. In addition to their own perceptions and motivations, taxpayers who use a paid preparer are strongly influenced by their preparers. Preparer motivators and their influence on taxpayers are discussed further in Chapter 6. This Chapter will cover the following items related to taxpayer motivations and concerns:

- **Awareness** — Are taxpayers aware of *e-file*?
- **Availability** — Is *e-filing* available to and appropriate for taxpayers?
- **Accuracy** — Is *e-file* perceived to produce an accurate return?
- **Security and Privacy** — Is *e-file* perceived to provide security and privacy?
- **Ease and Convenience** — Is *e-file* perceived to be easy to use?
- **Cost** — What is the cost of *e-filing* and its effect on adoption?
- **Taxpayer Demand** — How does owing a balance or getting a refund affect the perceived need to *e-file*?
- **Fear of Audit** — How does fear of being audited affect *e-filing*?

[105] IRS (2006) *Tax Year 2006 Taxpayer Usage Study*

- **Recordkeeping and Acknowledgment** — How do perceived requirements for recordkeeping affect *e-filing*?
- **Perceived Benefits** — How do taxpayers perceive the benefits of *e-filing*?

This Chapter uses the definitions introduced in Section 2.3.1.3 (see also the Glossary), though in cases where a study uses a particular term to refer to a particular group, we preserve that nomenclature.

This Section is organized in terms of these issues, rather than by taxpayer segment, although where an issue relates primarily to specific segments, those segments are identified. The discussion focuses on taxpayers' perceptions of the issues. In this context, for example, it is important to consider whether taxpayers perceive *e-file* to be accurate and secure, rather than whether it is accurate and secure by some external measure. In addition, the discussion focuses particularly on the perceptions of non-users of *e-file*, because overcoming their negative perceptions is critical to achieving the 80% *e-file* goal. Some information on what motivates *e-filers* is also presented because this may help determine how to motivate non–*e-filer*s.

Note that when this document discusses the approximately 42% (as of TY2005) of self-preparers who filed electronically, it is often challenging to distinguish their perceptions of the tax preparation process and software used from their perceptions of the actual process of *e-filing*, because all used tax return preparation software to *e-file*[106].

5.2 Awareness

While awareness is necessary for e-filing*, it does not guarantee adoption.*

Awareness appears to be a necessary but not sufficient condition of electronic filing. A 2003 IRS study looked at awareness of *e-file* by technology acceptance segments (see Section 4.4 for more explanation of these segments and this study) and found high levels of awareness even among taxpayers who are generally not accepting of new technologies, as shown in Table 5-1[107]. However, awareness among Spanish speakers in the survey was somewhat lower than for the survey population as a whole; the Spanish language taxpayer unaided awareness level was 64%, and the aided awareness level was 92%[108].

Table 5-1 *E-file* Awareness by Technology Acceptance Segment (as of 2003)

Segment	Tech Leaders	Tech Followers	Tech Laggards
Unaided Awareness	89%	92%	75%
Aided Awareness	100%	99%	98%
E-filed in the Past Year	46%	34%	34%

Additional research is required on how many paper filers understand *e-file* and how that relates to their potential acceptance of *e-file*.

As Table 5-1 shows, while awareness is absolutely necessary for *e-filing*, it does not guarantee a high correlation with acceptance. Even in the Tech Leader segment (the most likely segment to adopt a technological solution), only 46% of taxpayers *e-filed* in the previous year, even though they were at least 89% aware of the option to *e-file*. It should also be noted that awareness differs from understanding, much less acceptance. Further research is required to assess how many paper filers actually understand *e-file* and how that understanding promotes or inhibits their potential acceptance of *e-file*.

---

106 Calculated from IRS (2007) *ETA Tax Year 2005 Full Year Database Analysis* p. 17
107 IRS (2003) *Findings From The 2003 Wave Of The e-file Taxpayer Attitudinal Tracking Study* pp. 31,32
108 IRS (2003) *Findings From The 2003 Wave Of The e-file Taxpayer Attitudinal Tracking Study* p. 88

Availability of e-file *for taxpayers may depend on many factors, including access to a computer, access to the Internet, and a tax situation supported by the IRS* e-file *program and/or their return preparation software.*

5.3 Availability

While some factors that inhibit availability remain, they are largely outside the control of the IRS. All current *e-file* methods require both a computer and access to the Internet, either by the taxpayer directly or by the taxpayer's preparer. Access is primarily an issue for self-preparers, because it is assumed that virtually all paid preparers who process any significant volume of returns (e.g., more than 100 per year) are likely to have a computer and Internet access[109].

Many individual taxpayers, however, do lack access, at least at home. The Census Bureau in 2003 estimated that 38.2% of all households did not have computers and 45.3% did not have Internet access in the home[110]. Of course, these percentages have decreased in recent years as home computers and Internet access have become more pervasive. For example, the Pew Internet & American Life Project reported that in April 2006, 73% of adults had Internet access, although not necessarily at home[111]. This implies that 27% still did not have access to technologies necessary for individuals to *e-file*. The Pew study also reported that Internet usage is strongly affected by income: "Just 53% of adults living in households with less than $30,000 in annual income go online, versus 80% of those whose income is between $30,000-50,000"[112]. Some taxpayers may think that high-speed, as opposed to dial-up, access to the Internet is required to be able to *e-file*, a perception that may be an inhibitor. Pew reports that, as of June 2007, about 47% of adults had high-speed Internet access from home[113]. Even taxpayers with home computers may not be able to use them to prepare their returns due to technical or usability issues with the software or hardware.

Taxpayers without computers and/or Internet access at home may choose to use computers elsewhere in order to *e-file*, though the data indicates this is a relatively infrequent occurrence. Self-preparers may visit IRS Taxpayer Assistance Centers (TAC) or VITA locations or may utilize computers that are available to them at work or a public library. IRS Publication 17, *Your Federal Income Tax*, states, "Many VITA sites offer free electronic filing"[114]. However, taxpayers may view TACs and VITA as being primarily oriented to providing preparation assistance; those who feel that they are able to prepare their own returns may not consider using these facilities simply to *e-file*. Furthermore, Pew reports that only 4% of adults use the Internet outside their homes (including work locations)[115]. Some of the impediments to use of computers at work or in a public library include the following:

- Employers may restrict the use of computers for personal business or limit access to Internet sites.
- Public libraries and Internet cafes may limit the amount of time a user can spend on a computer.

---

[109] When practitioners were asked why they did not use *e-file*, lack of availability was not mentioned, although 3% said they "Don't like computers" (IRS (2004) *Final Report Practitioner Business Impact Study: Committed e-file Users vs. Committed V-Coders* p. 30).
[110] Census (2003) *Computer and Internet Use in the United States: 2003*
[111] Pew Internet & American Life Project (2006) *Internet Penetration and Impact April 2006* p. 3
[112] Pew Internet & American Life Project (2006) *Internet Penetration and Impact April 2006* p. 4
[113] Pew Internet & American Life Project (2007) *Home Broadband Adoption 2007* p. 1
[114] IRS (2007) *Your Federal Income Tax* p. 10
[115] Pew Internet & American Life Project (2007) *Home Broadband Adoption 2007* p. 3

- Privacy may be a concern to taxpayers working on their tax returns in a public location.
- Employers and locations outside the home may bar installation of software.
- Taxpayers may be uncertain about whether traces of personal tax information remain in a public computer's memory, available for retrieval by unknown parties. Public computers are open to exploitation (e.g., infection with malware, keystroke recorders, and background programs that transmit interactions to a hostile site).
- Taxpayers may consider using locations outside the home inconvenient or impossible to do logistically due to factors such as the additional travel time involved, availability of public transportation, the hours of availability overlapping with their work schedules, and the possibility that they might fail to bring a needed piece of information and need to return again.

Access to a PC and the Internet are necessary but not sufficient to *e-file*. Other constraints exist that may preclude someone from being able to *e-file*. Currently, the IRS supports most — but not all — of the 1040 family of forms and schedules. Tax return preparation software vendors may choose to support only a subset of the forms the IRS supports based on their determination of which forms provide sufficient business value. The result is that the primary means of return preparation — on a computer using third party software — does not support all forms an individual may need. Another example of system constraints precluding *e-filing* among certain users is that the IRS does not support *e-filing* extensions. A 2007 study by Gallant et al. found "Not Allowed to *e-file*" and "Extension Needed" as the third and distant fifth top reasons why taxpayers did not *e-file*[116].

5.4 Accuracy

While accuracy is noted as a primary e-file *benefit, it is difficult to untangle the accuracy inherent in computer preparation from the accuracy of* e-filing*.*

While accuracy seems to be another necessary but insufficient condition for taxpayers to file electronically, it is difficult to positively correlate taxpayers' perceptions of accuracy with incentive to file electronically.

Because there is no way to *e-file* without using return preparation software, it is difficult to separate taxpayers' attitudes toward the accuracy of *e-filing* itself (i.e., the accurate transmission of return information to the IRS) from attitudes concerning the preparation software used to create an accurate return. Accuracy can be interpreted in several senses:

- Accurately applying the law — in particular, properly applying provisions that are to the taxpayer's benefit in reducing the amount of tax owed.
- Accurate computations.
- Accurate transmission of return information to the IRS.

As noted previously, the TAB reported that accuracy in the first two senses is among the most important factors influencing taxpayers' choices among return preparation options.

---

[116] Gallant, L. M. *et al.* (2007) *Why People e-File (or Don't e-File) Their Income Taxes*

However, non-users of *e-file* are not convinced of its accuracy. As noted in the 2005 Taxpayer Satisfaction Study, only 27% of Resisters and 69% of Potential Acceptors viewed *e-file* as accurate[117]. In contrast, among Current *e-file* Users, 82% considered *e-file* an accurate way to file[118]. The same study also found that accuracy was the number one factor (beating, in descending order, privacy/security, ease of use, cost, speed of filing, and speed of refund) across the segments of Current Users, Lapsed Users, and Non-Triers and that accuracy, privacy/security, and ease of use had the greatest gaps between importance and acceptance[119].

Additional research is required on why taxpayers using a computer to prepare their returns actually revert to paper to file them.

The IRS list of *e-file* benefits includes "IRS computers quickly and automatically check for errors or other missing information"[120]. However, taxpayers may consider the fact that return preparation software performs calculation and logic checks regardless of whether they *e-file* (and in fact, end-user software does provide some level of quality control). Therefore, the incremental value of the IRS checks may be perceived as of little importance or conflated with their software's capabilities. Concerns over accuracy of transmission may at least partially explain why many taxpayers use preparation software but then choose to print out and mail their returns rather than *e-file*. Additional research is required to categorize and quantify the reasons why taxpayers who are comfortable using a computer to prepare their returns detour at the final step of using it to file their returns; this research should ideally address actual practices and behaviors rather than self-reported reasons.

5.5 Security and Privacy

Security and privacy are common concerns but are hard to distinguish from general concerns regarding use of the Internet versus e-file *specifically.*

Security and privacy are related concepts that many people think of as tightly intertwined. Security is about protecting the integrity of information — making sure it is not lost, changed, or corrupted and that it is available only to parties it is supposed to be available to and when it is supposed to be available to them. Privacy is about ensuring that personally identifiable information is controlled, only disclosed to those authorized to see it, and only used for agreed-on purposes.

Security and privacy may be key considerations for some taxpayers in deciding whether to file electronically, but taxpayers' perceptions of security are linked to their overall acceptance of advanced technology and perceptions of security and privacy on the Internet.

In a 2002 study, "perceived credibility" (e.g., "Using the electronic tax-filing systems would not divulge my personal information") had a stronger influence on the intention to use electronic systems than "perceived usefulness" or "perceived ease-of-use"[121].

A 2005 study showed that Current *e-file* Users, Lapsed *e-file* Users, and Non-Triers all agreed on the importance of security/privacy (it was a top-three concern along with accuracy and ease of use) but disagreed about the extent to which *e-file* provides the security they demand, as shown in Table 5-2[122].

---

[117] IRS (2005) *Findings From The 2005 Taxpayer Satisfaction Study* p. 14
[118] IRS (2005) *Findings From The 2005 Taxpayer Satisfaction Study* p. 6
[119] IRS (2005) *Findings From The 2005 Taxpayer Satisfaction Study* p. 22
[120] IRS (2007) *Your Federal Income Tax* p. 9
[121] Wang, Y.-S. (2002) *The Adoption of Electronic Tax Filing Systems: an Empirical Study* p. 345
[122] IRS (2005) *Findings From The 2005 Taxpayer Satisfaction Study* p. 22

Table 5-2 Importance of Security (as of 2005)

Item	Current Users	Lapsed Users	Non-Triers
Rated assurance that return is private/secure "Really Important"	92%	92%	87%
Said assurance that return is private/secure describes *e-file* completely	55%	34%	26%

Taxpayers' perceptions of *e-file* security appear to be linked to their overall acceptance of advanced technology. In a 2003 study, 78% of Tech Leaders agreed that "e file is a private and secure way to file Federal income taxes," whereas only 51% of Tech Followers and 41% of Tech Laggards agreed with this statement[123]. It is interesting to note that these statistics run contrary to other research; for example, the 2002 study found that technical sophistication ("computer self-efficacy") tended to lower respondents' perception of security ("perceived credibility") rather than increase it[124].

Although the IRS emphasizes the security of *e-file* in its communications, the existence of fraudulent web sites may cause some taxpayers concern. In recent years, the IRS has found it necessary to caution the taxpaying community about fraudulent web sites that have posed as legitimate preparers and obtained personal information from taxpayers or even intercepted their refunds and redirected their refunds to the fraudsters' own bank accounts[125]. The more taxpayers hear about insecure transactions over the Internet, the more concern they are likely to have about any transaction over the Internet. A 2003 IRS study surveyed trust as a facet of security and found that taxpayers who rejected their preparer's offer to *e-file* noted "I don't trust it/don't trust the system" as the third of four security concerns, any of which were a perceived disincentive to *e-file*[126].

In a 2005 IRS study, Current *e-file* Users expressed less confidence in the security of software-based solutions, in which their information was kept on their own PCs, than in online solutions (including Free File), in which their information was stored with a commercial service provider. When asked whether they were satisfied with their *e-file* products "being private and secure," 75% of users of software-based solutions were "very satisfied," compared with 88% of Free File users and 77% of users of online commercial software[127]. Moreover, although non–Current Users were concerned about software, concern about commercial third parties having access to their information was not identified specifically[128].

[123] IRS (2003) *Findings From The 2003 Wave Of The e-file Taxpayer Attitudinal Tracking Study* p. 38
[124] Wang, Y.-S. (2002) *The Adoption of Electronic Tax Filing Systems: an Empirical Study* p. 346
[125] IRS (2007) *IRS Urges Caution about Internet Sites that Resemble the Official IRS Site*
[126] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 38
[127] IRS (2005) *Findings From The 2005 Taxpayer Satisfaction Study* p. 15
[128] IRS (2005) *Findings From The 2005 Taxpayer Satisfaction Study* p. 15

5.6 Ease and Convenience

It can be difficult to distinguish taxpayers' perceptions of the ease and convenience of e-filing *from the ease and convenience of tax preparation.*

When it comes to *e-filing*, measuring opinions about ease and convenience is far from straightforward, partly because it is difficult to untangle perceptions of preparing online and filing online. This Section focuses not on those who find *e-file* easy and convenient nor on whether *e-filing* is in fact easy or convenient, but rather on several groups that may not obviously perceive it to be so.

Complex Returns

Self-preparers with complex returns may require forms that are not accepted by *e-file*. Because they have to file a portion of their return on paper anyway, they may find it easier to simply print and mail the entire return, rather than split it between *e-file* and paper. Complex returns may also push people to seek the assistance of a paid preparer. Using a preparer, their decision about *e-filing* may be influenced by their preparer's preferences (see Chapter 6).

Complicated Processes

Having completed their returns on a computer or online, self-preparers may find it easier to simply print out and sign their returns, attach their Form W-2, and mail the returns. (Most taxpayers will presumably print out their returns anyway for their records; see discussion of Recordkeeping in Section 5.10.) In 2007, 90% of all returns were prepared on a computer, but only two-thirds of these were subsequently *e-filed*[129]. A senior vice president of Intuit pointed to the ratio of preparation time to filing time in discussing *e-file* convenience:

> As modern software tools have reduced the time it takes to self-prepare a simple return down to a half hour, the process of electronic filing commonly takes another 50% of that time, or an additional fifteen minutes, just to transmit the return.[130]

The process of electronically signing a return and authenticating one's identity are not necessarily convenient and may lead some self-preparers to use a paper signature alternative (Form 8453OL) or to simply print out and mail the entire return. The IRS requires electronically signed returns use a Self-Selected Personal Identification Number (SSP) as the signature and the AGI or SSP from last year's return as the means of authentication. 97% of taxpayers keep a copy of last year's return (which contains at least the AGI if not the SSP) and 86% claim easy access to it if needed, though 27% do not have access to it when they actually file their current return[131]. Given that the vast majority do have access to (or can get) the information necessary to sign and authenticate their *e-filed* return, the IRS plans to discontinue Form 8453OL in 2009.

One of the top two reasons for rejection of *e-filed* returns is a mismatch between what the taxpayer enters as their previous year's AGI or PIN versus the IRS's records[132].

---

[129] IRS Oversight Board (2008) *Electronic Filing 2007: Annual Report to Congress* p. 26
[130] Smith, B. (2005) *Fiscal 2006 Budget: IRS*
[131] IRS (2008) *Findings From e-Signature Shared Secrets Research* p. 6
[132] IRS (2007) *Electronic Return File Specifications for Individual Income Tax Returns - Tax Year 2007: Part 1, Attachments 1-11;* IRS (2007) *Service Center Error Reject Codes Report;* Smith, B. (2005) *Fiscal 2006 Budget: IRS*

However, 84% of taxpayers who have their return rejected for this reason are able to correct it without resorting to the Form 8453OL [133].

Comfort and Habit

Habit (i.e., familiarity or comfort with mailing a paper return and the associated level of effort) may be a reason why *e-filing* is perceived by some to be less convenient. A 2003 IRS study found that habit ("prefer my old/regular/traditional paper method") and inconvenience ("process is longer/more detailed") were the third and fifth reasons why taxpayers did not *e-file* (cost, lack of need, and security were the first, second, and fourth reasons)[134]. A 2005 IRS study found similar results, with "prefer the traditional/paper method" behind "no access to a PC" and "prefer a tax preparer/accountant" as the top reasons not to *e-file*[135].

A 2005 IRS study reported that only 20% to 37% of Current *e-file* Users in various categories related to the mode of *e-filing* volunteered that they liked the product because it was easy/convenient[136]. A 2007 survey of customers of one tax return preparation software company found that taxpayers who *e-filed* actually perceived *e-file* to be significantly less convenient than did taxpayers who did not *e-file* and that this was one of only two statistically significant factors in discriminating *e-file* non-users from users (cost was the other)[137]. One interpretation of this result is that taxpayers who *e-file* discover it to be less convenient than they thought it would be, though other benefits drive the decision.

For a certain group of self-preparers — those who prepare their returns manually — ingrained behavior around paper may affect their adoption of technology overall. In a 2007 Forrester Research study, the belief that "writing paper checks is easier" was among the top three reasons holding back 71% of those who did not pay bills online at their banks or credit unions[138].

Taxpayers' perceptions of the convenience of *e-filing* are likely to be strongly colored by their attitudes toward preparation software and even computer usage in general. Taxpayers who are comfortable preparing returns, especially simple ones, with nothing more than a pencil and a calculator may be inhibited by the process of selecting and using a preparation package. For example:

- Taxpayers must choose a package from a large number of vendors, most of which offer a variety of packages with different features at different prices. In some cases, selection of a particular version may preclude e-filing.
- As with any software purchase, the taxpayer must carefully check whether the package supports their computer, operating system, browser, etc.

---

[133] IRS (2008) *Analysis of Findings from e-Signature Shared Secrets Research*
[134] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 37
[135] IRS (2005) *Findings From The 2005 Taxpayer Satisfaction Study* p. 15
[136] IRS (2005) *Findings From The 2005 Taxpayer Satisfaction Study* pp. 5-9
[137] Gallant, L. M. *et al.* (2007) *Why People e-File (or Don't e-File) Their Income Taxes* p. 3
[138] Forrester Research (2007) *Online Bill Pay 2007: Understanding The Mindset Of Holdouts, Fence-Sitters, And Quitters* p. 8

- Taxpayers must be able to predict their situations accurately. If taxpayers prepare a paper return themselves and discover the need for an additional form or schedule, the form and associated instructions can be readily obtained from the IRS. With preparation software, an upgrade or purchase of a higher-level package may be necessary to obtain the form.
- If using a PC-based solution, the taxpayer must install the software on their own computer. If using a web-based solution, taxpayers must have Internet connectivity.
- Taxpayers must navigate a series of information-gathering screens, some of which may appear to be superfluous. For example, software packages typically require taxpayers to enter all the fields from Form W-2, rather than the two or three fields that must be copied onto a paper return.

5.7 Cost

Cost as an e-file *inhibitor may have greater mindshare than it deserves, but it is a factor.*

Cost is commonly held to be a leading factor in taxpayer reluctance to *e-file*, but the available research suggests the effect of cost — while significant — cannot fully explain filer behavior. It should be noted that the IRS does not charge a fee to *e-file*:

> The IRS does not charge a fee for electronic filing. Some Authorized IRS *e-file* Providers (EROs) charge a fee for providing this service to their clients while others may offer it free of charge. However, this fee cannot be based on any figure from the tax return. Fees vary depending upon the tax professional you choose and the specific services you request.[139]

The actual cost per return incurred by third parties to e-file *is unknown, though the nature of Internet commerce points to small incremental costs after the initial investment.*

The fact that third parties charge taxpayers to *e-file* — to cover their operating costs and profit margin — may be a de-motivator. From an economic perspective, consumers react differently to products that have a cost (and to varying price points) and to those that do not. Marketers, economists, and business people have studied the psychological effect of cost and its opposite concept — free — on adoption and market share. To a consumer,

> …there is a huge difference between cheap and free. Give a product away and it can go viral. Charge a single cent for it and you're in an entirely different business, one of clawing and scratching for every customer…. zero is one market and any other price is another. In many cases, that's the difference between a great market and none at all.[140]

For the IRS, the concept of a market maps to *e-file* adoption and the population of taxpayers who are — at least in the case of a fee to *e-file* — price sensitive. Products offered through the Free File program, as well as products from selected vendors that offer return preparation software for free outside that program, are examples of attempts to serve this population. It should also be noted that the return preparation software industry is trending toward bundling previously separate *e-file* fees into the total cost of the product, masking but not eliminating this charge.

A 2003 IRS study found that cost was one of four "general barriers" to *e-filing* along with the lack of demand (e.g., "I wasn't in a hurry to receive refund," "I owe the IRS/don't

---

[139] IRS (2008) *Authorized IRS e-file Providers for Individuals: Is There a Fee for IRS e-file?*
[140] Anderson, C. (2008) *Free! Why $0.00 Is the Future of Business*

expect/never get a refund"), paper preference, and security[141]. Another 2003 IRS study found that 39% of *e-file* Skeptics and 40% of Tech Laggards believed *e-file* was inexpensive, a more negative attitude than that held by other segments. A 2005 study only found cost as an inhibitor for *e-filing* with a preparer; for self-prepared online filing and free filing, cost was not among the top reasons listed for why taxpayers did not use *e-file*[142]. A 2007 study by Gallant et al. found that cost (along with convenience) was one of two statistically significant discriminators between those who *e-file* and those who do not, though their study had limitations[143]. A 2007 IRS study listed cost (along with "Chance of getting it done right") as a fairly distant second behind "Paying the least amount of taxes under the law"[144].

In their study of online bill pay, Forrester Research found that the two top motivators for Quitters (those who previously paid bills online but no longer do so) to return to online bill pay were eliminating and reducing cost . In addition, a separate Forrester study found that banks with free online bill pay increased their active online bill payers 150% more than the fee-charging banks[145].

The cost of preparation versus e-filing *can be confusing and complicated.*

Taxpayers, especially those who self-prepare, may find it difficult to distinguish the cost of *e-filing* from the total cost of the software package or online service. Regardless of whether electronic filing fees are priced separately, pricing for tax return preparation software can be confusing.

One major tax return preparation software product is offered in eight versions at list prices that range from $19.95 to almost $100. The PC-based software is available from merchants at a wide variety of prices, and the online version can be offered at a discount through banks, financial services firms, and employers. Options such as State return preparation and *e-filing* further complicate the price structure. Consumers who prepare more than one Federal return (e.g., for themselves and for a family member) need to trade off the typically higher cost of PC-based software, which may allow up to five returns to be prepared, against the lower cost of an online service, which usually covers only one Federal return. Higher-end products often bundle related software (e.g., Quicken, Microsoft Money) or offer discounts on other products and services, further complicating the picture.

Online services tend to bundle Federal *e-filing* into the base price of the service. The two leading tax return preparation software products, Intuit TurboTax and H&R Block Tax Cut, both bundle *e-file* in their online versions. On the other hand, PC-based products tend to charge separately for *e-file*, either by offering software versions with and without *e-file* support (e.g., Tax Cut 2007, at a difference of $30 between *e-file* and non–*e-file* versions, for one Federal and one State return) or by charging a fee for *e-file* at the time of submission (e.g., TurboTax 2007, at $17.95 per return for Federal *e-file* and $17.95 additional per return for State e-file)[146]. In the case of Tax Cut and other packages that bundle the cost of *e-file*, consumers may focus on the relative prices of the packages, rather than the cost of *e-filing*. They may not consider it worthwhile to

[141] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 38
[142] IRS (2005) *Findings From The 2005 Taxpayer Satisfaction Study* p. 15
[143] Gallant, L. M. *et al.* (2007) *Why People e-File (or Don't e-File) Their Income Taxes* p. 3
[144] IRS (2007) *The 2007 Taxpayer Assistance Blueprint, Phase 2* p. 29
[145] Forrester Research (2007) *Online Bill Pay 2007: Understanding The Mindset Of Holdouts, Fence-Sitters, And Quitters* p. 8
[146] H&R Block (2008) *H&R Block;* Intuit (2008) *Intuit*

buy a version of the product that supports *e-file* at a cost 67% higher than the version without *e-file*[147].

Although cost is often cited as an inhibitor for e-filing, *the low adoption of Free File suggests that cost alone cannot explain taxpayer behavior.*

While the cost of electronic filing is a major concern for a large number of taxpayers, the adoption of Free File suggests that low cost (in this case, free) is another necessary but insufficient condition. One IRS analysis notes that four times more taxpayers use commercial tax software to prepare their returns and *e-file* than use the free preparation and filing solutions offered by the FFA[148]. Section 10.2.2.9 discusses Free File adoption in greater detail.

5.8 Taxpayer Demand

Taxpayers may want to pay balances as late as possible, and receive refunds as early as possible, but do not necessarily understand the ways in which e-file, *electronic payment, and direct deposit can help them.*

Pocketbook decisions also drive demand for *e-file*. For example, approximately 20% of taxpayers owe a balance, and the misperception that electronic filing requires concurrent payment could be a hindrance to this group adopting *e-file*[149]. In fact, taxpayers have the option of having a balance due taken directly from their bank accounts on any date they specify up to the filing deadline. It is not clear from IRS studies how many taxpayers do not know this or for how many it is a disincentive, or an outright obstacle, to *e-file*. However, it seems likely to be a concern.

A 2003 IRS study found that owing a balance or not getting a refund was the most popular single reason given — in the category of lack of need to *e-file* — not to *e-file*[150]. A 2007 study by Gallant et al. found that owing a balance was the fourth ranked reason not to *e-file* behind cost, problems using or understanding it, and not being allowed to use it[151].

In a 2007 Forrester Research study of online bill pay, the largest shared concern among two user segments (21% of Fence-sitters, 20% of Holdouts) was not wanting to have money deducted from their accounts before the bill is due — highlighting the importance to users of holding onto one's money as long as possible and their perception that the online process undermines this goal[152].

While the promise of a faster refund offers no benefit to the projected (2008 through 2010) 20% of individuals who will not receive one, *e-file* should appeal to the majority expecting money back from the IRS[153]. In fact, speed of refund is the number one (tied) perception of *e-file* among Potential Acceptors and a top four reason (of eight) among Resisters[154]. Taxpayers often want to get their refunds as soon as possible. (It is interesting that the same individuals who are willing to defer a constant stream of cash during the tax year in favor of a large refund in the future — even without compensating interest for the time value of their money — often exhibit a preference for receiving that large sum without delay when it becomes apparent that the sum is due, even at some cost.) The preponderance of refund returns early in the filing season

---

[147] H&R Block (2008) *H&R Block*
[148] IRS (2008) *Potential Free File Population Is Much Smaller than the Total Number of Eligible Taxpayers*
[149] Smith, B. (2005) *Fiscal 2006 Budget: IRS*
[150] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 37
[151] Gallant, L. M. *et al.* (2007) *Why People e-File (or Don't e-File) Their Income Taxes* p. 6
[152] Forrester Research (2007) *Online Bill Pay 2007: Understanding The Mindset Of Holdouts, Fence-Sitters, And Quitters* p. 8
[153] IRS (2007) *Calendar Year Projections of Individual Returns by Major Processing Categories* p. 5
[154] IRS (2005) *Findings From The 2005 Taxpayer Satisfaction Study* p. 14

demonstrates this propensity. For example, in 2007, 48% of refund returns were filed by March 9 compared with only 44% of all returns[155].

However, it is less clear that taxpayers are highly motivated to *e-file* in order to get their refunds sooner. On an index indicating overall importance ranging from 1 to 100, taxpayers in the TAB2 focus group interviews rated "waiting time for refund" at a 6 — the lowest score on the index[156]. One study segmenting taxpayers as *e-file* Believers and *e-file* Skeptics shows a stark difference between these groups about the statement "*e-file* is a faster way to get your Federal tax refund" — 87% of the Believers agree with the statement while only 49% of Skeptics do[157].

Those not convinced by *e-filing* may feel that they do not have enough information to assess the benefit of a faster refund. The IRS makes no promises about how long a refund will actually take; the benefits mention a minimum ("as little as 10 days") but not a maximum[158]. IRS Publication 2043, *IRS e-file 2008 Refund Cycle Chart*, provides information on when refunds will be sent (if using direct deposit) or mailed based on the week the return was *e-filed* but does not "guarantee a specific date" nor offer similar information for paper-filed returns[159]. In one IRS report to Congress, it was noted that using *e-file* and direct deposit decreased the average length of time for receiving a refund by 75%, from 40 days to 10 days[160].

The motivational value of an early refund is especially problematic for taxpayers who have to pay a fee (or similarly, buy a higher-priced software package to get its bundled *e-file* capability) in order to *e-file*.

5.9 Fear of Audit

Despite the IRS stating that e-filers *do not face a greater risk of audit compared with their paper filing peers, anecdotally, concerns exist.*

The IRS assures taxpayers that *e-filing* does not increase their chances of being audited. IRS Publication 17, *Your Federal Income Tax*, states, "The chance of being audited does not differ whether you *e-file* or file a paper tax return"[161]. However, this report did not find any research related to this assertion.

Taxpayers may be uneasy about giving the IRS their returns in electronic form out of apprehension that this may make an audit more likely, perhaps because they believe such returns might be easier to scrutinize or because they make more data available to the IRS. Because the method of selection of a return for audit is necessarily opaque, such fears may be hard to dispel. Suspicious taxpayers can easily find apparently credible web sites or blogs to confirm their fears. This report's review of existing information on fear of audit found no relevant research on the actual comparative frequency of audits for *e-filed* versus paper-filed returns, nor the perceived extent to which taxpayers view this as a concern for *e-filing*.

Given the lack of information on both the perception and reality of *e-file* audit probabilities, this topic requires research.

---

155 IRS (2007) *2007 Filing Season Statistics - Table 13*
156 IRS (2007) *The 2007 Taxpayer Assistance Blueprint, Phase 2* p. 29
157 IRS (2003) *Findings From The 2003 Wave Of The e-file Taxpayer Attitudinal Tracking Study* p. 59
158 IRS (2007) *Your Federal Income Tax* p. 9
159 IRS (2008) *2008 IRS e-file Refund Cycle Chart*
160 IRS (2006) *Report to Congress on Uses of the Debt Indicator Tool — and Whether it Facilitates the Use of Refund Anticipation Loans (RALs) — the Debt Collection Offset Practice, the Use of RALs, and Evaluations of RAL Alternatives, and Use of Debit Cards for Refunds, Iincluding Recommendations on How to Deliver Tax Refunds More Quickly*
161 IRS (2007) *Your Federal Income Tax* p. 9

5.10 Recordkeeping and Acknowledgments

Until there is clear guidance regarding recordkeeping for e-filing *and reliable digital preservation solutions, this may be a concern for* e-file*.*

Concerns over keeping appropriate tax records may impede taxpayers' willingness to *e-file*. Until there are clear statements about which form of record for *e-filed* returns is sufficient, taxpayers may continue to experience confusion regarding this aspect of *e-filing*.

The taxpayer can receive printed versions of the forms submitted to the IRS from any of the electronic preparation sources (brick-and-mortar preparation firms, PC software, online sites) but may wonder what constitutes a legal record for purposes of review and litigation, especially if the preparation is done by an online site where the electronic information does not reside on the taxpayer's own equipment. Finding reliable methods to keep computerized records secure and readable over the long term is also a significant challenge[162].

IRS Publication 552, *Recordkeeping for Individuals*, discusses which kind of records must be kept but does not address the matter of electronic records, especially in the case of the online preparation web site[163]. There does not appear to be any specific guidance with regard to which records are considered authoritative in the electronic filing regime among hard copy, forms on the taxpayer's own equipment, and information in some form on equipment belonging to a preparer or online preparation site.

Forrester noted in its study of online bill pay that retaining paper bills for record keeping was among the top three reasons holding back 71% who did not pay bills online[164].

The fact that e-file *provides acknowledgments of receipt and acceptance may be perceived as a benefit over paper filing.*

On a related topic, one key difference between *e-filed* and paper-filed returns relates to acknowledgment that the return was filed. Paper filers must use registered or certified mail (and pay extra for these services beyond first class postage) as proof of submission. However, they do not get confirmation beyond this delivery notification for the envelope (not its contents). That is, even for paper filers using a tracked delivery method, the IRS does not provide a formal acknowledgment of receipt or acceptance of the return; the delivery notification is at best a proxy for receipt acknowledgment. On the other hand, *e-filers* get an e-mail acknowledgment that their actual returns have been delivered and accepted (typically within 48 hours of submission). This is potentially a significant peace-of-mind benefit regarding recordkeeping that is unavailable for paper returns. Data on the awareness or importance of acknowledgment as an *e-file* benefit are scarce, however.

Additional research is needed on how *e-file* acknowledgments are perceived.

---

[162] For example, AIIM, the ECM Association, notes three digital preservation problems: storage media obsolescence, media degradation, and format obsolescence (Association for Information and Image Management (2006) *ECM Certificate Program: Concepts Module 5: Preserve*)

[163] IRS (2005) *Recordkeeping for Individuals*

[164] Forrester Research (2007) *Online Bill Pay 2007: Understanding The Mindset Of Holdouts, Fence-Sitters, And Quitters* p. 8

5.11 Perceived Benefits

E-file holdouts have not been convinced by marketing messages on e-file *benefits.*

Doubts about the benefits of *e-file* are most marked among taxpayers who are resistant to *e-file*. A 2003 IRS study noted:

> The differences between the two segments [*e-file* Believers and *e-file* Skeptics] on *e-filing* versus paper filing are stark…. Note that they share only one attitude — "tax filing is something nobody likes, but everyone has to do".[165]

A majority of Skeptics agreed with only one positive statement about *e-file*, "*e-file* is a faster way to get your Federal income tax return to the IRS"[166]. However, taxpayers may not see any benefit to themselves in getting their returns to the IRS quickly. In the same study, 68% of Skeptics agreed with the statement, "Mailing in your Federal return is still safer, more reliable," and 60% agreed with "I'm used to doing my taxes on paper and see no reason to change"[167]. Taxpayer studies also raise the benefits of e-mailed proof of receipt and accuracy.

More recently, the 2005 Taxpayer Satisfaction Study reported that among *e-file* Resisters (participants who identified themselves as "not very/not at all likely" to use one of three *e-file* products they were presented with: practitioner *e-file*, online filing, and Free File), the majority rejected all benefits associated with *e-file* with regard to online filing (including both PC-based and browser-based *e-file*) and almost all the proposed benefits with regard to free filing[168]. Potential Acceptors (those who are "very/somewhat likely to use" *e-file*) were somewhat more positive; nevertheless, only 37% thought that *e-file* using commercial software would be "easy to use/little hassle" and only 33% regarded *e-file* using commercial software as a "private and secure way to file"[169]. Table 5-3 summarizes these findings[170].

Table 5-3 *E-file* Attitudes of Non-Users (as of 2005)

Agree Completely that Product	**Practitioner *E-file***	**Online Filing**	**Free File**
Would be a way to file return quickly	48% / 67%	44% / 78%	52% / 81%
Would be a way to get refund faster	52% / 68%	42% / 78%	42% / 77%
Would be able to pay electronically	55% / 60%	49% / 64%	49% / 74%
Would be an accurate way to file	31% / 58%	27% / 68%	27% / 67%
Would be an inexpensive way to file	15% / 43%	21% / 50%	55% / 77%
Would be easy to use/little hassle	31% / 54%	13% / 37%	25% / 52%
Would be a private and secure way to file	30% / 50%	13% / 33%	13% / 66%
Would be better than other filing methods	10% / 35%	9% / 28%	5% / 44%

Note: Data on Resisters separated with a slash from data on Potential Acceptors (Resisters/Potential Acceptors).

---

165 IRS (2003) *Findings From The 2003 Wave Of The e-file Taxpayer Attitudinal Tracking Study* p. 59
166 IRS (2003) *Findings From The 2003 Wave Of The e-file Taxpayer Attitudinal Tracking Study* p. 59
167 IRS (2003) *Findings From The 2003 Wave Of The e-file Taxpayer Attitudinal Tracking Study* p. 59
168 IRS (2005) *Findings From The 2005 Taxpayer Satisfaction Study* p. 14
169 IRS (2005) *Findings From The 2005 Taxpayer Satisfaction Study* p. 14
170 IRS (2005) *Findings From The 2005 Taxpayer Satisfaction Study* p. 14

Some of these perceptions may be based on misunderstandings that could be addressed through improved communication between the IRS and the taxpayer community. For example, only 49% of the Resistors knew that they would be able to pay any tax due electronically.

The 2005 Taxpayer Satisfaction Study also analyzed taxpayers by whether they were Current Users, Lapsed Users, or Non-Triers of *e-file*. With respect to the latter two segments, it was noted, "These segments [Lapsed Users and Non-Triers] have not gotten the message of *e-file* being Private/Secure, Easy, or Accurate — and these are the attributes of a filing method that they value most"[171].

The TAB reports reasons taxpayers gave for their choice of return preparation options (see Table 5-4)[172].

Table 5-4 Taxpayer Reasons for Their Choice of Return Preparation Options (as of 2007)

Reason for Choosing Preparation Option	**Index of Importance**
Paying the least amount of taxes under the law	38
Cost	22
Chance of getting it done right	22
Return preparation time	11
Waiting time for refund	6

As shown in Table 5-4, at least as far as return preparation is concerned, taxpayers are influenced primarily by paying the least amount of taxes under the law and secondarily by cost and getting it done right. It is interesting to note that taxpayers rated the waiting time for a refund, which is a heavily promoted benefit of *e-file*, as least important.

In Publication 17, *Your Federal Income Tax*, the IRS identifies the following benefits for *e-filing*[173]:

- Free File allows qualified taxpayers to prepare and *e-file* their own tax returns for free.
- Free File is available in English and Spanish.
- Free File is available online 24 hours a day, 7 days a week.
- Get your refund faster than paper filers do, in as little as 10 days with direct deposit.
- Sign electronically and file a completely paperless return.
- Receive an e-mailed proof of receipt within 48 hours after the IRS receives your return.
- If you owe, you can *e-file* and authorize an electronic funds withdrawal or pay by credit card. If you *e-file* before April 15, 2008, you can schedule an electronic funds withdrawal from your checking or savings account as late as April 15, 2008.

[171] IRS (2005) *Findings From The 2005 Taxpayer Satisfaction Study* p. 24
[172] IRS (2007) *The 2007 Taxpayer Assistance Blueprint, Phase 2* p. 29
[173] IRS (2007) *Your Federal Income Tax* p. 9

- Prepare and file your Federal and State returns together and save time.
- IRS computers quickly and automatically check for errors or other missing information.
- The chance of being audited does not differ whether you *e-file* or file a paper tax return.

More research is required on the perception and effect of IRS-marketed benefits on *e-file* holdouts.

Regarding this published list of benefits for *e-filing*:

- The faster refund bullet offers a clear and unambiguous benefit that would seem to appeal to the majority of taxpayers.
- The first three bullets speak specifically to Free File, which while technically under the umbrella of the *e-file* program, is a distinct solution with its own eligibility criteria.
- The benefit of preparing Federal and State returns together speaks more to the benefit of tax return preparation software than *e-file* per se.
- The bullets on no increased chance of audit and e-mailed proof of receipt speak to allaying taxpayers' concerns about *e-file*, rather than offering positive reasons why *e-file* is in a taxpayer's interest. Furthermore, this report found no research on the actual risk of audit from *e-filing* nor on taxpayers' perception of this as a concern.
- The list does not reflect all of the messages that resonate with taxpayers in the studies discussed in this Chapter.

6. Preparer Motivators and Concerns

Contents of Chapter 6:

This Chapter discusses preparer motivators and concerns in a thematic framework. It covers these topics using a similar organization as in Chapter 5 on taxpayer motivations. Following an overview of preparers and their influence on taxpayers, this Chapter specifically discusses preparers' motivators and concerns in the categories of awareness, availability, accuracy, security and privacy, ease and convenience, cost, preparer influence and client demand, and perceived benefits. The points of leverage for influencing preparer behavior directly relate to the options discussed in Chapters 10 through 14 because they inform the likely perception and adoption of the options. Themes identified in this Chapter include the following:

- Motivators and concerns are what drive or hinder adoption of *e-file* among holdouts — the challenge is psychological and behavioral, not technological.
- *E-file* holdouts — whether individuals or preparers — are generally unconvinced of the marketed and/or studied benefits of *e-file*.
- Preparers exert significant influence on their clients' decisions to *e-file*, and taxpayers are increasingly turning to third parties for preparation and filing assistance.

6.1 Overview

Because preparers are the primary driver for tax-related decisions, understanding their motivations, inhibitors, and business context is important.

Taxpayers look to a variety of sources for assistance in preparing their returns — practitioners, commercial preparers, return preparation software vendors, community-based preparers, even friends and relatives. This Section focuses on the perceptions and behaviors of the two principal preparer categories — practitioners and commercial preparers. For purposes of this report, these two groups together are referred to as paid preparers.

The majority of taxpayers rely on a paid preparer, and this use of paid preparers continues to increase. Between TY2000 and TY2005, the number of returns filed by a paid preparer increased from 56% to 61%[174]. This is good news for the IRS because a return — no matter what its level of complexity — is more likely to be filed electronically when completed by a paid preparer[175]. Nearly 99% of income tax returns filed by tax professionals are computer-prepared, and about 67% of these are *e-filed*[176].

Growth in electronic filing rates for paid preparers is outpacing that for self-preparers year after year. In 2003, paid preparers filed 54.9% of taxpayer returns electronically. This number grew to 60.4% in 2004 and to 65.3% in 2005[177]. Self-preparers, in the same time period, went from 38.5% in 2003 to 42.2% in 2004 and dropped to 41.8% in

[174] IRS (2007) *ETA Tax Year 2005 Full Year Database Analysis* p. 8
[175] IRS (2007) *ETA Tax Year 2005 Full Year Database Analysis* p. 17
[176] IRS Oversight Board (2008) *Electronic Filing 2007: Annual Report to Congress* p. 26
[177] IRS (2007) *ETA Tax Year 2005 Full Year Database Analysis* p. 19

2005[178]. The drop in 2005 self-prepared *e-filer*s has been partially attributed to the elimination of the IRS Telefile program around that time, which is believed to have caused approximately half of the 3 million previously Telefiled returns be submitted on paper in 2005[179].

As of 2007, 85% of returns were prepared and filed using third party assistance; this figure breaks down into 58% from preparers and 27% from individuals self-preparing using third party tax return preparation software[180].

Among preparers, there are varying roles, business models, and client preferences that influence behavior in different ways. Regardless of those variations, the preparer has an influential role in taxpayer filing decisions. The IRS has explored the "unusually close business relationship" between taxpayers and their income tax return preparers[181]. Because of the high levels of trust taxpayers place in them, preparers "have a strong role in decision-making in the relationship"[182]. Another IRS study showed that "Practitioners command high loyalty and reliance from Individual and Business Taxpayers, and thus offer a strong opportunity for expanding the use of *e-file* — if they perceive *e-file* to be in their and their clients' best interests"[183].

Between TY1998 and TY2005, the percentage of returns filed on paper by paid preparers dropped from about 34% to about 15% — these paper filers are a targeted group for influencing behavior[184].

Preparers' motivators and concerns overlap with taxpayers'.

This Chapter will look at what motivates preparers to *e-file* — or not. It will also address the following items related to preparer motivation:

- **Awareness** — Are preparers aware of *e-file*?
- **Availability** — Is *e-filing* available to and appropriate for preparers?
- **Accuracy** — Is *e-file* perceived to produce an accurate return?
- **Security and Privacy** — Is *e-file* perceived to be secure and private?
- **Ease and Convenience** — Is *e-file* perceived to be easy to use?
- **Cost** — What is the cost of *e-filing* and the business model that supports it?
- **Preparer Influence and Client Demand** — How do preparers influence taxpayers to *e-file* and vice versa?
- **Perceived Benefits** — How do preparers perceive the benefits of *e-filing*?

In discussing these issues, this Chapter will focus on preparers' perceptions of the issues. In addition, this Chapter will emphasize the perceptions of non- and low-users of *e-file*, because changing their behavior is essential to achieving the 80% *e-file* goal.

---

[178] IRS (2007) *ETA Tax Year 2005 Full Year Database Analysis* p. 19
[179] IRS (2007) *ETA Tax Year 2005 Full Year Database Analysis* p. 73
[180] IRS (2007) *The 2007 Taxpayer Assistance Blueprint, Phase 2* p. 27
[181] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 12
[182] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 12
[183] IRS (2004) *Final Report, Practitioner Business Impact Study: Committed e-file Users vs. Committed V-Coders* p. 3
[184] IRS (2007) *ETA Tax Year 2005 Full Year Database Analysis* p. 35

The majority of preparers is aware of e-file*, but that is just the first step to understanding and action.*

6.2 Awareness

It is difficult to imagine that any paid preparers still in possession of clients are not aware of electronic filing as a means of transmitting returns to the IRS (though they may not choose to use it). A more intriguing question is, to what extent do they understand the details of *e-filing* and its potential benefits?

In surveys of 750 preparers performed both before and after a communications campaign, 73% of preparers in November 2004 were aware of *e-file* communications, and after the communications campaign, in April and May 2005, 83% of preparers were aware of *e-file* communications[185]. Of those preparers aware of the campaign, 59% took action as a result of the campaign[186]. Their actions consisted of telling their clients about *e-file* (40%), discussing *e-file* with friends and colleagues (29%), visiting IRS.gov (23%), starting or increasing use of *e-file* (9%), visiting the communications campaign web site aboute-file.com (6%), and other actions (7%)[187].

However, as seen when discussing taxpayer awareness of *e-file*, awareness of *e-file* is not enough to ensure *e-filing*. Although 73% of preparers were aware of *e-file* in November 2004 and 83% in April 2005, only 60.4% of paid preparer returns were *e-filed* in 2004 and 65.3% in 2005[188].

Training and education may be the next step required to motivate preparers who are *e-file* holdouts. A 2005 IRS study of Committed V-Coder preparers found support for the suggestion that the IRS should offer special seminars/workshops/training for preparers in how to *e-file* [189]. Preparers who V-Coded 25% or more of their returns shared this view and ranked training highest in the category of providing more training, information, and promotion, which was itself a top three suggestion to make *e-file* easier[190]. A 2005 IRS study comparing preparers who *e-file* and V-Code also found that providing training was a priority for Committed V-Coders[191]. However, it is not clear exactly what additional training on *e-filing* is required or why they need it, as most preparers already *e-file* the remainder of their (non–V-Coded) returns.

In summarizing the findings from a 2005 IRS study, what seem to be the actual barriers for V-Coding preparers are a lack of knowledge about *e-file* and a lack of belief and acceptance of the benefits of *e-filing*. V-Coding preparers underestimate the growth in clients and profits that *e-filing* preparers have seen, and they overestimate the increase in client fees.[192]

---

[185] IRS (2005) *Findings From The 2004-05 Practitioner Communications Tracking Study* p. 6
[186] IRS (2005) *Findings From The 2004-05 Practitioner Communications Tracking Study* p. 6
[187] IRS (2005) *Findings From The 2004-05 Practitioner Communications Tracking Study* p. 13
[188] IRS (2007) *ETA Tax Year 2005 Full Year Database Analysis* p. 19
[189] IRS (2005) *Findings From Practitioner Business Impact Research PBI-2 and PBI-3* p. 24
[190] IRS (2005) *Findings From Practitioner Business Impact Research PBI-2 and PBI-3* p. 7
[191] IRS (2004) *Final Report, Practitioner Business Impact Study: Committed e-file Users vs. Committed V-Coders* p. 16
[192] IRS (2005) *Findings From Practitioner Business Impact Research PBI-2 and PBI-3* p. 2

6.3 Availability

Among paid preparers, larger practices are more likely to e-file *than smaller practices.*

For taxpayers, availability consists of having the means to *e-file*. Conceptually, paid preparers have the same core requirements (e.g., computer and Internet access), though the nature of their business means they may have additional needs related to other electronic tax services and specific tax situations (e.g., less common forms). This Section focuses on preparers' perceptions of the availability of these resources and is organized as follows:

- Availability of Organizational Resources.
- Availability of IRS Resources.
- Availability of Support for Complex Returns.

6.3.1 Availability of Organizational Resources

For both taxpayers and paid preparers, those with more resources and well-established electronic channels of communication are thought to be better prepared — and hence more likely — to file tax returns electronically on their own behalf or on the behalf of others.

A 2005 survey by Anderson of 277 preparers showed that "respondents with larger practices were more likely to *e-file* than those with smaller practices"[193]. Also illuminating was the relative percentage of *e-filing* firms by geographic region, in that it correlated with practice size: "Respondents with practices in the Midwest, West, and Southwest were more likely to *e-file* than those in the Northeast or Southeast"[194]. Smaller practices were more abundant in the Northeast and Southwest (71% of firms had 5 or fewer employees versus 57% elsewhere) and were more likely to be among non–*e-filers*[195].

In a 2004 IRS study, preparers reported that the main difficulties in implementing *e-file* were not having the right hardware or software and not realizing that there was less room for error with *e-file*[196]. Those who did not have the right hardware or software (56%) were able to overcome this issue by buying what was needed to enable *e-filing*[197].

6.3.2 Availability of IRS Resources

IRS provides a number of free products and services specifically to support preparers in e-filing*.*

The 2005 survey by Anderson indicated that preparers felt that the IRS should provide assistance in helping them implement *e-file*[198], and they sought help from the IRS in providing training, information, and promotion of *e-file*; making changes to the program itself (i.e., making *e-file* mandatory); and providing incentives to use *e-file* and ease the cost burden of *e-filing*[199].

In a 2005 IRS study, a list of suggestions from the previous year's study was used to ask participants which suggestions were most important for making *e-filing* easier.

---

193 Anderson, T. *et al.* (2005) *History and Trends in E-filing: A Survey of CPA Practitioners*
194 Anderson, T. *et al.* (2005) *History and Trends in E-filing: A Survey of CPA Practitioners*
195 Anderson, T. *et al.* (2005) *History and Trends in E-filing: A Survey of CPA Practitioners*
196 IRS (2005) *Findings From Practitioner Business Impact Research PBI-2 and PBI-3* p. 6
197 IRS (2005) *Findings From Practitioner Business Impact Research PBI-2 and PBI-3* p. 6
198 IRS (2005) *Findings From Practitioner Business Impact Research PBI-2 and PBI-3* p. 24
199 IRS (2005) *Findings From Practitioner Business Impact Research PBI-2 and PBI-3* p. 7

Respondents selected the following as their top two most important suggestions: "IRS should give practitioners who *e-file* some customer service incentives to use *e-file*" (top 33% agreed) and "IRS should work with software industry to improve *e-file* for all business tax and information returns" (next 30%)[200].

The IRS has worked hard to provide preparers with the tools they need to establish an *e-file* capability at their practices. One example is the IRS *e-file* Logo and Marketing Tool Kit, which contains everything from *e-file* logo decals for storefronts to marketing materials to hand out to clients[201]. The materials are available in both English and Spanish. Many of the materials are provided free of charge to preparers. The IRS also provides all registered preparers with unlimited access to three incentive products: Disclosure Authorization (DA), Electronic Account Resolution (EAR), and Transcript Delivery System (TDS). These products, along with the basic e-services, round out an *e-file* package where no paper is required at all.[202]

Paper can be reduced or eliminated on the incoming side for preparers as well. Becoming an "Authorized IRS *e-file* provider" provides additional advantages to preparers because they are better able to stay informed about the tax code and tax practices through use of direct electronic channels[203]. Communicating electronically with paid preparers has the benefit of being faster and less expensive than direct mail.

6.3.3 Availability of Support for Complex Returns

*The relatively high rate of non–*e-filing *of complex returns may be attributed to the lack of system support for the full range of forms and schedules required.*

When thinking about preparer habits, it is important to remember that nearly 99% of income tax returns filed by tax professionals are prepared electronically[204]. The preparers possess the necessities for *e-filing*, but other factors come into the picture when it comes time to transmitting the returns. A major factor appears to be the complexity of the return.

Currently, IRS *e-file* supports most — but not all — of the 1040 family of forms and schedules (tax return preparation software vendors may only support a subset of these), necessitating paper filing for more complex returns for which these unsupported forms and schedules are used[205]. Furthermore, not all return preparation software vendors support the full subset of IRS forms that can be *e-filed*, because they must make business decisions about which forms provide the required cost/benefit. The net result is that most but not all required forms and schedules are available to preparers in their return preparation software products.

The numbers of paid preparer returns by method of filing for TY2005 indicate that a paid preparer is more likely to V-Code a complex return than a simple or intermediate return; Table 6-1 summarizes the proportion of simple, intermediate, and complex returns by method of filing[206]:

[200] IRS (2005) *Findings From Practitioner Business Impact Research PBI-2 and PBI-3* p. 7
[201] IRS (2007) *IRS e-file Logo and Marketing Tool Kit*
[202] IRS (2008) *Circular 230 FAQs for e-Services Access*
[203] IRS (2008) *e-file Made Easy - A Tax Professional's One-Stop e-file & e-Pay Shop*
[204] IRS Oversight Board (2008) *Electronic Filing 2007: Annual Report to Congress* p. 26
[205] IRS (2008) *1040 Forms that Cannot be e-filed or Submitted as an Attachment to Form 8453, U.S. Individual Income Tax Transmittal for an IRS e-file Return, for TY 2007*
[206] IRS (2007) *ETA Tax Year 2005 Full Year Database Analysis* p. 26

Table 6-1 Paid-Preparer Returns by Complexity and Filing Method (as of 2006)

Method of Filing	Simple Returns	Intermediate Returns	Complex Returns
Electronic	68%	76%	54%
Paper (V-Coded)	29%	22%	43%
Paper	3%	2%	3%

Some paid preparers have attributed this to the inability of the current *e-file* solution to handle the range of (sometimes specialized) forms and schedules that complex returns require; rather than *e-filing* part of the return and mailing the rest, most elect to just print out the entire return. A similar trend shows up in self-prepared returns, as shown in Table 6-2; the more complex the return, the more likely it was V-Coded[207].

Table 6-2 Self-Prepared Returns by Complexity and Filing Method (as of 2006)

Method of Filing	Simple Returns	Intermediate Returns	Complex Returns
Electronic	35%	52%	39%
Paper (V-Coded)	20%	25%	37%
Paper	45%	23%	24%

However, the percentage of V-Coded returns by paid preparers for all return types has fallen over time from 62% in 1998 to 31% in 2005, with an average annual drop of 4.3%. Interestingly, V-Coding among self-preparers grew in that same time period from 19% in 1998 to 27% in 2005, with an average annual increase of 1.2%.[208]

These findings derived from actual usage data align with self-reported statements from a 2005 IRS study of preparers who V-Coded 25% or more returns. These preparers noted that *e-file* was not appropriate for more complex returns[209].

6.4 Accuracy

In contrast to taxpayers who generally rate accuracy as a primary motivator to e-file*, preparers place it behind other factors, though it remains relevant.*

For many preparers, accuracy is less important than speed (and sometimes other benefits) as a benefit of *e-filing*. A 2003 IRS study found that V-Coding preparers in particular placed accuracy as a distant third to speed and behind *e-file* being paperless[210]. A 2004 IRS study found that Committed *e-file* Users (preparers) rated the importance of accuracy as third behind *e-file* saving paper and yielding faster refunds[211]. The same study found Committed V-Coders (preparers) rated the benefit of "Greater Accuracy/Fewer Problems" behind "Increased Productivity" and "It's Paperless/Saves Paper"[212]. Whether preparers are more likely than taxpayers to discriminate between

[207] IRS (2007) *ETA Tax Year 2005 Full Year Database Analysis* p. 30
[208] IRS (2007) *ETA Tax Year 2005 Full Year Database Analysis* p. 32
[209] IRS (2005) *Findings From Practitioner Business Impact Research PBI-2 and PBI-3* p. 13
[210] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 72
[211] IRS (2004) *Final Report, Practitioner Business Impact Study: Committed e-file Users vs. Committed V-Coders* p. 11
[212] IRS (2004) *Final Report, Practitioner Business Impact Study: Committed e-file Users vs. Committed V-Coders* p. 23

Issues with perceived accuracy requirements dissuade some preparers from using e-file.

the accuracy inherent in a particular preparation method (e.g., on a computer using specialized tax return preparation software) and the accuracy of e-filing itself is unclear.

The flip side of the accuracy associated with *e-file* is that it can be a concern among non-adopters. The accuracy required to *e-file* appears to dissuade approximately 16% of preparers from using it because they feel this is a disadvantage of *e-file*[213]. The relative structure and stringency of the *e-file* process (e.g., high rejection rate [errors on *e-filed* returns are flagged earlier and corrected earlier than for paper returns, which actually have a higher overall error rate due to the lack of these upfront checks]) is noted as a barrier to usage among preparers who V-Code, though this category of concern rates a distant third behind lack of demand and paper preference[214].

6.5 Security and Privacy

Paid preparers generally find e-file *to be secure, and some even tout its security as a benefit.*

Security and privacy does not seem to be prevalent in the minds of preparers when they think about *e-file*, though it is increasingly a concern. In a 2003 IRS study (relatively dated given recent developments in identity theft and phishing on the Internet), lack of confidence in the security (including privacy) of *e-file* was cited as a disincentive to using *e-file* by 24% of V-Coding Non-User Preparers, 8% of Lower *e-file* Usage Preparers, and 20% of Higher *e-file* Usage Preparers[215]. However, security concerns was not the most prevalent response of the preparers surveyed. The study found that 41% of V-Coders and 40% of Higher *e-file* Usage Preparers were more concerned with the difficulty of *e-filing*, while 33% of Lower *e-file* Usage Preparers were more concerned with the cost[216]. In fact, 16% of Lower *e-file* Usage Preparers and 35% of Higher *e-file* Usage Preparers mentioned security as a benefit when they talked to their clients about the benefits of *e-file*[217]. Security was cited as a benefit by 11% of the preparers in this study, in last place behind speed, accuracy, paperless, ease of use, and no postage required[218].

The issue of trust is often associated with security and privacy. A 2005 IRS study found that preparers who V-Coded 25% or more of their returns rated "Clients don't trust [*e-file*] yet" as the third most common reason they did not *e-file*[219]. The same study also found that Committed V-Coders shared this attitude[220].

6.6 Ease and Convenience

As their clients defer to their advice on tax matters, it is practitioners' own attitudes toward e-file *that chiefly determine whether clients will* e-file*.*

In 2007, almost 99% of paid preparer returns were computer prepared, indicating that regardless of the filing method, the work processes almost always involved software to prepare the tax return[221]. However, only approximately two-thirds of these returns were then *e-filed*[222]. Decisions were clearly made by some not to *e-file* when the return was ready to be submitted to the IRS. The V-Coding process entails printing and mailing the

---

[213] IRS (2005) *Findings From Practitioner Business Impact Research PBI-2 and PBI-3* p. 6
[214] IRS (2004) *Final Report, Practitioner Business Impact Study: Committed e-file Users vs. Committed V-Coders* p. 30
[215] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 60
[216] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 60
[217] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 71
[218] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 72
[219] IRS (2005) *Findings From Practitioner Business Impact Research PBI-2 and PBI-3* p. 13
[220] IRS (2005) *Findings From Practitioner Business Impact Research PBI-2 and PBI-3* p. 28
[221] IRS Oversight Board (2008) *Electronic Filing 2007: Annual Report to Congress* p. 26
[222] IRS Oversight Board (2008) *Electronic Filing 2007: Annual Report to Congress* p. 26

return, while the *e-filing* process entails simply pressing a button to transmit the return electronically. This Section will address questions such as these: What barriers do V-Coding preparers face? What drives the decision to *e-file* or not? When preparers switch from V-Coding to *e-file*, what motivates them to switch?

In a 2003 IRS study, when V-Coding Non-User Preparers were asked why they had not moved to *e-file* usage when "they [had] the filing tools already in place to do *e-file*," they responded that they "perceive[d] *e-file* as involving more time/work for them"[223]. Among V-Coding Non-User Preparers, 41% noted that they did not adopt *e-file* because it was too time consuming or too difficult[224]. These preparers cited their already enormous workload, with 33% of the respondents working from morning to midnight 7 days a week during filing season[225]. In comparison, Lower *e-file* Usage Preparers and Higher *e-file* Usage Preparers in the same study reported working from morning to midnight 7 days a week only 19% and 17% of the time, respectively[226]. Lack of confidence in computers, security, or reliability was cited as a roadblock to *e-file* adoption by 27% of the V-Coding respondents, while unwillingness to take on extra costs was cited by 21% of the V-Coding respondents[227].

V-Coding preparers tend to underestimate the benefits of e-file *and overestimate the costs of* e-filing.

A 2005 IRS study found a number of motivators and issues related to preparers printing and mailing returns prepared by software (i.e., V-Coders). The study found that 53% of all preparers (those who filed 100 or more returns) V-Coded at least 25% of their returns. This group was more likely to be accountants/CPAs and tended to work in older, smaller firms, and their companies tended to have less focus on tax preparation and more focus on other accounting or financial services. When asked why they did not use *e-file*, these V-Coders tended to cite two reasons: lack of demand from their customers and lack of software to support *e-filing*. As noted previously, the preparer ultimately drives the method of filing, and there are many tax return preparation software applications at many price points.[228]

Particulars of the *e-file* process (that do not hold for paper filing) also influence preparers' perceptions of *e-filing* ease and convenience. For example, issues with the signature form and electronic signatures are noted in a 2003 IRS study as a concern of both V-Coding Non-User Preparers and Lower *e-file* Usage Preparers[229]. Registering as an *e-file* provider was also noted as an issue among V-Coding Non-User Preparers[230]. These concerns that the *e-file* process is too stringent were shared by V-Coding preparers in a 2004 IRS study[231].

---

[223] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 10
[224] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 60
[225] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 50
[226] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 50
[227] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 60
[228] IRS (2005) *Findings From Practitioner Business Impact Research PBI-2 and PBI-3*
[229] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 61
[230] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 61
[231] IRS (2004) *Final Report, Practitioner Business Impact Study: Committed e-file Users vs. Committed V-Coders* p. 30

6.7 Cost

The cost of e-filing *does not appear to be an inhibitor to preparers.*

Preparers note cost as a consideration but not necessarily an inhibitor to *e-filing*. A 2004 IRS study found that among preparers who V-Coded at least 25% of their returns, 15% indicated that it cost too much when asked why they did not *e-file* more[232]. A 2005 IRS study explored several aspects of cost with preparers. Among the 62% of preparers who V-Coded at least 25% of their returns, only 6% had heard from other preparers that price/cost was a drawback of electronic filing[233]. Furthermore, only 12% of the preparers who V-Coded 25% or more of their returns and expected *e-file* implementation to be "Less than very easy" had a perception that the software and added cost to *e-file* would be too expensive[234]. However, cost cannot be dismissed entirely: a 2003 IRS study found that 33% of Lower *e-file* Usage Preparers chose not to *e-file* because of concerns about costs either to them or to the taxpayer and that this was the second highest ranked reason behind lack of client demand, which garnered 60%[235]. The same study found that cost dissuaded 21% of V-Coding Non-User Preparers (behind 41% who had difficulty with *e-filing* and 27% who lacked confidence in *e-filing*)[236].

More research is required to evaluate the costs and benefits of preparers adopting an *e-filing* business model (beyond the cost to *e-file* a return).

The relative scarcity of preparers' perceptions of cost, specifically their perceptions of the costs of moving to an *e-file* practice, merits further research.

6.8 Preparer Influence and Client Demand

Consistent with taxpayers' attitudes, the majority reason Lower e-file *Usage Preparers noted for not* e-filing *was when the client owed money or had to mail a check.*

Just as clients make pocketbook decisions to *e-file* when self-preparing, they make similar decisions regarding whether they need to *e-file* when using a preparer, though the preparer exerts a significant influence on this decision.

In a 2005 IRS study, V-Coding preparers reported that the greatest difficulty in implementing *e-file* was "lack of client demand"[237]. However, another study uncovered what may be the actual reason behind preparers V-Coding: even though they recognized that *e-file* could provide a greater speed of filing, the V-Coding preparers simply did not find it in their best interests to upset their client relationships with a filing method that they were not wholly convinced was easy, uncomplicated, and affordable[238].

That same 2005 IRS study found that many of the V-Coding respondents continued to resist *e-file* mainly because they "dominate[d] the filing method decision for their clients," they had their clients' complete trust (at 61%, the highest of the three segments in the study[239]), and they found it easy to deflect the questions of the 89% of clients who asked about *e-file*[240]. When asked who made the decision on filing method, 65% of V-Coding Non-User Preparers said they did, compared with 9% of Lower *e-file* Usage Preparers and 19% of Higher *e-file* Usage Preparers[241]. V-Coding preparers were also more likely to always file via paper regardless of what the client wanted, with 55%

---

[232] IRS (2005) *Findings From The 2004-05 Practitioner Communications Tracking Study* p. 17
[233] IRS (2005) *Findings From Practitioner Business Impact Research PBI-2 and PBI-3* p. 4
[234] IRS (2005) *Findings From Practitioner Business Impact Research PBI-2 and PBI-3* p. 6
[235] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 60
[236] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 60
[237] IRS (2005) *Findings From Practitioner Business Impact Research PBI-2 and PBI-3* p. 6
[238] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 10
[239] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 59
[240] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 10
[241] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 58

of V-Coders stating this, compared with 4% for Lower *e-file* Usage Preparers (32% of whom allowed their clients to decide the filing method) and 3% of Higher *e-file* Usage Preparers (24% of whom left the decision up to the client)[242].

A category of preparers identified in a 2003 IRS study may provide insight into the motivating factors for preparers using or not using *e-file*. Existing in the spectrum between *e-file* resistors and full *e-file* adopters, preparers in the Lower *e-file* Usage Preparers segment decided for themselves when they would or would not *e-file* a return. The only barriers to full *e-file* adoption, according to Lower *e-file* Usage Preparers, were lack of client demand and apprehension regarding their ability or the ability of their clients to cover the additional costs.[243]

This segment, categorized as "the least pro-active preparer segment in this study," reported that it based its decisions mainly on client demand for *e-file*[244]. The study found that 60% of Lower *e-file* Usage Preparers reported that their clients did not ask for *e-file* or did not have confidence in it[245]. Lower *e-file* Usage Preparers felt confident in using *e-file* for refund returns, for simple returns, and when their clients expressed an interest in *e-file*[246]. The majority reason (28%) for not *e-filing* a return was the client did not want to *e-file* a return when they owed money and/or had to mail a check[247].

The study also found that 12% of Lower *e-file* Usage Preparers (compared with immeasurably low responses from the other two segments) stated that they were "just learning how to do [*e-file*]" or that it was their first time working with *e-file*, a finding that aligns with technology adoption theory related to Early Adopters[248]. A very low percentage of respondents found *e-file* difficult (they had the most confidence in *e-file* across the segments), and only 1% of them cited "lack of access" to software as a reason for not *e-filing* more[249].

The majority reason Higher e-file *Usage Preparers noted for not* e-filing *was that the client owed money or had a complex return.*

When considering the *e-file* habits of Higher *e-file* Usage Preparers, the primary reason this segment used *e-file* so extensively was simply because "they [thought] about it differently"[250]. Higher *e-file* Usage Preparers believed in *e-file*, knew the benefits that *e-file* could bring them, and were more likely to offer its use to clients[251]. The study found that 97% of Higher *e-file* Usage Preparers told their clients about the positive aspects of *e-file*[252]. A very low percentage of Higher *e-file* Usage Preparers reported that their clients were not interested in *e-filing*[253]. When asked why they chose not to *e-file* in certain cases, Higher *e-file* Usage Preparers cited as reasons that a balance was due (15%) or that the return was too complex (15%)[254].

---

[242] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 58
[243] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* pp. 60, 69
[244] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 11
[245] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 61
[246] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 10
[247] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 69
[248] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 61
[249] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* pp. 60-61
[250] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 11
[251] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 11
[252] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 71
[253] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 69
[254] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 69

Speed is the most commonly recognized benefit of e-file *among preparers.*

6.9 Perceived Benefits

This Section considers preparers' perceptions of not only *e-file* benefits marketed by the IRS, but also those benefits spread by word of mouth among preparers. The studies of paid preparers focus less on understanding perceptions of *e-file* benefits than the studies of taxpayers; therefore, less data is available on preparer perceptions. A 2003 IRS study examined the perceived benefits of *e-file* by preparer segment, as shown in Table 6-3[255].

Table 6-3 Perceived Benefits of *e-file* by Preparer Segment (as of 2003)

Leading Benefits of *e-file*	100+ Volume Practitioners	*E-file* Users	*E-file* Non-Users	50-99 Volume Practitioners
Speed/Faster	71%	77%	60%	68%
Accuracy	39%	45%	25%	36%
Ease of Use	29%	35%	18%	23%
Paperless Filing Using a PIN	15%	17%	10%	19%
Clients Like It	5%	6%	4%	3%

More in-depth interviews with preparers in a 2003 IRS study found similar results. In this study, 87% of preparers cited Speed as a benefit, 45% of preparers cited Accuracy, 42% of preparers were pleased that it was Paperless, and 36% of preparers cited Ease of Use as a benefit[256].

Other studies had findings pertinent to preparers' perceptions of *e-file* benefits. A 2005 IRS study found that V-Coding preparers understood that the main advantages of *e-file* were that it is simpler, easier, and faster[257]. A 2004 IRS study found that the top four positive aspects of *e-file* that Higher *e-file* Usage Preparers impressed upon their clients were, in order of prevalence, speed (76%), security (35%), ease or convenience (32%), and accuracy (31%)[258].

In a 2003 IRS study using in-depth interviews of 225 preparers, when respondents were asked what it would take for the IRS to convince them to *e-file* more, 23% of Lower *e-file* Usage Preparers and 29% of Higher *e-file* Usage Preparers stated that the IRS should provide benefits and incentives to adopting *e-file*[259]. While this was the majority opinion among Higher *e-file* Usage Preparers, it was second in importance to the 28% of Lower *e-file* Usage Preparers who stated that the IRS needed to convince the taxpayer, thereby driving client demand[260]. Higher *e-file* Usage Preparers cited as second in importance (27%) that the IRS should have more advertising, promotion, and education about *e-file*[261]. Among V-Coding Non-User Preparers, 36% wanted the IRS to make *e-file* easier and less complicated, 20% stated that they would move to *e-file* when the IRS stops accepting paper returns and mandates *e-file* use, 12% wanted the IRS to reduce the cost

---

[255] IRS (2003) *Findings From The 2003 e-file Practitioner Attitudinal Tracking Study* p. 30
[256] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 72
[257] IRS (2005) *Findings From Practitioner Business Impact Research PBI-2 and PBI-3* p. 24
[258] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 71
[259] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 70
[260] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 70
[261] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 70

or even make *e-file* free, 11% wanted to see proof that *e-file* was safe, 9% needed client demand for *e-file*, and 7% demanded that the IRS pay preparers to *e-file*[262].

Regardless of the volume of use or non-use of *e-file*, the majority of preparers cited speed as the primary benefit of *e-file*. The benefits of accuracy, ease of use, and *e-file* being paperless were given “far less acknowledgment,” especially among non-users[263].

Preparers who V-Coded also tended to underestimate the positive effect on their business (growth, productivity, accuracy, ease of use), themselves (more job satisfaction with less work and less stress), and their clients (more accuracy, ease of use, and customer satisfaction).[264]

A 2005 IRS study contacted Committed V-Coders from 2004 to see how their behaviors had changed in 2005. The study found that 29% of the 2004 Committed V-Coders had moved to *e-file*, and this change seemed to be based on them learning more about the benefits of *e-file*, especially fast refunds, paper/cost savings, ease of use, accuracy, efficiency to their practices, and greater acceptance among clients.[265]

[262] IRS (2003) *Findings From One-On-One e-file Research Among Taxpayers & Preparers* p. 65
[263] IRS (2003) *Findings From The 2003 e-file Practitioner Attitudinal Tracking Study* p. 30
[264] IRS (2005) *Findings From Practitioner Business Impact Research PBI-2 and PBI-3* pp. 8-12
[265] IRS (2005) *Findings From Practitioner Business Impact Research PBI-2 and PBI-3* p. 20

7. State Electronic Filing Experiences

Contents of Chapter 7:

The purpose of this Chapter is to provide a high-level overview of electronic filing experiences in government entities other than the Federal government — specifically the tax authorities of State governments. This Chapter begins with a description of the IRS-State relationship, with a focus on the interconnectedness of Federal and State electronic filing programs; provides a statistical snapshot of the different options in use at the State level; and concludes with a discussion of the growth of electronic filing for State returns and the effect of the technology adoption curve. This Chapter is designed to set the stage for a more detailed description of State experiences, with each of the options considered in Chapters 10 through 14. Themes identified in this Chapter include the following:

- On the whole, States have employed a range of electronic filing options on par with the ones being explored by the IRS for *e-filing* Federal returns; of those, preparer-filed returns are dominant. Preparer-filed returns represent the largest percentage of electronically filed returns for States overall.
- The technology adoption theory applies at the State level.
- Although States offer electronic filing insights, it is important to recognize the variability in the different systems.

7.1 IRS-State Relationship for Electronic Filing

Although Federal and State governments share the objective of increasing electronic filing, their approaches and contexts differ. What has worked in the States may or may not apply in the Federal setting.

As described in Chapter 2, within the electronic filing arena, the relationship between the IRS and the various State tax administrations is complex — balancing the shared objective of increasing electronic filing for individual State and Federal returns with the diversity of each State's context and independence in choosing how to best meet that objective. These complexities are apparent in looking at overall State experiences with an eye on how these experiences may or may not apply in the Federal setting.

The experiences of the States are important to the IRS *e-file* efforts for number of reasons, including the following:

- What the States have tried to date serves to inform the discussion on electronic filing and may provide lessons learned as the IRS moves forward with Federal *e-file* efforts.
- The path that the IRS chooses to pursue to increase Federal *e-filing* rates may affect State efforts.
- The choices that States make concerning increasing State electronic filing rates may ultimately affect the Federal goal of reaching 80% *e-file* participation.

This Section provides an overview of the many methods States have implemented regarding electronic filing to date. Given the variability among States regarding their tax systems, it is not surprising that the States have tried a wide range of electronic filing solutions and met with varying degrees of success. This overview sets the stage for more detailed consideration of State experiences within each of the option categories in the

Many challenges exist with the availability, currency, and validity of information on State filing programs; more research and analysis is required to obtain current and valid State data.

Chapters that follow — incentives, mandates, Internet-based options (comparable to States' experiences with online filing and I-File), paper-based options (comparable to States' experiences with 2D barcoding), and Telefile.

States vary widely in tax policy as well as in their reporting methods, and current information about State returns can be difficult to obtain. As the lead organization of State tax authorities and administrators, the Federation of Tax Administrators (FTA) faces the challenge of compiling and making sense of a vast amount of information. Current and authoritative data on State filing programs is difficult to validate, and published reports comparing one State's information with another's can sometimes be opaque about the definitions of terms being compared. Additional research to clarify and confirm State information will be an important part of future efforts. Note that because TY2007 data was just becoming available as this report was produced, it was generally not incorporated.

7.2 Electronic Filing Methods for State Returns

States have tried a range of approaches to increase electronic filing and have met with success overall.

According to the FTA, "each of the forty-one States with a broad-based income tax and the District of Columbia [42 total] provide one or more avenues for the [electronic] filing of individual income tax returns"[266]. The FTA categorizes and describes State electronic filing programs/approaches for electronic filing as shown in Table 7-1[267]. Also included in this table is a breakout of methods used to file State returns (taken as a whole) from 2005. Note that for overall State returns, 52.5% were filed on paper — the rest of the returns were filed electronically according to the methods described in the table.

Table 7-1 State Approaches to Electronic Filing (as of 2005)

Approach	Description	% of All State Returns
Preparer Filing Though Fed/State Program	Third party files both Federal and State returns with the IRS in a single transmission. The IRS separates State information and makes it available for downloading by the State.	35.5% (Includes Fed/State and Direct Filing Combined)
Preparer Filing with the State	Third party files by two separate transmissions — Federal return to the IRS and State return to the State.	
Online Filing Programs	Program for electronic filing of returns by individual taxpayers using personal computers and approved commercial software routed through transmitters. The path through which returns are transmitted depends on the State's participation in the Fed/State or Direct File program.	8.3%
Telefile Programs	State-operated, independent Telefile programs in which the individual taxpayer enters return information using a touch-tone telephone.	1.8%
Direct Internet Filing (I-File) Programs	State programs that allow individual taxpayers to file State income tax returns directly with the State through a State-developed and administered web site.	1.9%

[266] Duncan, H. T. (2006) *Preparing Your Taxes: How Costly Is It?* p. 1

[267] Duncan, H. T. (2006) *Preparing Your Taxes: How Costly Is It?;* Federation of Tax Administrators (2008) *State Electronic Commerce Programs: State EC Snapshots Updated March 13, 2008;* IRS (2006) *States' Experience with Tax Return Bar Code Technology;* IRS (2008) *State E-file Analysis*

Approach	Description	% of All State Returns
2D Barcode Programs	State programs that allow computer-produced returns that are filed on paper where the return data is captured and printed in a machine-readable 2-dimensional (2D) barcode.	8.6%
State Mandates	State programs in which certain preparers are required to electronically file the returns they prepare. [a]	N/A
Total *E-filed* [b]		47.5%

Notes: (a) Program details, including preparer thresholds, vary by State. (b) Excludes use of 2D barcodes because this is not an electronic filing method, though it is a means of automating the processing of paper returns.

Preparer programs are responsible for 75% of electronically filed state returns.

Consistent with Federal trends, the largest percentage of electronically filed returns came from preparers. Note also that the percentage of returns filed electronically as a direct effect of mandates are not explicitly called out in Table 7-1; however, the overall effect of mandates on that preparer population is discussed in Chapter 11.

Table 7-2 provides more detailed information about State participation in each of these programs using FTA, State, and IRS data compiled by the IRS[268]. To understand Table 7-2, the following definitions and notes are helpful:

- **Fed/State Program** — If "Yes," the State functions as a part of the Fed/State program, and filings are prepared/processed by EROs and sent to the IRS, which returns them to the State. If "Ind.," the State functions independently of the Fed/State program, and filings are prepared/processed by EROs and sent directly to the State. If "Both," the State is both a member of the Fed/State program and accepts some returns independently.
- **Online Filing** — Fed/State filings are prepared using vendor software (on the vendor's web site or offline), sent to the IRS, and then forwarded to the State.
- **I-File** — Filings are prepared and filed by individual taxpayers on the State server (or on a vendor server and forwarded to a State web portal).
- **Telefile** — Filings are prepared via a touch-tone telephone interface (State or vendor maintained) and sent to the State.
- **2D Barcode** — V-Coded returns must have a 2D barcode.
- **Mandate** — A State mandate (typically on preparers) to electronically file is in place.
- The presence of a year in a cell indicates when the State started a program. The presence of yes/no without a year indicates that the start year is unavailable.

[268] Federation of Tax Administrators (2008) *State Electronic Commerce Programs: State EC Snapshots Updated March 13, 2008;* IRS (2006) *States' Experience with Tax Return Bar Code Technology;* IRS (2008) *State E-file Analysis;* IRS (2008) *Summary of State Mandates for Individual Tax Returns*

Table 7-2 State Participation in Filing Programs (as of 2008)

State	Fed/State Program	Online Filing	I-File	Telefile	2D Barcode	Mandate
Alabama	Yes, 1997	1998			Yes	2005
Alaska	No tax					
Arizona	Yes, 1997	2000			Yes	
Arkansas	Yes, 1994	1999				
California	Both, 1994	1997	2002		No	2004
Colorado	Yes, 1993	1998	1999	Yes	Yes	
Connecticut	Yes, 1993	1997	2001	Yes	Yes	2006
Delaware	Yes, 1993	1997	1998		Yes	
D.C.	Yes, 1996	1999	2001		Yes	
Florida	No tax					
Georgia	Yes, 1994	1999			Yes	
Hawaii	Yes, 2001		2001		Yes	
Idaho	Yes, 1993	1997	2001 [a]		Yes	
Illinois	Both, 1995	1999	1998		Yes	
Indiana	Yes, 1992	1999	1997		Yes	2008
Iowa	Yes, 1993	1997	2001 [a]	Yes		
Kansas	Yes, 1991	1997	1999		Yes	
Kentucky	Yes, 1992	2000			Yes	
Louisiana	Yes, 1992	1998	2001		Yes	2008
Maine	Ind., 2000	2000	2000	1996	Yes	2008
Maryland	Yes, 1995	1999	2000		Yes	
Massachusetts	Ind., 1992	1996	Yes [a]	Yes	Yes	2005
Michigan	Yes, 1992	1997			Yes	2003
Minnesota	Ind., 1989	1998				2001
Mississippi	Yes, 1992	1998				
Missouri	Yes, 1993	1997	2000 [a]		Yes	
Montana	Yes, 1994	1997	2000			
Nebraska	Yes, 1993	1999	2001	Yes	Yes	
Nevada	No tax					
New Hampshire	No tax					
New Jersey	Yes, 1994	1999	2000		Yes	2005
New Mexico	Yes, 1992	1998	1998		Yes	2008
New York	Both, 1992	1999			Yes	2006
North Carolina	Yes, 1991	1998				
North Dakota	Yes, 1999	1999			Yes	
Ohio	Yes, 1999	1999	2003	Yes	Yes	

State	Fed/State Program	Online Filing	I-File	Telefile	2D Barcode	Mandate
Oklahoma	Yes, 1992	1999			Yes	2003
Oregon	Yes, 1993	1998			Yes	2007 [b]
Pennsylvania	Yes, 1995	1998	2000	Yes	Yes	
Rhode Island	Yes, 1994	1999			Yes	2003 [b]
South Carolina	Yes, 1990	1997	1999			2008
South Dakota	No tax					
Tennessee	No tax					
Texas	No tax					
Utah	Yes, 1992	1999	2003		Yes	2006
Vermont	Yes, 2001	2001				
Virginia	Yes, 1994	1998	2001		Yes	2005
Washington	No tax					
West Virginia	Yes, 1991	1998	2004 [a]			2007
Wisconsin	Yes, 1991	1998	2001	Yes	Yes	2003
Wyoming	No tax					
Totals	38 (Yes)	41	27	9	32	18 [b]

Notes: 2D barcode data is as of 2006 (excepting California, which is 2008). (a) I-File may be discontinued. (b) Updated based on 2008 data. In addition to the 18 States with preparer mandates, Oregon and Rhode Island have electronic filing mandates on tax return preparation software vendors but not preparers.

While Table 7-2 shows the considerable variability in the particulars of States' filing programs, there are some notable observations:

- The Fed/State program is the dominant model based on the number of States.
- Most States provide online as well as Internet filing.
- Preparer mandates can be used alone or in conjunction with any other option.

The following data maps (Figure 7-1, Figure 7-2, Figure 7-3, Figure 7-4, and Figure 7-5) are provided as a visualization of the State-based information sourced above.

For more information on the Fed/State program, see Section 2.2.2.

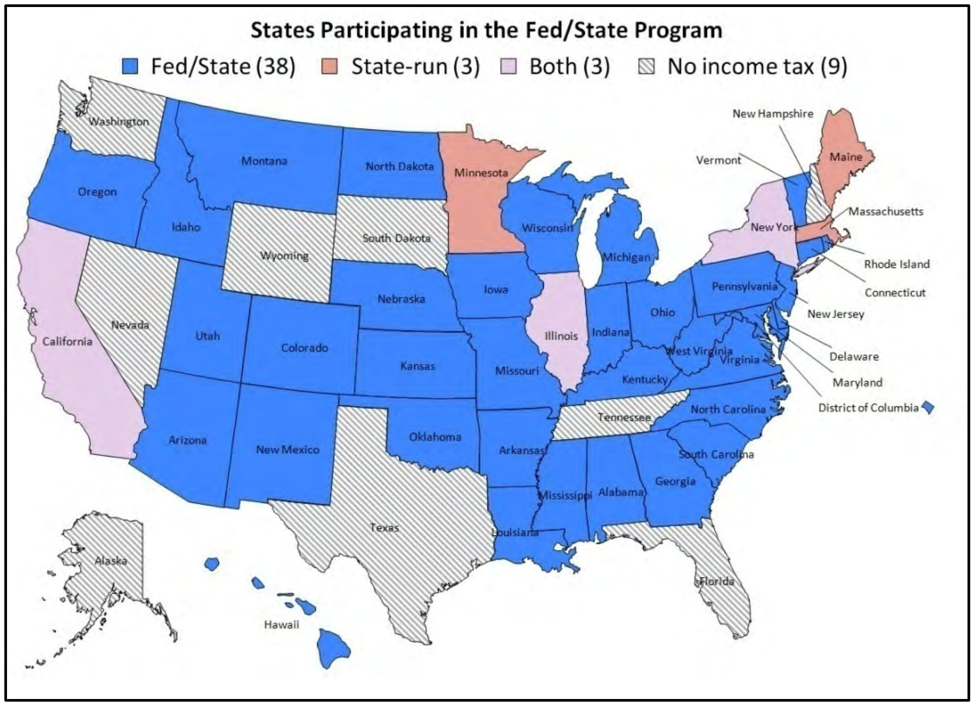

Figure 7-1 States Participating in the Fed/State Program (as of 2008)

For more information on States with electronic filing mandates, see Chapter 11.

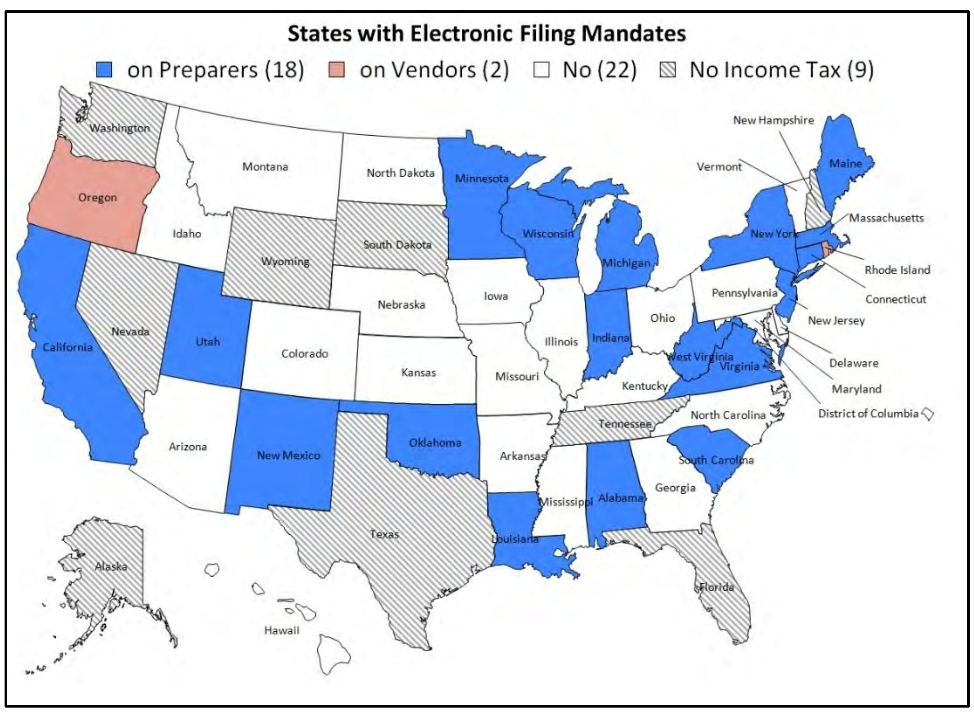

Figure 7-2 States with Electronic Filing Mandates (as of 2008)

For more information about I-File and related systems, see Chapter 12.

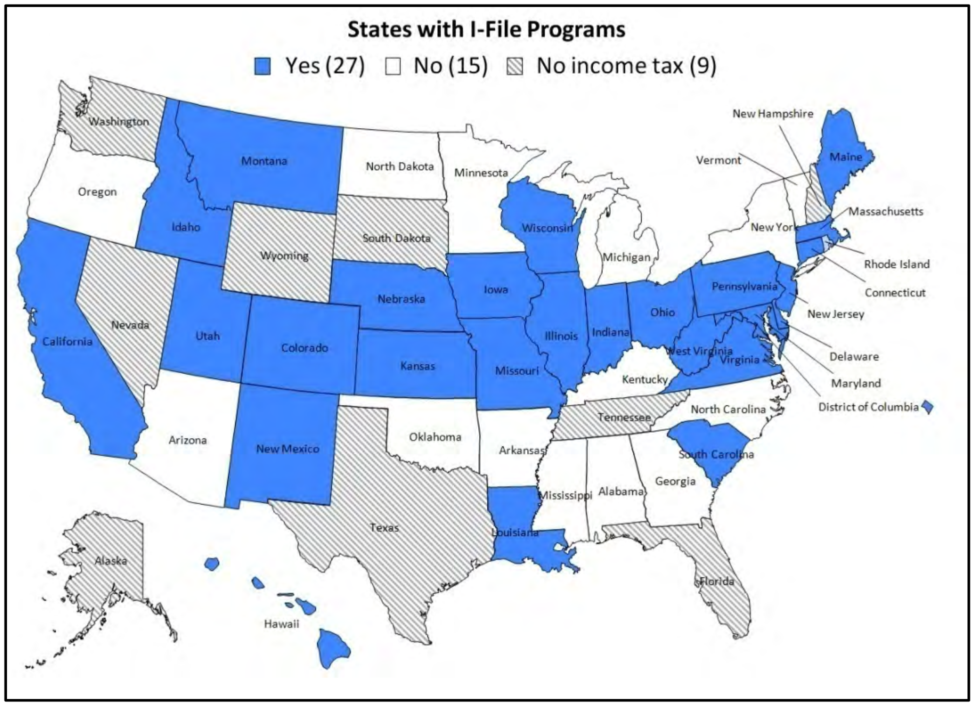

Figure 7-3 States with I-File Programs (as of 2008)

For more information about 2D barcodes and methods of automating paper return processing, see Chapter 14.

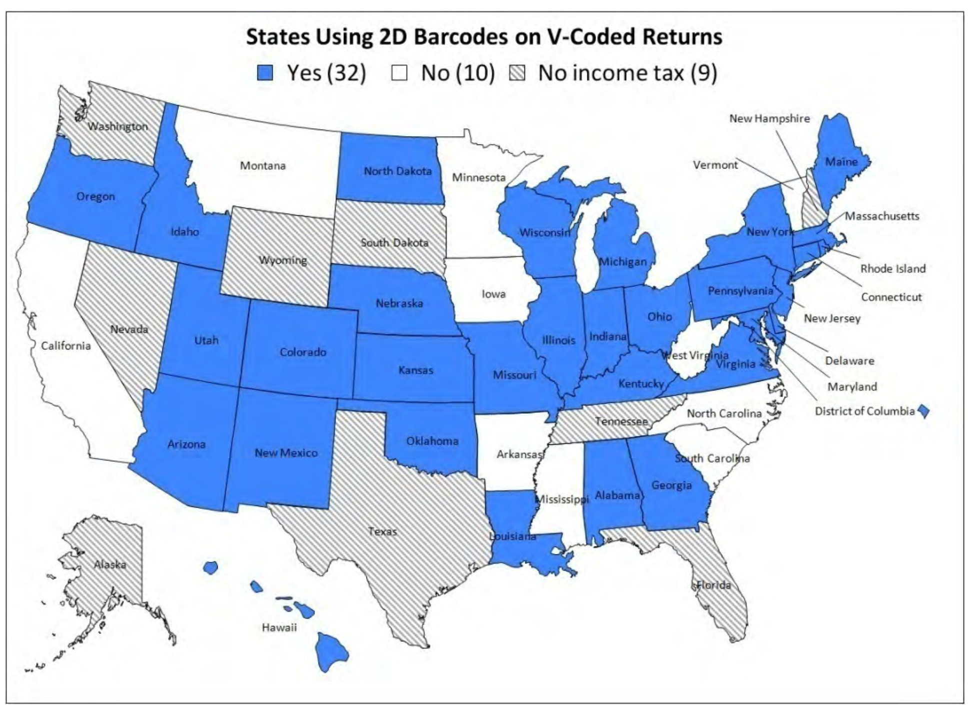

Figure 7-4 States Using 2D Barcodes on V-Coded Returns (as of 2006)

For more information about phone-based electronic filing methods, see Chapter 13.

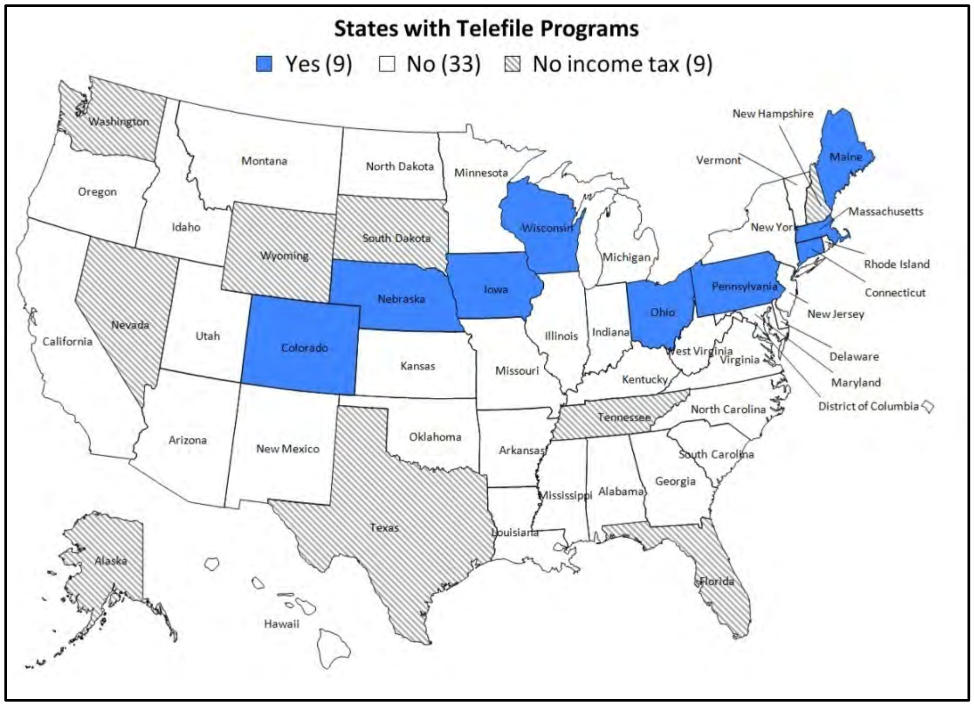

Figure 7-5 States with Telefile Programs (as of 2008)

7.3 Electronic Filing Growth for State Returns

States are currently showing faster electronic filing growth than the IRS, but this trend is slowing, which is expected given their position on the technology adoption curve.

Table 7-3 shows the growth of State electronic filing overall[269]. Referring to this data, FTA points out that by 2005 the volume of State electronically filed returns "nearly quintupled" the volume of 1998, compared with Federal returns that saw approximately 2.8 times the volume over the same period.

[269] Duncan, H. T. (2006) *Preparing Your Taxes: How Costly Is It?* p. 3

Table 7-3 Growth of State Electronic Filing (as of 2005)

Year	# Federal Electronic Returns	# State Electronic Returns	Federal Annual Growth	State Annual Growth	*E-file* as % of All Federal Returns	E-File as % of All State Returns
1998	24.6	10.1			19.7%	12.0%
1999	29.4	14.3	19.5%	48.3%	23.1%	16.6%
2000	35.4	18.1	20.5%	30.1%	27.3%	19.5%
2001	40.2	23.8	13.6%	34.4%	30.9%	23.5%
2002	46.9	29.4	19.2%	28.3%	36.0%	28.7%
2003	52.9	35.5	14.5%	24.3%	40.6%	34.2%
2004	61.4	43.3	18.0%	25.1%	46.8%	41.6%
2005	68.5	49.8	11.5%	14.9%	51.6%	47.5%

Of the States included in this aggregated total, in 2005 FTA noted:

> …four of the five States with the highest proportion of electronic total returns have an electronic filing mandate in place… Other factors that seem to influence the higher proportion of electronic filing are the number of options for electronic filing that a State offers. These do not explain all the differences across States, and some disparate results must be attributed to the nature of the taxpaying population and the complexity of their tax affairs.[270]

This growth trend for State electronic filing is slowing down, which is “not necessarily unexpected, given the maturation of the programs and the fact that most early filers are already electronic filers”[271]. According to the FTA, for all types of returns, the growth rate in 2006 was an estimated 7.7% (Telefile returns dropped by half and other forms of State electronic filing were up only 10%, compared with 15% in 2005 and more than 20% in previous years)[272].

Figure 7-6 shows the proportion of all State returns filed electronically in 2005[273].

---

[270] Duncan, H. T. (2006) *Preparing Your Taxes: How Costly Is It?* pp. 3-4
[271] Duncan, H. T. (2006) *Preparing Your Taxes: How Costly Is It?* p. 6
[272] Duncan, H. T. (2006) *Preparing Your Taxes: How Costly Is It?* p. 6
[273] Duncan, H. T. (2006) *Preparing Your Taxes: How Costly Is It?* p. 16

The option Chapters that follow include a Section on State experiences relevant to each option.

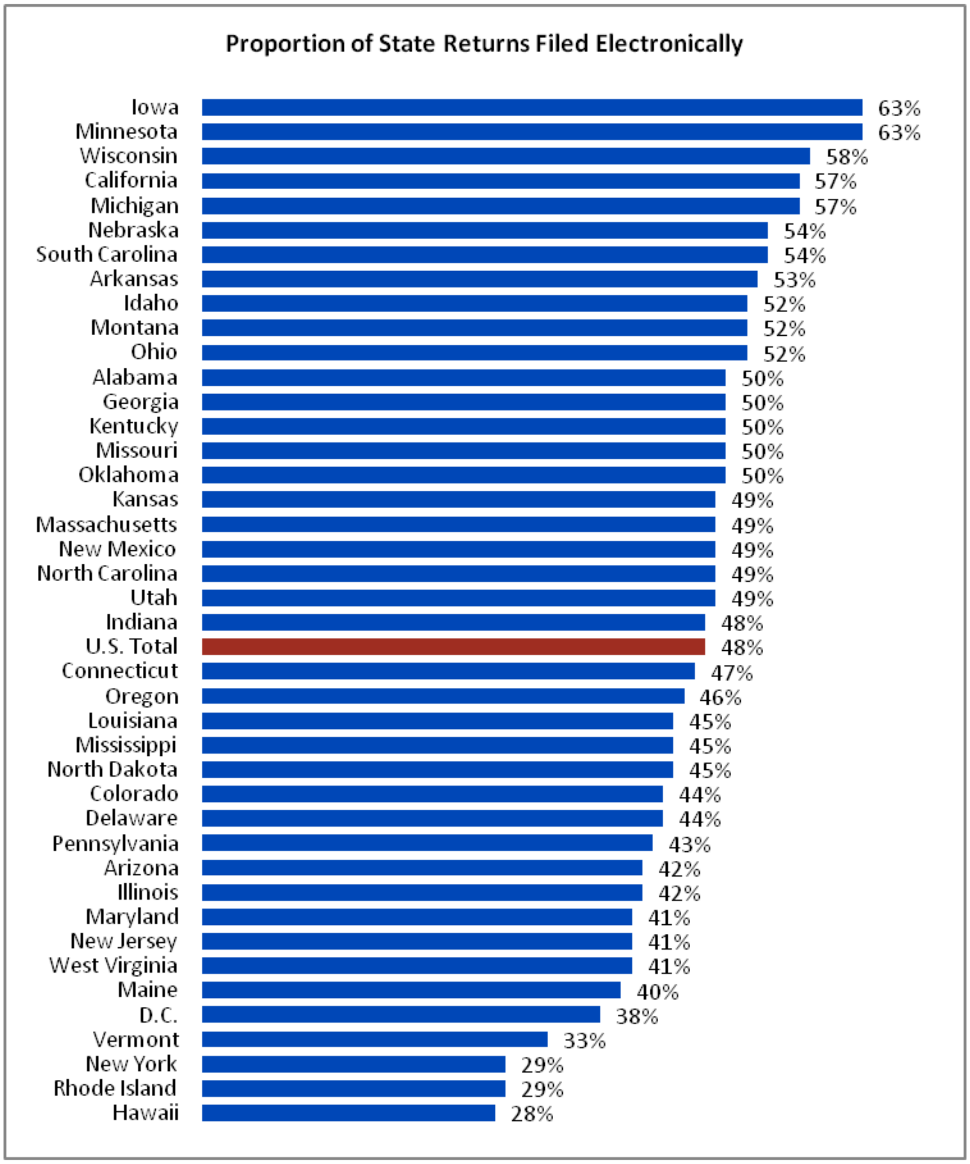

Figure 7-6 Proportion of State Returns Filed Electronically (as of 2005)

8. International Electronic Filing Experiences

Contents of Chapter 8:

This Chapter discusses electronic filing of tax returns in selected foreign countries. Following a high-level overview of approaches by a range of international tax authorities, this Chapter focuses in more detail on three countries: the United Kingdom, Canada, and Australia. These countries have similar tax systems, have pursued long-term electronic filing programs for individual taxpayers, and have a similar level of technical maturity. For each of these three countries, the Chapter provides a brief comparative overview followed by a summary of each country's electronic filing options and features, electronic filing history and adoption, and role of third parties. Themes identified in this Chapter include the following:

- While foreign countries have employed a range of methods on par with, and some beyond the scope of, those explored by the IRS for *e-filing* Federal returns, there is no single approach that by itself stands out as a paradigm of electronic filing success.
- Many variables affecting technology adoption overall and electronic filing adoption in particular — size of population, culture, existing technology infrastructure, tax code, and third party models — must be taken into account when drawing insights from other countries' experiences with electronic filing.

8.1 International Experiences at a Glance

Foreign countries use a range of electronic filing approaches, including some not currently being considered in the United States.

Foreign countries employ a range of methods for the electronic filing of individual income taxes. While tax systems around the globe differ in numerous ways, these varying experiences with electronic filing offer insights for the IRS. Overall, two common, interrelated trends emerge among countries adopting electronic filing: an effort to simplify tax preparation and filing and a focus on making more tax-related information, including tax account information, available online.

Table 8-1 summarizes the electronic filing methods of more than 20 foreign countries. While each country may use a different title for the same method, this report assigns labels (column headings in the table) that most closely resemble the nomenclature used in the United States. The three countries that will be looked at in greater detail later in this Chapter — the United Kingdom, Canada, and Australia — are emphasized with **bold blue** text. Note also that the table identifies electronic filing approaches for these countries but does not offer analysis of the return volume for each. The following definitions and notes should be helpful in understanding Table 8-1:

- **Pre-Filled Form** — The tax agency prepares taxpayers' returns on their behalf using available data and then provides the returns to them to correct or accept as is.
- **2D Barcode** — Printing of a computer-readable symbol on the computer-prepared paper form that allows all information encoded in it to be automatically extracted.

For more information on 2D barcodes in the United States, see Chapter 13.

For more information on incentives in the United States, see Chapter 10.

For more information on potential US options for free tax return preparation software, see Section 12.4.

For more information on phone filing in the United States, see Chapter 13.

- **Extend Filing Period** — A later deadline offered to electronic filers.
- **Cash Incentive** — Government-provided direct monetary payments offered to taxpayers for electronically filing.
- **Misc. Incentive** — Other (miscellaneous) incentives to electronically file.
- **Free Tax Soft.** — Government-provided free tax return preparation software.
- **Free E-file** — Electronic filing with no cost for transmitting the tax return.
- **Online Acct. Access** — Ability to view and/or edit tax (and sometimes other) information through a government web site.
- **Phone** — Ability to file taxes by phone using a keypad or voice.
- **Text Msg.** — Ability to file by text messaging on a mobile phone.

Table 8-1 Summary of International Electronic Filing Efforts

Country	Pre-Filled Form	2D Bar-code	Extend Filing Period	Cash Incen-tive	Misc. Incen-tive	Free Tax Soft.	Free E-file	Online Acct. Access	Phone	Text Msg.
Australia[274]	**Yes**		**Yes**			**Yes**	**Yes**	**Yes**	**Yes**	
Belgium[275]	Yes	Yes				Yes	Yes	Yes	Yes	
Brazil[276]						Yes	Yes			
Canada[277]		**Yes**				**No** [a]	**Yes**	**Yes**	**Yes**	
Denmark[278]	Yes					n/a	n/a		Yes	Yes
Finland[279]	Yes					n/a	n/a		Yes	Yes
France[280]	Yes		Yes	Yes [b]		Yes	Yes			
Germany[281]						Yes	Yes	Yes		
Iceland[282]	Yes		Yes			Yes	Yes			
India[283]						Yes	Yes			

[274] Australian Taxation Office (2007) *Commissioner of Taxation Annual Report 2006–07* p. 46

[275] Belgium (2008) *Belgium Tax-on-web;* epractice.eu (2008) *eGovernment Factsheet - Belgium - History*

[276] Brazilian Government - Ministério da Fazenda (2008) *Centro Virtual de Atendimento ao Contribuinte – e-CAC;* Federal University of Brasília *Impacts of Internet Use on Public Administration: A Case Study of the Brazilian Tax Administration;* World Bank e-Development Thematic Group (2005) *Implementing E-Government at the Subnational Level: Lessons Learned from the Brazilian State of Minas Gerais* p. 14

[277] Canada Revenue Agency (2008) *Certified Software for the 2008 NETFILE Program*

[278] Cross, M. (2006) *Online Tax Gets Positive Return;* Danish Inland Revenue (2008) *SKAT;* London School of Economics and Political Science ICT Observatory *ICT Learning And Training: Data, Policies And Practice In Selected EU Countries, Work Package 2 – Synthesis Report* p. 2; Organisation for Economic Co-Operation and Development (2005) *Using 3rd Party Information Reports to Assist Taxpayers Meet their Return Filing Obligations: Country Experiences with the Use of Pre-populated Personal Tax Returns;* Organisation for Economic Co-Operation and Development (2008) *Third Party Reporting Arrangements and Pre-filled Tax Returns: The Danish and Swedish Approaches*

[279] Finland Ministry of Transport and Communications (2008) *Finland Ministry of Transport and Communications,;* Finnish Tax Administration (2007) *The Long and Winding Road to a Tax Return Free World: Experiences from the Finnish Tax Administrations' Pre-completed No-touch Return System*

[280] European Commission Directorate-General for Informatics (2008) *Interoperable Delivery of European eGovernment Services to Public Administrations, Business and Citizens (IDABC)*

[281] Stockholm Challenge (2008) *Stockholm Challenge,*

[282] European Committee for Standardization (2004) *Towards an Electronic ID for the European Citizen, A Strategic Vision*

Country	Pre-Filled Form	2D Bar-code	Extend Filing Period	Cash Incen-tive	Misc. Incen-tive	Free Tax Soft.	Free E-file	Online Acct. Access	Phone	Text Msg.
Ireland[284]			Yes			Yes	Yes	Yes		
Italy[285]	Yes		Yes	Yes [c]	Yes [d]	Yes	Yes	Yes		
Japan[286]				Yes [e]		Yes	Yes			
Netherlands[287]						No	Yes		Yes	Yes
New Zealand[288]			Yes			No	Yes			Yes
Norway[289]	Yes					Yes	Yes		Yes	Yes
Portugal[290]	Yes				Yes [f]	Yes	Yes			
Singapore[291]			Yes			Yes	Yes	Yes		Yes
South Africa[292]			Yes	Yes	Yes	Yes	Yes	Yes		
Spain[293]	Yes					Yes	Yes			
Sweden[294]	Yes					n/a	n/a			Yes
United Kingdom[295]		**Yes**	**Yes**		**Yes**	**Yes**	**Yes**			

Notes: Empty cells indicate data not available. “n/a” indicates not applicable (e.g., pre-filled form precludes need to prepare and file a return). (a) Must buy CRA-certified software from commercial return preparation software vendors, but this software is free to qualified low-income residents. (b) 20€. (c) About €5 (based on characters keyed in) to banks and post offices that act as preparers and €10 to union co-operatives that also assist in return preparation. (d) Legislative mandate for electronic filing by individuals. (e) ¥5000. (f) Electronic filing mandatory for certain self-employed workers.

---

283 Government of India Directorate of Income Tax (2008) *Individual Income Tax;* Moneycontrol.com (2007) *The Flip Side of E-filing Tax Returns*

284 Cosgrove, S. & Hegarty, C. (2006) *Revenue On-Line Service (ROS), Ireland’s e-Government Success Story* pp. 52-62; epractice.eu (2008) *IE: Growing Returns for eTaxes;* Irish Tax and Customs (2008) *Revenue's On-Line Service Wins Award*

285 Agenzia Entrate (2007) *The Costs and Benefits of ‘Il fisco telematico’;* Booz Allen Hamilton (2005) *Beyond e-Government: The World's Most Successful Technology Enabled Transformations* pp. 54-56; Carter, P. (2006) *Review of HMRC Online Services* p. 33

286 Guirong Mao (2004) *Building e-Government in Japan* p. 15; PricewaterhouseCoopers Tax (2007) *Japan Tax Update June 2007, Issue 30*

287 Deloitte (2008) *E-filing in the Netherlands;* epractice.eu (2008) *eGovernment in the Netherlands* p. 22; IBM (2008) *Case Studies: Web Services - Dutch Tax Authorities*

288 New Zealand Inland Revenue (2008) *Individual Income Tax*

289 Accenture (2004) *eGovernment Leadership: High Performance, Maximum Value;* Accenture (2006) *High Performance in Government - Leadership in Customer Service: Building the Trust* p. 33; Nordisk eTax (2008) *Nordisk eTax Portal*

290 Accenture (2004) *eGovernment Leadership: High Performance, Maximum Value* p. 95; epractice.eu (2008) *PT: E-tax Service Increasingly Popular With Portuguese Taxpayers;* Government of Portugal *Building Bridges Towards Better Administration - State Modernization in Portugal*

291 Accenture (2004) *eGovernment Leadership: High Performance, Maximum Value* pp. 18-19 and 96; Carter, P. (2006) *Review of HMRC Online Services;* United Nations (2008) *UN E-Government Survey 2008: From E-Government to Connected Governance* p. 54

292 Accenture (2004) *eGovernment Leadership: High Performance, Maximum Value* p. 98; South African Revenue Service (2008) *SARS Efiling*

293 epractice.eu (2004) *ES: Spanish Taxpayers Embrace E-tax Filing;* European Public Administration Network (2008) *EUPAN Learning Team Administrative Burden For Citizens - Report On National Approaches* p. 39

294 Organisation for Economic Co-Operation and Development (2008) *Third Party Reporting Arrangements and Pre-filled Tax Returns: The Danish and Swedish Approaches*

295 HM Revenue & Customs (2008) *Software You Can Use For Your Tax Return*

While the United Kingdom, Canada, and Australia use varying approaches and have encountered different challenges, each country has made progress with electronic filing.

There are similarities and differences between these countries and the United States that affect the applicability of a particular option.

8.2 Comparison of the United States, the United Kingdom, Canada, and Australia

This Section focuses on the experiences of three countries — the United Kingdom, Canada, and Australia — with electronic filing programs similar to the ones in the United States. These countries were selected for comparison primarily based on expressed interest from IRS stakeholders, similarities in features and approaches to tax administration, comparable levels of Internet penetration and use, and relative availability of a considerable body of documentation across several years. In addition, each has experienced choices and challenges similar to those in the United States as they have implemented electronic filing capabilities and other electronic services and seek to increase the level of adoption of these services.

The IRS may be able gain insights from these experiences as lessons learned for various electronic filing solutions and adoption factors. Although each of the selected country's electronic filing programs has similarities to the United States *e-filing* program, each country has taken a different approach to fostering adoption of electronic filing. Still, they all follow a trend among governments to alter their approaches to taxpayers, by treating them as clients, addressing their needs, and fostering greater awareness of their tax obligations[296].

There are other countries of similar size and complexity that may also be worthy of comparison; however, for the purposes of this phase of the report, the field has been limited to a high-level overview of these three. Additional information about these three countries or other countries would require additional research in subsequent phases as deemed necessary.

8.2.1 Electronic Filing Adoption

For a high-level comparison of electronic filing adoption in these three countries, the following factors were considered: electronic filing adoption rates, Internet adoption, and tax system complexity (including the role of third party preparers). Recognizing that there are additional and more in-depth ways of comparing these tax administrations, future phases of the IRS advancing *e-file* effort could offer more in-depth comparison with additional insights about other countries' experiences. The individual electronic filing adoption rates of the United States, the United Kingdom, Canada, and Australia are summarized in Table 8-2.

[296] Kirchler, E. (2007) *The Economic Psychology of Tax Behavior* p. 176

Table 8-2 Summary of Individual Electronic Filing Adoption by Selected Country

Country	Total Returns	2003	2004	2005	2006	2006 %
United States[297]	134,421,400 [a]	52,869,000	61,428,300	68,463,900	73,239,500	54.5%
United Kingdom[298]	9,000,000 [b]	700,000	1,100,100	2,000,000	2,895,482	36%
Canada[299]	23,606,102 [c]	9,940,000	11,180,000	12,050,200	12,650,000	54.7%
Australia[300]	11,500,000 [d]	8,633,000	9,000,000	8,900,000	9,100,000	80% [e]

Notes: (a) Data as of 2006. (b) Data as of 2007; approximation. (c) Data as of 2007. (d) Data as of 2005. Australia electronic filing statistics combine ELS and e-Tax adoption; ELS contribution: 7,800,000 in 2003, 7,900,000 in 2004, 7,500,000 estimated in 2005, 7,500,000 estimated in 2006. (e) Includes all electronic filings.

This report uses the term "filing" in place of the equivalent term — "lodgement" — used in Australia and the United Kingdom. Similarly, the term "preparer" is used in place of the equivalent term "agent," which is used in the United Kingdom and Canada.

More information on the electronic filing programs and the first year of electronic filing operation for each country follows:

- **United States** — The first year of electronic filing operation in the United States was 1986, and its programs include *e-file*, Free File, and Telefile (retired in 2005).
- **United Kingdom** — The first year of electronic filing operation in the United Kingdom was 2000, and its programs include the legacy Electronic Lodgement System (ELS) (retired in 2006) and Filing by Internet (FBI).
- **Canada** — The first year of electronic filing operation in Canada was 1999, and its programs include NETFILE (Internet filing for individuals), EFILE (Internet filing for preparers), and TELEFILE.
- **Australia** — The first year of electronic filing operation in Australia was 1999, and its programs include e-Tax (direct Internet filing for individuals with free e-Tax software) and the legacy Electronic Lodgement System (ELS) for preparers filing for individuals[301].

[297] IRS (2006) *SOI Bulletin Historical Table 22: Selected Returns and Forms Filed or To Be Filed by Type During Specified Calendar Years, 1990-2007*; IRS (2007) *Calendar Year Return Projections for the United States and IRS Campuses CY 2007-2014* p. 13

[298] 2003 data based on 11% e-filing rate given for Self-Assessment returns (Inland Revenue (2003) *Annual Report for the Year Ending 31st March 2003* p. 4); 2004 data from (Inland Revenue (2004) *Autumn Performance Report 2004* p. 10); 2005 data from (HM Revenue & Customs (2006) *Annual Report 2005-06 and Autumn Performance Report 2006* p. 85); 2006 data from (epractice.eu (2007) *On-line Submission of Tax Declarations Reaches New High in UK;* HM Revenue & Customs (2007) *Departmental Autumn Performance Report 2007* p. 19).

[299] 2000 NetFile data from (Canada (2006) *Government On-Line 2006*); other figures from (Canada Customs and Revenue Agency (2002) *CCRA Annual Report to Parliament 2001-2002;* Canada Customs and Revenue Agency (2003) *CCRA Annual Report to Parliament 2002-2003;* Canada Customs and Revenue Agency (2004) *CCRA Annual Report to Parliament 2003-2004;* Canada Customs and Revenue Agency (2005) *CCRA Annual Report to Parliament 2004-2005;* Canada Revenue Agency (2006) *CRA Annual Report to Parliament 2005-2006;* Canada Revenue Agency (2007) *CRA Annual Report to Parliament 2006-2007*).

[300] Australian Taxation Office (2007) *Commissioner of Taxation Annual Report 2006–07;* Australian Taxation Office (2008) *Taxation Statistics;* Turner, L. & Apelt, C. (2004) *Globalisation, Innovation and Information Sharing in Tax Systems: The Australian Experience of the Diffusion and Adoption of Electronic Lodgement*

[301] The Australian Electronic Lodgment System was developed in 1989 as a batch filing protocol that integrated with the practice management software used by Tax Agents, allowing them seamless lodgment as part of their internal work processes. With the combined ELS and e-Tax electronic filing programs, over 80% of all filings are now done electronically and this continues to grow year-on-year. (Australian Taxation Office (2008) *Taxation Statistics*)

8.2.2 Internet Adoption

Internet usage is comparable among the selected countries.

The level of Internet usage is closely correlated with electronic filing adoption within a country. Each of the three countries selected for comparison have Internet adoption rates comparable to those in the United States. Table 8-3 summarizes the population, number of Internet users, and the percentage of each country's population that uses the Internet[302].

Table 8-3 Internet Usage in the United States, the United Kingdom, Canada, and Australia (as of 2007)

Country	Total Population	Internet Adoption	Adoption
United States	301,139,947	215,088,545	71%
United Kingdom	60,776,238	40,362,842	66%
Canada	33,390,141	22,000,000	66%
Australia	20,434,176	15,504,532	76%

8.2.3 Tax System Complexity

There is no commonly accepted measure of tax system complexity across the four countries compared. Two data points — the number of pages of primary tax legislation and the percentage of returns filed by preparers — offer limited insight into the comparison of tax code complexity and the level of difficulty associated with completing an individual tax return. Since the definition and role of preparers varies by country, and some countries' tax laws are supplemented by regulations, these are rough indicators at best.

Table 8-4 compares the percentage of returns prepared by third parties – the definitions and roles of which vary – in the United States, the United Kingdom, Canada, and Australia. In each of the countries selected for comparison, a large percentage of individual taxpayers rely on the assistance of a third party to help them prepare and file their tax returns.

Table 8-4 Percentage of Preparer-Filed Returns for Selected Countries

Country	Preparer-Filed Returns
United States[303]	58%
United Kingdom[304]	53%
Canada[305]	48.6%
Australia[306]	72.8%

Table 8-5 compares the United States, the United Kingdom, Canada, and Australia on the basis of global Gross Domestic Product (GDP) rank, GDP, and the number of pages of

---

302 Internet World Stats (2008) *Internet World Stats Usage and Population Statistics*
303 IRS (2007) *The 2007 Taxpayer Assistance Blueprint, Phase 2* p. 27
304 United Kingdom Parliament House of Commons (2007) *Testimony on UK Tax Returns* p. 4
305 Canada Revenue Agency (2008) *Electronic Filing for Tax Preparers*
306 Australian Taxation Office (2007) *Community Perceptions Survey 2007* p. 133

primary tax legislation (as a proxy for tax system complexity)[307]. As of 2007, the United Kingdom had the longest national tax code in the world because the Chancellor's 2007 Finance Bill brought the code up to just short of 10,000 pages[308].

Table 8-5 Tax System Complexity for Selected Countries (as of 2006)

Country	GDP Rank	GDP ($ Millions)	Pages of Tax Law
United States	1	11,711,834	5,100 [a]
United Kingdom	4	2,124,385	8,300 [b]
Canada	9	977,968	2,440
Australia	13	637,327	7,750

Notes: (a) Considering tax regulations in addition to tax law, the number of pages for the United States increased from 40,500 in 1995 to 66,498 in 2006[309]. (b) 2007 figure: 10,000.

The remainder of this Chapter takes a more detailed look at each of the three countries described here, providing a high-level overview of each country, including its tax systems for filing individual income tax returns, filing options and features, electronic filing history and adoption, and the role of third parties.

8.3 United Kingdom Electronic Filing Summary

The primary tax authority in the United Kingdom is Her Majesty's (HM) Revenue & Customs (HMRC), formed in 2005 following the merger of the Inland Revenue and HM Customs and Excise Departments. HMRC responsibilities include the following[310]:

- Collect and administer direct taxes paid by taxpayers or their businesses on money earned, Capital Gains Tax, Corporation Tax, Income Tax, Inheritance Tax, and National Insurance Contributions.
- Collect and administer indirect taxes paid by taxpayers or their businesses on money spent on goods or services.
- Collect and administer Excise duties, Insurance Premium Tax, Petroleum Revenue Tax, Stamp Duty, Stamp Duty Land Tax, Stamp Duty Reserve Tax, and Valued Added Tax (VAT).
- Pay and administer Child Benefits and the Child Trust Fund and Tax Credits.
- Collect Environment Taxes, enforce the National Minimum Wage, and service student loans.

The United Kingdom tax year runs from April 6th of one year through April 5th of the following year, and is referred to using both the start and end calendar years.

The two major approaches to individual tax assessment and filing in the United Kingdom, Pay As You Earn (PAYE) and Self-Assessment (SA), are discussed below.

Pay As You Earn (PAYE)

Most employees pay their taxes automatically by having income tax withheld from their wages as they are paid, similar to the United States. Under the PAYE program, tax is withheld from an employee's earnings by the employer and paid to HMRC. The United

---

[307] World Bank (2008) *Paying Taxes 2008: The Global Picture* p. 17
[308] AccountingWeb (2007) *UK Now Has Longest Tax Code in the World*
[309] Edwards, C. (2007) *The Federal Tax Gap* p. 1
[310] HM Revenue & Customs (2007) *About Us*

Kingdom differs from the United States in the way the withholding amount is determined. HMRC sets the rate based on previous year's earnings and creates an alphanumeric code that is included on paychecks and end-of-year earnings summaries. The earnings summary document (called a P60) is the equivalent of a W-2 in the United States.

If the PAYE code is correct — meaning the income tax due matches the amount withheld by the employer — no further action is required by taxpayers to comply with their tax obligations[311]. In this sense, the PAYE program is comparable to the "pre-filled" tax returns used in other countries or the ReadyReturn method used in California. However, if HMRC provides an incorrect PAYE code, the taxpayer must file an SA tax return (see below). In 2005, PAYE coding accuracy was 73.3%, and the estimated number of SA taxpayers affected in 2004– 2005 by coding errors was 1.4 million[312].

Self-Assessment (SA) Tax Return Filing

A minority of taxpayers whose situations are too complex to be addressed solely with PAYE — usually those who are self-employed or have multiple sources of income — file an income tax SA to reconcile their tax obligations. Taxpayers use the SA to document individual income earned and capital gains and to claim tax allowances or reliefs.[313]

Taxpayers are then required to make any payment by one of two due dates: for tax year 2007–2008 onward, returns submitted on paper must be sent by 31 October, though payment is not due until 31 January. As an incentive to file electronically using the FBI program, the deadline for online filers to submit their SA returns is extended to 31 January.[314]

HMRC collects £16 billion a year from Income Tax SA[315].

8.3.1 Filing Options and Features

HMRC's web site offers downloadable forms as well as an online preparation service at no charge.

For PAYE, tax payments are handled through the employer with no action required by the taxpayer. SA tax returns can be filed on paper or online using the FBI program. Unlike the IRS, HMRC provides its own free tax filing service through HMRC web site, which automatically calculates any refund or tax due and provides acknowledgment of receipt. HMRC's web site also provides downloadable SA forms for paper SA filers and instructions in Portable Document Format (PDF) format.

HMRC offers an extension of the tax filing period for those submitting their returns via the FBI service. Starting in tax year 2007–2008, returns submitted on paper must be sent in by 31 October; online return filers are given until 31 January. After April 2008, it

---

[311] House of Commons Committee of Public Accounts (2006) *Filing of Income Tax Self Assessment Returns: Twenty-third Report of Session 2005–06* p. 14

[312] Note that for employees or pensioners with PAYE tax underpayments of up to £2,000, HMRC usually provides a PAYE coding adjustment without the need for a self-assessment tax return.(HM Revenue & Customs (2008) *Introduction to Self Assessment*)

[313] HM Revenue & Customs (2008) *Introduction to Self Assessment*

[314] HM Revenue & Customs (2008) *Introduction to Self Assessment*

[315] House of Commons Committee of Public Accounts (2006) *Filing of Income Tax Self Assessment Returns: Twenty-third Report of Session 2005–06* p. 5

will be possible to amend a 2007–2008 return online using either third party software or HMRC software.[316]

Starting in April 2008, the United Kingdom will no longer accept computer-prepared returns filed on paper — what the IRS calls V-Coded returns.

To encourage greater adoption of online filing, beginning in April 2008, HMRC will no longer accept computer-prepared SA returns printed out on paper (i.e., returns prepared using third party tax software and printed out on paper, equivalent to V-Coded returns in the United States)[317]. This new mandate was based on recommendations from the 2006 Lord Patrick Carter review of HMRC online services[318]. As a result of this policy decision, preparers will either have to file applicable forms online or prepare paper forms manually (not on computer). There are very few exceptions, affecting less than 1% of filers[319].

8.3.2 Electronic Filing History and Adoption

The United Kingdom is still making progress with electronic filing despite its technical challenges.

In 1998, HMRC included the future capability for citizens to electronically file tax returns in its modernization strategy, and in 1999, Gordon Brown (then Chancellor of the Exchequer) confirmed the development of electronic filing as part of the government's commitment to e-government services[320]. By 2001, United Kingdom citizens were able to file their own tax returns online.

Online delivery of services and systems remains an important theme in HMRC business and information technology strategies: "...enabling [HMRC] customers to use their channel of choice but encouraging the use of online services, as these are [HMRC's] lowest cost channel, by designing easy to use on line products"[321].

Currently, HMRC's electronic filing goal is considerably lower than the US goal of 80%. The target for tax year 2007–2008 was 35% of SA returns. HMRC achieved this goal 1 year early — by tax year 2006–2007 — with 36% of SA returns filed electronically [322]. In the 2006–2007 tax year almost 2.9 million of the total of approximately 9 million SA returns were filed online, a figure expected to increase to 4 million in the current tax year[323]. Some 150,000 returns were received by the system in the 24-hour run-up to the 31 January 2007 deadline. During the filing peak, the system processed more than 6,000 returns per hour[324]. There has been a significant increase in online filing by preparers, with 29.7% more returns being filed online during 2007–2008.

---

[316] HM Revenue & Customs (2008) *Self Assessment: the Tax Return 2007/08*
[317] United Kingdom (2007) *Paper Substitutes for SA Returns* p. 1
[318] Carter, P. (2006) *Review of HMRC Online Services* p. 11
[319] HRMC will provide a list of exception cases for 2008. Only for these exceptional cases will a filer be able to use tax software to print out an "identical" return and file it manually. Identical returns must be printed in grayscale or color – not black and white. HMRC has stated that it will monitor the use of these identical returns and will withdraw this limited concession to paper filing if it is abused. However, some practical difficulties remain. For example, filers may not know that they are exceptions. For security reasons, some clients may not wish to tell their preparers that they are exceptions and HMRC will not be able to tell the tax preparers whether or not a particular client actually is an exception.(World Opportunities & Services - UK (2008) *"Important UK Tax Changes for April 2008"*)
[320] Cabinet Office (2008) *Modernising Government;* Hansford, A. *et al.* (2004) *IT Adoption Strategies and their Application to E-Filing Self-Assessment Tax Returns: The Case of the UK*
[321] HM Revenue & Customs (2006) *Information Management Solutions (IMS): Information Systems Strategy* p. 3
[322] HM Revenue & Customs (2004) *SR 2004 - Departmental Investment Strategy 2005-06 to 2007-08*
[323] TimesOnline (2008) *Havoc on Deadline: the Great Tax Crash*
[324] epractice.eu (2007) *On-line Submission of Tax Declarations Reaches New High in UK*

HMRC has experienced a number of significant technical challenges while implementing online Self Assessment filing services — the press has covered several highly visible incidents involving slow system performance and crashes during the annual filing season. The security of the online filing process has also been a concern for high-profile users.

Operational Challenges

In his 2006 HMRC report on the United Kingdom's electronic filing program, Lord Carter recognized that adoption had been slow and lagged behind other countries pursuing similar goals. He referred to similar low usage of online services by businesses and their preparers and pointed out that challenges to adoption "may have been exacerbated by some high profile problems with HMRC online services at peak times."[325]

HMRC online tax filing services for both individuals and businesses have faced challenges in terms of infrastructure reliability since their inception[326]. Examples include the following:

- In May 2007, HMRC was forced to extend the SA online filing deadline and mitigate penalties for late filing for PAYE, after preparers complained that the online service was so slow that the only way to file a return was at 4 a.m. or on weekends. [327]
- On January 31, 2008, hundreds of thousands of HMRC customers were given an extra 24 hours to file their returns online for the 2007–2008 filing season after HMRC's computer filing system crashed hours before the 31 January filing deadline[328]. The web site failed to work for nearly 6 hours on the busiest day of the tax year[329].
- HMRC itself at one point admitted that thousands of "high-profile" people (members of Parliament, celebrities, and the Royal Family) had secretly been advised against using it because its system was not secure enough[330].

A 2006 report by Lord Carter addressing the state of HMRC online services identified some of the problems, including the following[331]:

- In 2004–2005, many individuals completing the online exit poll for SA Online were critical of service performance during peak filing periods, despite the fact that 88% were "satisfied" or "very satisfied" with the service.
- The paper processes that clients used to notify HMRC that their preparers were authorized to act for them also caused difficulties. Preparers indicated that HMRC's records of the authorizations were sometimes out of date, with the result that they were unable to access some of their clients' data online.
- Preparers felt that HMRC's online services had not always been designed with their needs in mind. For example, they sometimes need to send additional documents with their clients' returns, but the SA Online service did not allow attachments to be sent.
- Software developers were disappointed that HMRC and the Government Gateway had not provided full end-to-end test services and that the test services provided were often implemented too late to ensure that their products would meet HMRC standards and pass the validation tests.

---

[325] Carter, P. (2006) *Review of HMRC Online Services*
[326] Carter, P. (2001) *Review of Payroll Services*
[327] AccountingWeb (2007) *PAYE: HMRC Allow Filing Extension And Agree Penalty Mitigation*
[328] TimesOnline (2008) *Havoc on Deadline: the Great Tax Crash*
[329] AccountingWeb (2008) *UK Self Assessment Tax System Recovers from Crash, Extra Day Given to Filers*
[330] TimesOnline (2008) *Havoc on Deadline: the Great Tax Crash*
[331] Carter, P. (2006) *Review of HMRC Online Services*

Users of United Kingdom e-services are enthusiastic but concerned about system dependability.

UK Customer Satisfaction/Concerns with Electronic Filing

In 2006, HMRC collaborated with preparers on a survey of preparers' satisfaction with electronic filing[332]. While the survey indicated a high level of enthusiasm for e-services, it also underscored widespread concerns about HMRC's ability to deliver reliable, robust systems with sufficient capacity to cope with predictable and inevitable peaks. A summary of the results follows[333]:

- **Need for Improved Functionality** — 17.6% of respondents indicated that they used HMRC's online product and would welcome enhancement of the software to include more of the supplementary pages. The FBI system — unlike its predecessor, ELS — does not currently permit filing of previous years' returns, a drawback and key reason for the need for computer-printed paper returns beyond 2008.
- **Overly High Rejection Rate** — Too many SA returns submitted online using FBI were rejected. The rejection rate was higher than with ELS, and many of the reasons for rejection were unacceptable in a system that had been in existence for 5 years.
- **Ongoing Need for Paper Returns** — Respondents believed that paper returns will be needed beyond 2008 for several reasons:
  - General lack of confidence in HMRC's IT infrastructure.
  - FBI system's inability to accept returns from some taxpayers.
  - Need for evidence that a client has approved a return's full content.
- **Learning Lessons from the Past** — The results of the survey reinforced the importance of the Carter Principle, set out in Lord Carter's report, which stated: "as part of their work to deliver robust, high capacity services, HMRC should build in more rigorous testing…and if any tests are not successful the measures relating to that service should be deferred. We believe that nothing would do more damage to the potential success of the Carter program than the premature launch of services that are not fit for purpose"[334].

Figure 8-1 displays the survey responses for some of the factors preparers saw as inhibiting electronic filing of personal tax returns[335]:

---

[332] HMRC has a unit specifically representing and championing the interest of individual customers with the rest of the department. Within the customer units is a cross-disciplinary customer insight team. The team is intended to become a centre of expertise, creating best practices and establishing a central repository of customer data to prevent duplication of effort. (HM Government (2007) *Service Transformation Agreement* p. 47)

[333] United Kingdom (2006) *E-Filing of Personal Tax Returns Survey: Collective Views of the Association of Accounting Technicians, the Association of Chartered Certified Accountants, the Association of Taxation Technicians, the Chartered Institute of Taxation, the Institute of Chartered Accountants in England & Wales, the Institute of Chartered Accountants in Ireland, and the Institute of Chartered Accountants of Scotland* p. 25

[334] Carter, P. (2006) *Review of HMRC Online Services* p. 12

[335] United Kingdom (2006) *E-Filing of Personal Tax Returns Survey: Collective Views of the Association of Accounting Technicians, the Association of Chartered Certified Accountants, the Association of Taxation Technicians, the Chartered Institute of Taxation, the Institute of Chartered Accountants in England & Wales, the Institute of Chartered Accountants in Ireland, and the Institute of Chartered Accountants of Scotland* p. 291

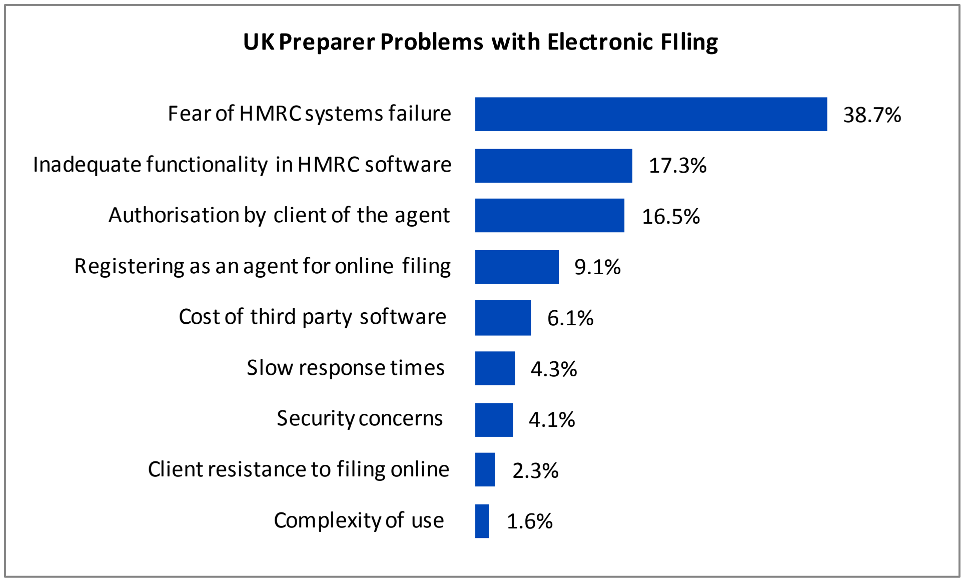

Figure 8-1 Preparer Problems with Electronic Filing in the United Kingdom (as of 2006)

8.3.3 Role of Third Parties

Third parties in the United Kingdom tax system include accountants, auditors, tax advisers, bookkeepers, payroll agents, and tax consultants, which are authorized by HMRC and can register as Accountancy Service Providers (ASP)[336]. There is also a tax return preparation software vendor industry.

HMRC maintains a Working Together web site that provides information and guidance to preparers and communicates information about upcoming workshops and other events involving preparers. As of January 2006, 17,927 preparers had registered to electronically file on behalf of their clients. For the 2004–2005 tax year, preparers filed approximately 600,000 returns on behalf of their clients[337]. By the 2006–2007 tax year, the number of individual SA returns filed by preparers had risen to 4,521,689 (this is 53% of the total of 8,534,084 SA forms filed for individuals in that tax year).

In the process of promoting electronic filing, the HRMC has placed an emphasis on communicating with third parties. Following Lord Carter's 2006 Review of HMRC online services, HRMC consulted widely with its customers, delivering presentations to accountants and tax professionals to raise awareness of online services, to communicate the benefits of dealing with HMRC online, and to solicit ideas and feedback. HMRC also established a working group to facilitate communication among

[336] In order to register for each online service the Agent is required to have a different Agent Reference Number. For the Self Assessment (SA) Online Service, they must apply through their local tax office. The agent's client can still register as an Individual or Organization to use HMRC online services. A client authorizes their Agent to act on their behalf by completing the relevant authorization form and sending it to the address provided on the form (for some services, e.g., VAT, can be completed online). HMRC gives the agents some latitude in preparing their clients' returns.

[337] Hansford, A. *et al.* (2004) *IT Adoption Strategies and their Application to E-Filing Self-Assessment Tax Returns: The Case of the UK* p. 9

software vendors, preparers, and HMRC on issues related to the implementation of the Carter report recommendations.[338]

According to HMRC, for preparers who are new to the online filing system, HMRC offers a series of introductory workshops, various printed materials, and a help line. In addition, there is a preparer zone on HMRC's web site specifically for tax professionals.[339]

"The comparison with the US experience suggests that the free Government service provided by HMRC has suppressed the take up rate of online filing." — All Party Parliamentary Taxation Group, May 2008

A significant difference between third parties in the United Kingdom and United States tax systems is the much more prominent role of the US private sector in the online tax filing system. A May 2008 report, *The Future of Income Tax Administration in the UK*, by the All Party Parliamentary Taxation Group pointed out this distinction and linked it to the US *e-file* rate: "Not only has the US Internal Revenue Service (IRS) avoided having to provide its own filing service, many more taxpayers in the US file online at a fraction of the cost to the Department"[340].

Reinforcing findings from an earlier review of HMRC's online services by Lord Carter, the All Party Parliamentary Taxation Group report recommended the following:

> HMRC should urgently review the success that has been achieved in the US to consider whether it would be more beneficial to HMRC and taxpayers to leave software provision to the software industry and focus HMRC's resources on the infrastructure for exchanging electronic [data] with customers, agents and other intermediaries. The comparison with the US experience would suggest that the free Government service provided by HMRC has suppressed the take up rate of online filing.[341]

8.4 Canada Electronic Filing Summary

In Canada, the tax agency is directed by an oversight management/advisory board. Federal taxes are collected by the Canada Revenue Agency (CRA), formerly known as Revenue Canada or the Canada Customs and Revenue Agency. Under its Tax Collection Agreements, CRA collects and remits the following to the provinces:

- Provincial personal income taxes on behalf of all provinces except Quebec so that individuals outside of Quebec file only one set of tax forms each year for their Federal and provincial income taxes.
- Corporate taxes on behalf of all provinces except Quebec and Alberta.
- Provincial sales taxes in New Brunswick, Nova Scotia, and Newfoundland and Labrador.

The Canadian tax year runs from January 1st to December 31st of the same year (equivalent to a calendar year).

The Ministère du Revenu du Québec collects the Goods and Services Tax (GST) in Quebec on behalf of the Federal government and remits them to Ottawa.

In Canada, both the Federal and provincial governments impose income taxes on individuals, and these are the most significant sources of revenue for those levels of government, accounting for more than 40% of tax revenue. The Federal government

---

338 HM Revenue & Customs (2007) *Departmental Autumn Performance Report 2007* p. 13
339 Banyard, S. (2008) *"Advice for Agents" Podcast: Paul Hartigan Interviews Stephen Banyard of HMRC*
340 All Party Parliamentary Taxation Group (2008) *The Future of Income Tax Administration in the UK* p. 6
341 All Party Parliamentary Taxation Group (2008) *The Future of Income Tax Administration in the UK* p. 6

charges the bulk of income taxes, with the provinces charging a somewhat lower percentage. Federal and provincial income tax rates are shown on the CRA web site[342].

8.4.1 Filing Options and Features

Tax returns can be filed on paper tax forms or electronically using CRA-approved software. As described in Table 8-6, CRA offers free electronic filing through one of three vehicles: NETFILE (for individuals), EFILE/EFILE Plus (for third parties), and TELEFILE (for individuals). In addition, individual taxpayers can access and manage their tax data via the CRA My Account capability on the CRA web site[343].

Table 8-6 Free Electronic Tax Filing Services Offered by Canada Revenue Agency

Program	Description
NETFILE	Electronic filing service designed for individual taxpayers only, for filing their own personal income tax and benefit returns with the CRA.
EFILE	EFILE On-Line allows preparers to transmit their clients' returns individually over the Internet. Acknowledgment of receipt of the electronic return is immediate.
EFILE Plus	EFILE On-Line Plus allows preparers to transmit from 1 to 60 of their clients' returns at the same time over the Internet. Acknowledgment of a batch transmission takes a few hours.
TELEFILE	TELEFILE is an interactive computer program that allows taxpayers, if eligible, to electronically file their tax returns for free using a touch-tone telephone. Using the service requires a touch-tone telephone.

In addition to these electronic filing methods, the CRA uses Magnetic Ink Character Recognition (MICR) technology for some paper forms[344]. This is comparable to the US situation in which some forms cannot be *e-filed*. Unlike the United States, where even forms that cannot be *e-filed* are available online for downloading, CRA's use of MICR technology means that these forms cannot be electronically downloaded and printed because consumer-grade printers do not support MICR[345].

---

[342] Canada Revenue Agency (2008) *What Are The Income Tax Rates In Canada For 2008?*

[343] The individual taxpayer can access their tax data via the CRA My Account capability. With My Account the taxpayer can see information about their: Tax refund or balance owed; direct deposit; Registered Retirement Savings Plan (RRSP), Home Buyers' Plan, and Lifelong Learning Plan; tax returns and carryover amounts; disability tax credit; account balance and payments on filing; installments; Canada Child Tax Benefit and related provincial and territorial programs payments, account balance, and statement of account; Goods and Services Tax (GST)/Harmonized Sales Tax (HST) credit and related provincial programs payments, account balance, and statement of account; Universal Child Care Benefit payments, account balance, and statement of account; Children for which you are the primary care giver; Working Income Tax Benefit advanced payments; pre-authorized payment plan; authorized representative; and addresses and telephone numbers. My Account also allows taxpayers to manage their personal income tax and benefit account online: changing return(s) information; changing address or telephone numbers; applying for child benefits; arranging direct deposits; authorizing their representative; setting up a payment plan; and formally disputing assessments or determinations. It is possible to see information on the My Account pages before the official document or documents from the CRA arrive. For example, if a return is reassessed, the details of the reassessment may be available on My Account before they receive their Notice of Reassessment in the mail. (Canada Revenue Agency (2008) *My Account for Individuals*)

[344] Canada Revenue Agency (2008) *Forms Available Only in Paper Format*

[345] Certain payment forms and remittance vouchers are not available in a computerized format due to the technical requirements of the Magnetic Ink Character Recognition (MICR) technology used on these forms. The CRA states that this is because the ink or toner is magnetized, so they can provide these forms only in

NETFILE for Individual Filers

Individual taxpayers who prepare their personal income tax and benefit returns themselves and wish to send them to CRA via the Internet must use NETFILE. This online system requires the use of a security code found on the mailing label affixed to the taxpayer's T1 (Income Tax and Benefit Return) preparation package. To prevent preparers from using the NETFILE service, the CRA has set a limit of 20 returns that can be prepared with NETFILE-certified tax return preparation software. Software developers must respect this limit for their software to be certified for NETFILE use[346]. CRA randomly asks electronic filers to send in supporting documentation for their returns.[347]

A description of NETFILE characteristics follows:

- **Benefits** — CRA claims NETFILE benefits such as security and confidentiality, quick refunds (usually within 8 business days), greater accuracy (fewer transcription errors occur when tax return preparation software is used), convenience (nothing to be mailed and no receipts to be submitted unless requested), and immediate acknowledgment of receipt of tax return[348]. The benefit of quick turnaround for refunds was confirmed in processing the 2004 tax year returns, when the CRA surpassed its own performance target of 2 weeks for processing electronically filed returns by processing returns within 1.85 weeks. The paper-filed return processing target was 4 to 6 weeks, 3.57 weeks actual[349].
- **Cost** — Although NETFILE is free of charge, taxpayers who wish to use NETFILE must purchase a web application or a tax return preparation software package marketed by the private sector and certified by the CRA.
- **Eligibility** — Although eligibility is broad, some citizens are excluded, including those in bankruptcy, non-residents of Canada, and those with income from a business with a permanent establishment outside their province or territory of residence. NETFILE cannot be used to send an amended tax return.[350]

EFILE and EFILE Plus for Preparers

The CRA offers a service for third party filers called EFILE that allows registered preparers to file current-year individual tax returns using one of two methods of electronic transmission:

---

preprinted format. If these forms were printed from the Internet or computer software, they would not be acceptable for payments at financial institutions. As a result, various forms including the non-personalized GST/HST (Goods and Services Tax/Harmonized Sales Tax) return are only available in pre-printed format. (Institute of Chartered Accountants of Alberta and Institute of Chartered Accountants of Saskatchewan (2006) *Income Tax Questions*)

[346] The CRA has determined that a limit of 20 returns, whether printed or filed using NETFILE, is appropriate and sufficient for a NETFILE software product. This allows even a large family to share one software product to prepare and file their tax returns. Canada Revenue Agency (2008) *Certified Software for the 2008 NETFILE Program (2007 Tax Return)*

[347] Wong, C. (2006) *CRA Looks to Have More Than Half of Returns Filed Electronically*

[348] Le Goff, P. (2005) *Individual Income Tax Returns: Taxpayers Pay While The Government Saves* p. 1

[349] Canada Revenue Agency (2006) *CRA Annual Report to Parliament 2005-2006* p. 44

[350] Wong, C. (2006) *CRA Looks to Have More Than Half of Returns Filed Electronically*

- The EFILE On-Line software program allows transmission of clients' returns individually over the Internet. The preparer receives an acknowledgment of the individual return receipt immediately.
- The EFILE On-Line Plus application is an enhanced electronic filing software program that allows the preparer to transmit from one to 60 returns electronically at one time (i.e., in a batch) via the Internet; acknowledgment of receipt of the return takes a few hours.

To file electronically using either EFILE On-Line or EFILE On-Line Plus, the preparer needs CRA-certified tax return preparation software. In addition, the client has to complete and sign an authorization (Form T183, Information Return for Electronic Filing of an Individual's Income Tax and Benefit Return) before the preparer can electronically file the return.[351]

TELEFILE for Filing by Telephone for Eligible Individual Filers

The CRA also offers TELEFILE, an interactive computer program that allows eligible taxpayers to electronically file their tax returns for free using a touch-tone telephone. Besides using a touch-tone telephone, the service requires the taxpayer's social insurance number (SIN), a personalized access code, and a completed tax return. If taxpayers cannot use the TELEFILE service due to a disability or lack of access to a touch-tone telephone, they are directed to a toll-free telephone number for assistance.[352]

TELEFILE is designed for taxpayers with the most common types of income tax information, such as employment income, pension income, interest income, registered pension plan contributions, and charitable donations. The TELEFILE system does not accept more complex tax information, such as self-employment income, capital gains, and rental income. First-time filers are not eligible to use TELEFILE. [353]

The TELEFILE service is also available to taxpayers who receive the tax package for computer software users and who would otherwise receive one of the T1 special forms and guidance. These packages also contain a personalized access code that can be used for both the TELEFILE and NETFILE services and information about the TELEFILE service.[354]

Canada's TELEFILE capability is well promoted, with a prominent entry on the CRA web site, which points to benefits similar to those for electronic filing — security, quick refund (within 2 weeks), convenience, and no cost to taxpayers[355].

TELEFILE was introduced in 1998 and had 700,000 participants in 1999[356]. In 2006, there were 585,762 TELEFILE users, and in 2007, 510,438, a drop of 12.86%[357]. Additional information concerning the drop in TELEFILE use between 2006 and 2007 may be a topic of future research, because no readily available information was found.

---

[351] Canada Revenue Agency (2008) *Electronic Filing for Tax Preparers*
[352] Canada Revenue Agency (2007) *About the TELEFILE service*
[353] Canada Revenue Agency (2007) *About the TELEFILE service*
[354] Canada Revenue Agency (2007) *About the TELEFILE service*
[355] Canada Revenue Agency (2008) *Sending a Tax Return*
[356]Inland Revenue (2000) *Information Age Government: Benchmarking Electronic Service Delivery* p. 140
[357] CBCNews.ca (2007) *E-filing Running Ahead of Last Year, Tax Department Says*

Canada has an Internet-literate and Internet-experienced population.

8.4.2 Electronic Filing History and Adoption

The adoption of electronic filing of tax returns in Canada mirrors the overall Canadian electronic services experience. In 1997, Canada announced its aim to become the most connected nation on earth. Through an initiative called Connecting Canadians, the Federal government provided access to the best available communications technologies, including the Internet, in all areas of the country. Canadians have subsequently become among the world's most enthusiastic users of the worldwide web. A 2005 Canadian government survey revealed that 72% of Canadians had Internet access at home, and 71% of these had used a Federal government web site in the previous 12 months.[358]

Building on the Connecting Canadians program, in 1999 the government launched the Government On-Line (GOL) initiative to make the 130 most commonly used government services available online, anywhere, anytime. As of 2005, individual Canadians and businesses could access all of the promised 130 government services online, in English or French.[359]

The CRA electronic filing program for tax returns was one outcome of the GOL initiative. When electronic filing over the Internet was first offered, the CRA received 443,000 individual tax returns via this channel (representing 2% of the T1 [Income Tax and Benefit Return] individual tax returns); by 2004, it had received close to 4 million returns via the Internet. A capability for filing business tax returns via the Internet began in 2004.

Canadian electronic filing figures indicate some of the same trends as in the United States, including the common practice (by both individuals and preparers) of printing out a paper version of a tax return prepared using tax return preparation software (V-Coding in the United States).

The following table and figures provide additional insight into Canadian filing trends. Table 8-7 displays the 2006 figures for paper and electronic filing, including the number of software-prepared returns printed out for submission[360].

---

[358] Canada (2007) *Service Canada – A New Paradigm in Government Service Delivery* p. 1
[359] Canada (2007) *Service Canada – A New Paradigm in Government Service Delivery* p. 1
[360] Canada Revenue Agency (2008) *Electronic Filing for Tax Preparers*

Table 8-7 Canadian Filing Methods (as of 2006)

Method	Millions of T1 Returns
Paid Preparer	
EFILE	8.8
V-Coded	2.6
Paper	0.1
Self-Prepared	
NETFILE	4.1
TELEFILE	0.5
V-Coded	2.8
Paper	4.8
TOTAL	23.7

Figure 8-2 shows the trend in electronic filing in Canada from 1994 through 2006[361].

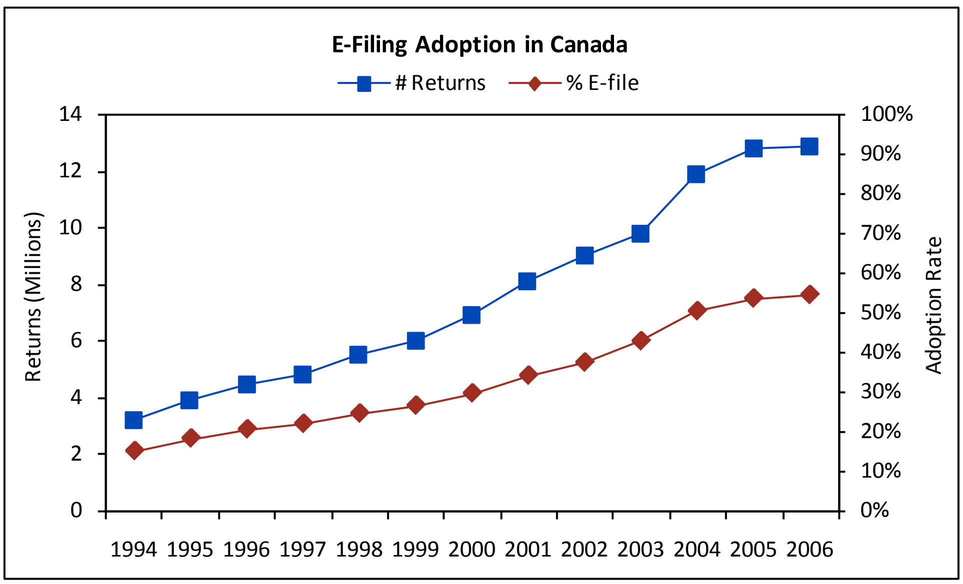

Figure 8-2 Canadian Electronic Filing Trends (1994–2006)

[361] Binder, M. (2007) *Canada's Challenge: The Network Economy and The Wireless Revolution*

Table 8-8 shows electronic filing statistics for processing that occurred in 2006 and 2007, covering returns filed for tax years 2005 and 2006, respectively[362].

Table 8-8 Canadian Revenue Agency Electronic Filing Statistics (2006–2007)

Program	2006	2007	Change
EFILE	7,991,399	8,392,061	+5.01%
NETFILE	3,781,706	3,998,742	+5.74%
TELEFILE	585,762	510,438	-12.86%
Paper	11,182,330	10,704,861	-4.27%
TOTAL	23,541,197	23,606,102	+0.28%

Although many Canadians still prefer to file paper returns by regular mail, these numbers are decreasing.[363]

8.4.3 Role of Third Parties

Canadian preparer electronic filing is more than double that of individuals.

Third parties play a key role in Canadian electronic filing of taxes because taxpayers must use third-party–provided software to self-prepare their returns. In addition, in 2006, 48.6% of Canadian individual taxpayers used third party preparers[364].

As discussed previously, preparers cannot use the NETFILE service for individual tax returns; they must use EFILE to electronically file returns on behalf of others. The EFILE service requires preparers to sign in with their own user ID and password. A preparer who wishes to use EFILE must first register online[365]. Before a preparer can file on another's behalf, the preparer needs specific authorization from the client. This authorization does not permit a preparer to file on a client's behalf using NETFILE.[366]

Although Canada has different private professional organizations for chartered accountants and tax professionals, there is no equivalent to the enrolled agent concept as practiced in the United States. Virtually anyone can register as a third party preparer via the CRA web site and use EFILE On-Line or EFILE On-Line Plus to represent another party[367]. According to the CRA web site, any firm, organization, or individual who wants to provide electronic filing services to members of the public, their clients, or their employees can apply. There is an EFILE Registration On-Line form to complete; it is a one-time application, but in some situations the preparer will have to submit revised information. There is no fee for processing the application.[368]

Canada does regulate "tax-discounting services." Tax preparation firms that provide early tax refunds (similar to refund anticipation loans, or RALs, in the United States) are constrained in the fees they can withhold by the Tax Rebate Discounting Act, which regulates tax discounting in Canada.[369]

---

[362] CBCNews.ca (2007) *E-filing Running Ahead of Last Year, Tax Department Says*
[363] CBCNews.ca (2007) *E-filing Running Ahead of Last Year, Tax Department Says*
[364] Canada Revenue Agency (2008) *Electronic Filing for Tax Preparers*
[365] Canada Revenue Agency (2008) *EFILE New Registration*
[366] Canada Revenue Agency (2008) *Certified Software for the 2008 NETFILE Program (2007 Tax Return)*
[367] Canada Revenue Agency (2008) *EFILE for Electronic Filers*
[368] Canada Revenue Agency (2008) *EFILE New Registration*
[369] Canada Revenue Agency (2008) *Information for Discounters*

8.5 Australia Electronic Filing Summary

The Australian Taxation Office (ATO) is the Australian government's principal revenue collection agency and a payer of government funds[370]. The ATO also has regulatory responsibility for aspects of superannuation (retirement pensions). The ATO administers legislative systems that fund public goods and services, safeguard retirement incomes, and support social and economic policy, as outlined in the Australian Treasury Portfolio Budget Statements.

The ATO administers the tax system through the income tax (including Pay as you go [PAYG] withholding and installments and capital gains tax), Goods and Services Tax (GST), and other taxes[371]. As part of Australia's largest tax reform, the New Tax System, which went into effect on 1 July 2000, the GST replaced the wholesale sales tax and state transaction taxes, and personal income taxes were substantially reduced[372].

For individual income taxes there are two main systems — PAYG and Personal Income Tax Returns. The former is filed by the employer; the second is filed by the individual or a third party preparer.

Pay as you go (PAYG)

Most Australian employees have their income taxes withheld from their paychecks as they are paid during the tax year, similar to employee withholding in the United States and the PAYE program in the United Kingdom[373].

Personal Income Tax Returns

The Australian financial year or income tax year runs from July 1st of one year to June 30th of the following year, and is usually referred to by the year it ends in.

All those with income not taxed at the source (by employers [PAYG]) are liable for income tax; a small threshold applies[374]. As the largest group in the tax system, the individual taxpayer segment includes mostly salary and wage earners and contributes around 40% of Australian tax revenue[375]. For the 2006 financial year, 11.5 million Australian individuals filed tax returns[376]. These individuals represented 55.8% of the total estimated Australian population of 20.6 million as of 30 June 2006[377].

---

[370] Australia raises the majority of its taxation revenue (62.8% in 2004) from direct taxation, which is levied on incomes: wages, salaries, payrolls, and profits. This compares with the United States, which raised 69.6% of its (2004) taxes through direct taxation. The remaining 37.2% of Australia's taxation revenue is derived from indirect taxation, including the goods and services tax (value added tax), excise and customs duties, and property taxes. The OECD average is 38.6%. Australia (2008) *Appendix G: Australia's Tax System - Australia's Tax System Compared with the OECD*

[371] Other taxes include: Fringe benefits tax, wine equalization tax, luxury car tax, excise duty, fuel grants and benefit schemes, and Higher education funding (jointly). Australian Taxation Office (2007) *Commissioner of Taxation Annual Report 2006–07* p. 9

[372] Australia (2007) *Pocket Guide to the Australian Tax System* p. 1

[373] Australian Taxation Office (2008) *PAYG withholding (PAYGW) essentials*

[374] Organisation for Economic Co-Operation and Development (2004) *Tax Administration in OECD Countries: Comparative Information Series (2004)* pp. 38-41

[375] Australian Government: Inspector-General of Taxation (2008) *Appendix C - Overview of the Tax Administration System*

[376] Australian Taxation Office (2008) *Latest Taxation Statistics Released*

[377] Australian Bureau of Statistics (2008) *3101.0 - Australian Demographic Statistics, Sep 2007*

8.5.1 Filing Options and Features

Australian individual tax returns can be filed on paper, through a number of electronic options or using the phone. Table 8-9 provides a brief description of each filing option (both paper and electronic).

Table 8-9 Summary of Australian Filing Methods

Method	Description
TaxPack	Taxpayers can file returns through the mail by using TaxPack (a paper filing method). Most tax refunds or debts are issued within 6 weeks. TaxPack 2007 is available from news agents or can be ordered online or by phone.[378]
e-Tax	Electronic filing using ATO's free e-Tax software. The taxpayer can download the e-Tax software for free from the ATO web site.
Preparer	A taxpayer can file a return through a registered tax agent (a preparer) for a tax-deductible fee[379]. The return may be filed on paper or electronically.
Pre-Filled Returns	ATO pre-fills electronic returns with salary, wages, allowances, and other information when filing online.
Phone	The phone filing service is an option for those individuals who use the short version of the individual tax return.

In addition to electronic filing, the ATO offers online calculators and other electronic products to help taxpayers apply the law to their own tax situations. Examples include the "Do I Need to Lodge" tool, which helps taxpayers determine whether they need to file an income tax return, and the Simple Tax Calculator, which assists in calculating taxes owed[380]. There is no online access to account data for individual Australian taxpayers.

The ATO also provides assistance to low-income earners who need help with their tax returns through a free community service called Tax Help. About 1,400 volunteers in more than 800 locations across Australia provide this service from July to October[381].

Electronic Filing Using ATO's e-Tax Software

The ATO initiated a direct, electronic filing method for individual taxpayers through the e-Tax program in January 1997. It was one of the first applications in the world to be offered by a revenue service and one of the first of its type to use Public Key Infrastructure (PKI) technology and Internet transmission. The e-Tax program was developed to address concerns from a number of sources regarding complexity of tax legislation and complexity of the TaxPack (paper filing) documents and to take advantage of a general increase in community use of Internet services. The service is direct in that no third parties are involved in the process of transmitting returns to the ATO.

E-Tax was developed to be a free, easy-to-use software package for the 2.5 million individual taxpayers who prepare and file their own personal income tax returns. It is an electronic advancement of the paper-based TaxPack package of forms and guidance and

[378] Australian Taxation Office (2007) *Essential Info for Employees: It's Tax Time: What You Need to Know* p. 4
[379] Australian Taxation Office (2007) *Taxpayer Charter: Who Can Help with Your Tax Affairs* p. 3
[380] Australian Taxation Office (2008) *Do I Need to Lodge a Tax Return?*
[381] Australian Taxation Office (2007) *It's Tax Time: What You Need to Know*

complements the back-end system, the Electronic Lodgement System (ELS), used by third party preparers to file income tax returns.[382]

With built-in checks and calculators to ensure accuracy, the software provides an on-the-spot estimate of the tax refund or balance due. The 2007 version of e-Tax software permits users to download return data directly into their tax returns (e.g., interest paid from more than 20 participating banks and credit unions, dividends paid via three major share registries plus details of Centrelink and other government payments). Most tax refunds are issued within 14 days.[383]

An updated version of e-Tax was released in July 2008[384]. The standard processing time for returns filed through e-Tax is 2 weeks, compared with 6 weeks for paper returns[385].

Tax Agent Portal (For Third Party Preparers)

The ATO operates a Tax Agent Portal for registered preparers and their employees. The Tax Agent Portal is the preparers' secure gateway to ATO online services. Registered preparers can use the portal to accomplish the following[386]:

- View and update clients' registration details.
- Prepare, file, view, and print business activity statements for clients.
- View filing information.
- View client account information.
- Request refunds and credit transfers on behalf of clients.
- Send messages to the ATO on selected topics.

A 2006 ATO survey found that the Tax Agent Portal had a high satisfaction rating among preparers, with more than two-thirds (70%) of the preparers surveyed reporting that they found the Tax Agent Portal to be very useful. The individual functions viewed as being most useful were as follows[387]:

- **View Client Accounts** — 66% rated as very useful.
- **View Client Activity Statement** — 65% rated as very useful.
- **Add Client/Delete Client** — 51% rated as very useful.

Preparer use of the Tax Agent Portal continues to increase. In March 2007, 62% of preparers indicated that the Tax Agent Portal is their most frequently used channel for contacting the ATO[388]. The ATO notes that:

> The Tax Agent Portal is one of our biggest success stories. The Tax Agent Portal has revolutionized the way we work together. Over 80% of tax agents say they spend less time contacting [ATO] because of the portal. We have spent over $40 million on the Tax Agent Portal since 2002 when the portal was

---

[382] Australian Government: Information Management Office (2008) *E-government Benefits Agency Case Studies - Australian Taxation Office*
[383] Australian Taxation Office (2008) *E-Tax Essentials: E-Tax 2008*
[384] Australian Taxation Office (2008) *E-Tax Essentials: E-Tax 2008*
[385] Australian Taxation Office (2008) *Where's My Refund?*
[386] Australian Taxation Office (2008) *Welcome to the Tax Agent Portal*
[387] Australian Taxation Office (2008) *2006 Tax Agent Portal and Technology Survey*
[388] Australian Taxation Office (2007) *Commissioner of Taxation Annual Report 2006–07* p. 59

> first released. There have been nine updates with tax agents involved in making improvements for each release.[389]

For 2008, extra government funding will be used to enable e-Tax users and preparers to download more information to tax returns, including dividend information from share registries[390].

Pre-Filled Returns

The Australian Treasury plans to invest additional funding of $20 million in 2007–2008 to enable the ATO to expand its pre-filled electronic tax returns for about 9 million taxpayers. This measure is intended to make completing income tax returns significantly easier for the 80% of individual taxpayers who use e-Tax or file their returns through a preparer, allowing taxpayers to do no more than file their pre-filled returns electronically or provide only a few additional pieces of information to the pre-filled information to complete their returns[391]. The ATO will pre-fill electronic returns with the following information:

- Salary, wages, and allowances, where the employer has filed the employee's payment summary electronically with the ATO.
- Dividend and interest income and distributions from managed funds.
- Payments from Centrelink; the Department of Education, Science and Technology; and the Department of Veterans' Affairs.
- Medicare out-of-pocket expenses and private health insurance information.
- Higher Education Contribution Scheme and Higher Education Loan Program details.

Taxpayers with additional sources of income, such as rental income, capital gains, or foreign-source income, will need to augment their returns with that information, as do individuals whose employers have not filed payment summaries electronically with the ATO.

Filing by Phone

The phone filing service is based on the information in the short version of the individual tax return. The service is available 24 hours a day, 7 days a week, and taxpayers get an on-the-spot estimate of their tax refund or balance due, with a receipt number. The average time to file by phone is about 12 minutes; most refunds are issued within 14 days.[392]

8.5.2 Electronic Filing History and Adoption

Overall filing of individual tax returns grew by 2.4% for the 2006 financial year, and growth in returns filed by third party preparers increased by 2% that same year[393].

---

[389] Australian Taxation Office (2007) *A Long-Term Commitment to the Profession: Commissioner D'Ascenzo's Speech to the Chartered Institute of Management Accountants, Canberra*
[390] Australian Taxation Office (2007) *Commissioner of Taxation Annual Report 2006–07* p. 6
[391] Australian Government (2008) *Budget Paper No. 2, Part 2: Expense Measures: Treasury: Australia Post — Continuation of Funding for Competition Regulation*
[392] Australian Taxation Office (2008) *Entering the Tax System 2007-08: Phone Lodgement*
[393] Australian Taxation Office (2008) *Personal Tax [Taxation Statistics 2005-06]* p. 1

Online filing is the most popular method of self-filing, with half of respondents who file their returns themselves using e-Tax and a third using the TaxPack (paper filing method). Filing via e-Tax (13.2%) almost overtook paper and telephone lodgments (14.0% or 1.6 million) for the 2006 financial year[394]. Overall growth in electronic tax filing in that year grew by 17.2% to 1.5 million[395].

In 2006, around 1.6 million people filed their financial year 2006 tax returns using e-Tax, for the first time surpassing the number of self-preparers who filed paper returns [396]. In addition, more than 1 million taxpayers chose to use the pre-filling function.

Australian Customer Satisfaction

In 2007, Australian Commissioner of Taxation Michael D'Ascenzo pointed out that the percentage of people saying the ATO was doing a good job had grown from 55% to 80%. According to D'Ascenzo, research indicated that this improvement in community perception was largely driven by the ATO providing much better tools and information for people to manage their tax affairs. At the same time, there is a perception that the ATO has become much more accessible and approachable during the past decade.[397]

8.5.3 Role of Third Parties

For individual filers who file electronically using e-Tax, the role of third parties is nonexistent, because third parties are involved in neither preparing returns nor in the process of transmitting returns to ATO.

The registration of preparers in Australia is controlled by the Tax Agent Boards. There is one board in each of the states and territories of Australia. Each Board consists of three members, including one from the ATO, and acts autonomously in performing its functions. Historically, the non-ATO Board members have been drawn from the accounting and legal professions. The Tax Agent Boards are independent from the Tax Commissioner. The Boards maintain the registry of preparers, a publicly accessible listing of all preparers currently registered. Only registered preparers are permitted to offer and charge a fee for the provision of tax services to the public. The Boards consider the academic qualifications and experience and personal integrity and propriety of applicants. Preparers prepare income tax returns and objections and transact business on behalf of taxpayers in income tax matters. Preparers must keep up with tax law, act professionally when dealing with clients and the ATO, and continue to meet the requirements for preparer registration. By law, preparers may be de-registered by a Board if they have prepared and filed false tax returns, engaged in misconduct as a preparer, neglected client taxation affairs, or undertaken activities that call into question their integrity, character, fitness, and propriety, such as criminal or fraudulent conduct. The Boards may investigate complaints against preparers and consider other information that may assist in determining whether a preparer should remain registered.[398]

---

[394] Australian Taxation Office (2008) *Personal Tax [Taxation Statistics 2005-06]* p. 1

[395] Australian Taxation Office (2008) *Personal Tax [Taxation Statistics 2005-06]* p. 1

[396] Australian Taxation Office (2007) *Commissioner of Taxation Annual Report 2006–07* pp. 4, 59

[397] Australian Taxation Office (2007) *It's All About People: Australia's Tax and Superannuation Systems: Speech by Michael D'Ascenzo, Commissioner of Taxation, Taxpayers Australia & Superannuation Australia, Annual Conference, Melbourne*

[398] Australian Government: Tax Agents' Board (2008) *About the Board*

Preparers are authorized to register for the legacy ELS and file an individual's return. Since 2001–2002, preparers have filed roughly three-quarters of all individual tax returns; of these, all but a small percentage have been filed electronically via ELS. As the percentage of individual returns filed via e-Tax software increased from 5.28% in 2000–2001 to 9.24% in 2003–2004, the percentage of individual returns filed through ELS by preparers dropped only slightly (74% in 2001–2002, down to 72% in 2003–2004). Although exact figures for ELS filings by preparers for 2005–2006 and 2006–2007 were not available at the time this report was prepared, it is estimated that more than 7.5 million returns were filed electronically via ELS for those two financial years. Filings via e-Tax grew to 1.5 million (13.2%) in 2005–2006 and to an estimated 1.9 million (estimated at 16% or more, depending on the final number of returns filed) for 2006–2007.[399]

Similar to the United States, however, Australian taxpayers most commonly choose a third party preparer to file their income tax returns (72.8% in financial year 2006),[400] and those third parties can either file on paper or electronically through ELS. In these cases, the individual is primarily responsible for gathering information to pass on to a tax professional to prepare and file the return on the taxpayer's behalf. Respondents to a 2007 ATO survey said they chose to use a preparer to ensure that their return was correct and because they found the tax process too complicated.[401]

Approximately 97% of business-related income tax returns are filed through preparers, and 55% of business activity statements (equivalent to information returns in the United States) are also filed through preparers.[402]

ATO Commissioner D'Ascenzo has noted the critical role played by preparers in his country. He stated that taxpayers' reliance on preparers had gradually increased in Australia for a number of reasons, including demographic and social changes, such as an increasing proportion of non-salaried wage earners, an increasing number of taxpayers with non–bank investments such as stocks and rental properties, and a trend to buy services to increase free time or to deal with a more complex tax environment.

In a 2007 speech to preparers, ATO Commissioner D'Ascenzo restated the importance of preparers' role: "There is no doubt about the vital role of tax practitioners in our tax system. By supporting and working with you, together we can better influence the compliance behavior of many people." He noted the practical assistance offered to preparers, citing more than 5,000 visits to preparers and responses to more than 153,000 calls from preparers about electronic filing, Tax Agent Portal use, web site navigation, and practice management issues. The ATO delivered presentations and

---

[399] Australian Taxation Office (2008) *"Delivering for the community: making tax and superannuation easier, cheaper and more personalised" speech by Michael D'Ascenzo, Commissioner of Taxation to the Australasian Tax Teachers' Association Conference;* Australian Taxation Office (2008) *Taxation Statistics*

[400] Australian Taxation Office (2008) *Personal Tax [Taxation Statistics 2005-06]* p. 1

[401] Concerns motivating the use of tax agents included: Making sure that the return is correct (38%) and perception that tax is too complicated (37%).Among respondents who filed the return themselves, online filing is the most popular method. In addition, exactly half (50%) of the respondents who filed the return themselves had used the ATO's e-Tax direct-filing software to file their most recent income tax return. A further third (33%) filed on paper, using the TaxPack paper forms and guidance documents provided by the ATO. (Australian Taxation Office (2007) *Community Perceptions Survey 2007* p. 132)

[402] Australian Government: Inspector-General of Taxation (2008) *Appendix C - Overview of the Tax Administration System*

conducted seminars, reaching hundreds of preparers. The ATO also works to incorporate the preparer's perspective in the design of products and services.[403]

[403] Australian Taxation Office (2007) *It's All About People: Australia's Tax and Superannuation Systems: Speech by Michael D'Ascenzo, Commissioner of Taxation, Taxpayers Australia & Superannuation Australia, Annual Conference, Melbourne*

9. Introduction to Option Chapters

Contents of Chapter 9:

Chapters 2 through 8 offer overviews of the IRS, its stakeholders, and its relationship with third parties; the history of *e-filing* and the effect of technology adoption on progress toward the 80% *e-file* goal; taxpayer and preparer perceptions and motivations; and State and foreign electronic filing experience. The balance of this report focuses on the potential options for the IRS to pursue to advance *e-filing*, highlighting considerations and research gaps. As noted in Chapter 1, this report does not offer detailed analysis on factors such as cost/benefit, security, and other considerations, which will be crucial for the IRS in making decisions about any particular option. As presented in Chapter 1 of this report, the following overall themes have been identified for all options:

- **There is no silver bullet.** An advancing *e-file* strategy must take into consideration many complex factors, and there is no quick fix or any single option approach for the IRS to convert remaining paper filers.
- **The IRS cannot meet the goal without help.** The multifaceted landscape of the US tax system, by its very nature, requires that the IRS rely on strong partnerships with third party partners, stakeholders, and Congress to advance *e-file*.
- **Technology is secondary to motivating behavior**. Even the most innovative technology will not help the IRS achieve the 80% *e-file* goal unless it is grounded in a thorough understanding of the intricacies of filer behavior — their motivators, concerns, and relative positions on the technology adoption curve.

9.1 Overview

Having covered the history of *e-file*, its stakeholders, taxpayer and preparer behaviors, and related programs and efforts, the following Chapters focus on potential options the IRS may choose to advance *e-file*. The first two sets of options discuss opportunities tied directly to individual and paid preparer motivators and concerns, while the last three sets focus on technology-driven options. The first and second technology-based options directly influence *e-filing*, while the last — paper-based filing options — does not directly affect the *e-file* rate but may result in increased efficiencies comparable to those achieved by *e-file*. Addressing paper return processing is an important consideration closely tied to the 80% *e-file* goal given that reaching the goal will leave 20% of returns still filed on paper. Subsequent phases will address in greater detail the feasibility, cost/benefit analysis, and implementation considerations of each option. Table 9-1 lists the options discussed in the following Chapters.

Table 9-1 Summary of Option Categories

Chapter	Description of Option Categories
Behavior and Motivation Focus	
10. Incentive-Based *E-filing* Options	Incentives include strategies for increasing *e-file* participation by encouraging voluntary adoption through monetary enticement or enticements that offer other real or perceived benefits.
11. Mandate-Based *E-filing* Options	Federal mandates for *e-filing* require a specified group of preparers to file individual tax returns electronically.
Technology Focus	
12. Internet-Based *E-filing* Options	Internet-based options focus on using the Internet as the approach to increase *e-filing*. Although these options are based on technology, their more substantive implications are operational and political.
13. Phone-Based *E-filing* Options	Phone-based options provide a means for taxpayers, especially those without access to computers or the Internet, to file electronically using landline or mobile phone capabilities.
Efficiency Focus (non–e-file)	
14. Paper-Based Filing Options	While not actually *e-filing*, paper-based options provide the means to automate paper return processing to achieve the efficiency and cost-saving outcomes typically associated with *e-filing*.

Each of the chapters follows a similar structure:

- **Overview** — Introduces the category of options and provides introductory information and definitions.
- **History and Background** — Provides IRS context on historical, current, and future related efforts.
- **State Experiences** — Notes relevant findings from States.
- **Options** — Describes the options generally and then provides for each option a definition, an analysis of the option's potential contribution to the 80% *e-file* goal, and related considerations that affect the viability, feasibility, or appropriateness of the option.

9.2 Summary of Options

Table 9-2 provides an overview of each of the options described in Chapters 10 through 14, along with a summary of the targeted population/potential *e-file* contribution to the goal for each. For subsequent phases, the remaining columns — actual expected contribution to the 80% *e-file* goal as well as cost/benefit and other detailed considerations can be added.

Table 9-2 Summary of Options and Estimated Contribution to the 80% *E-file* Goal

Option	Targeted Population/Potential *E-file* Contribution	Expected Contribution to the *80% E-file* Goal	Cost/Benefit Analysis and Implementation Considerations
Incentive-Based E-filing *Options*			
Incentive Option 1: Direct Monetary Incentives Direct monetary reward (e.g., cash, tax credit) for filing electronically.	Targets taxpayers and preparers who do not file electronically and are motivated by cash.	Future Phase	Future Phase
Incentive Option 2: Targeted Marketing of *E-file* Focused marketing efforts towards taxpayers and preparers who continue to file on paper.	Targets taxpayers and preparers who do not file electronically for reasons that can be addressed through awareness and education.	Future Phase	Future Phase
Incentive Option 3: Increased Marketing for Free File Retain current Free File program as is (no changes in eligibility), but increase and focus marketing.	A theoretical target of about 95 million individuals, which likely will be considerably reduced by realistic expectations of the targeted self-prepared paper filers.	Future Phase	Future Phase
Incentive Option 4: Expand the Free File Program Expand current Free File program by increasing the pool of eligible taxpayers.	As mentioned in Incentive Option 3, actual contribution to the 80% *e-file* goal is more likely to be a subset of the eligible population, no matter how eligibility is defined.	Future Phase	Future Phase
Incentive Option 5: Develop New Benefits Consider new benefits and incentives to convert *e-file* holdouts*,* such as extending the payment deadline for *e-filer*s beyond April 15.	In 2006, approximately 19.5 million paper filers (14%), owed a balance, representing a group that might be persuaded to switch to *e-file* in order to hold on to its money longer.	Future Phase	Future Phase
Mandate-Based E-filing *Option*			
Mandate Option 1: Federal Mandate on Paid Preparers Establish a Federal mandate with a description of applicable features and thresholds (e.g., only paid preparers that meet a threshold for a certain number of returns filed in a year).	Targets paid preparers who do not yet file electronically; the actual contribution to the 80% *e-file* goal will be determined by the threshold set (for example, using 2005 data, a threshold of more than 50 returns per year produces an increase of 18%; a threshold of more than 200 returns per year produces an increase of 14%.)	Future Phase	Future Phase
Internet-Based E-filing *Options*			
Internet Option 1: Enhance IRS Systems Continue to maintain EMS while preparing an incremental release of 1040 forms on the MeF system to provide enhanced *e-file* features.	Targets only the preparer community because MeF is only available to registered preparers; primarily targets preparers who never or only sometimes *e-file* due in part to restrictions in the number of forms supported by *e-filing*.	Future Phase	Future Phase
Internet Option 2: Direct Filing Enhance current IRS Internet *e-filing* (or MeF) to handle direct user interaction for individual taxpayers and preparers; the use of third party transmitters would continue to be an option.	Targets taxpayers and preparers who do not currently *e-file*, but who use a computer/tax return preparation software to prepare tax returns (V-Coders); such returns constitute approximately 38 million returns or 30% of all returns filed.	Future Phase	Future Phase

Option	Targeted Population/Potential *E-file* Contribution	Expected Contribution to the *80% E-file* Goal	Cost/Benefit Analysis and Implementation Considerations
Internet Option 3a: IRS-Provided Form-Based Preparation Tool Expand taxpayer preparation methods to include IRS-provided tools such as fillable PDF forms (i.e., a template) or web-based forms that can be directly transmitted to the IRS.	Targets individuals who are comfortable using forms and do not need the additional assistance of an interactive interface (guided interview), including those who handwrite or type their returns on paper forms and V-Coders who currently use IRS fill-and-print forms.	Future Phase	Future Phase
Internet Option 3b: IRS-Provided Interview-Based Preparation Tool Expand taxpayer preparation methods to include IRS-provided tools such as an interactive application for taxpayers to prepare and transmit their returns directly to the IRS.	Targets taxpayers and preparers who do not currently *e-file*, but who use a computer/tax return preparation software to prepare tax returns (V-Coders); such returns constitute approximately 38 million returns or 30% of all returns filed. In this case, the cost objection is related to the preparation fee, not just the *e-file* fee.	Future Phase	Future Phase
Phone-Based E-filing *Options*			
Phone Option 1: Rethink Phone *E-filing* Evaluate current and cutting-edge phone technology and conduct research on usage trends and the behavior of various target populations for phone-based *e-filing*.	The projected contribution to the 80% *e-file* goal depends on the scope and eligibility requirements of any phone-based program. Among the key targets are paper filers who have access to a landline or mobile phone but do not have access to a computer.	Future Phase	Future Phase
Paper-Based Filing Options			
Paper Option 1: 2D Barcodes Implement 2D barcodes through: *Fill-and-print forms* — The IRS updates the 1040 family of forms on IRS.gov to include 2D barcodes when printed. *Tax return preparation software* — The return preparation software vendor community updates its products to allow for this capability on IRS forms.	Because the filing of machine-friendly paper returns is not considered *e-filing*, this option category does not directly contribute to the 80% *e-file* goal. However, there are significant cost savings and efficiency benefits from automating the extraction of data from paper returns.	Future Phase	Future Phase
Paper Option 2: Character Recognition Implement return imaging and character recognition capability. Similar to the approach planned for the IRS Msp project (note Msp also reads 2D barcodes).	Because the filing of machine-friendly paper returns is not considered *e-filing*, this option category does not directly contribute to the 80% *e-file* goal. However, there are significant cost savings and efficiency benefits from automating the extraction of data from paper returns.	Future Phase	Future Phase

10. Incentive-Based *E-filing* Options

Contents of Chapter 10:

Effective incentives must be marketed strategically with targeted communications.

This Chapter focuses on strategies for increasing *e-file* volumes through incentives that offer monetary or value-added benefits for filing electronically. The Chapter reviews past and current incentive strategies from the IRS and other stakeholders and then presents a number of incentive-based options for future consideration. In some cases, the current incentives may be refocused or enhanced as part of a future option. Themes identified in this Chapter include the following:

- Effective incentives address perceptions and motivations around the choice of how to file a tax return and are tied directly to taxpayer and preparer behaviors and motivations, rather than to a specific technology.
- Incentives that have succeeded in the past may not be as attractive to taxpayers and preparers who have not yet converted to *e-filing*. New or different incentives may be required to convert *e-file* holdouts.
- The benefit of any given incentive can be relatively subjective; therefore, it may be difficult to quantify its contribution to the 80% *e-file* goal. More research may be needed in this area.

10.1 Overview

Chapters 10 and 11 explore options for advancing *e-file* that are tied directly to taxpayer and preparer behavior and motivation, rather than to a specific technology. This Chapter looks at strategies for increasing *e-file* participation by encouraging voluntary compliance through incentives, while Chapter 11 focuses on options that impose mandates on certain subsets of those filing individual tax returns.

Targeting the taxpayer, the preparer, or both, incentives take many forms and can be implemented as stand-alone strategies or in conjunction with other options for advancing *e-file*. Effective incentives address perceptions and motivations around the choice of how to file a tax return.

For the purposes of this study, incentive-based options are divided into two categories — those in the form of tax credits or monetary enticement and those that appeal to real or perceived benefits to taxpayers and preparers (e.g., value-added features of *e-file*).

Among key considerations for incentives:

- Marketing and communications are critical, because the success of any incentive is dependent on people knowing about it.
- Once implemented, incentives could become expected by *e-file* users, and removing them could cause a backlash.
- New incentives to encourage converts to *e-file* must also be offered to current *e-filers* — an especially important consideration when it comes to monetary incentives.

10.2 History and Background

Since the launch of electronic filing, the IRS and some third party partners have offered a range of incentives, both monetary and benefit-based. While RRA98 allows for both types of incentives, there are few examples of consideration given to monetary incentives. The following Sections present at a brief history of incentives in both of these categories.

10.2.1 Direct Monetary Incentives

Historically, there has been little real consideration given to direct monetary incentives.

Section 2001(c) of RRA98 authorizes the Secretary of the Treasury to "implement procedures to provide for the payment of appropriate incentives for electronically filed returns," which could include tax credits or other monetary enticements to encourage individuals or preparers to *e-file* their returns[404].

In 1998, the IRS considered a program that would pay $3 for every electronically filed return transmitted by a third party partner. The proposal did not find much traction and ultimately was not implemented.[405]

Other than some anecdotal discussion among stakeholders, this report did not find any other proposals for monetary incentives.

10.2.2 Benefit-Based Incentives

It is unclear whether current benefit-based incentives will convert e-file *holdouts.*

This second category of incentives would appeal to taxpayers and preparers by promoting the benefits, or perceived benefits, of abandoning paper and filing electronically. These incentives may be associated with marketing campaigns and other communications efforts to inform individuals and preparers of *e-file* value-added features and encourage them to take advantage of those features.

Section 2001(c) of RRA98 authorizes the Secretary of the Treasury to promote the benefits and encourage the use of electronic tax administration programs, as they become available, through the use of mass communications and other means[406]. Initial marketing efforts consisted of public service announcements (PSA) that promoted *e-file* and Free File.

The IRS marketing approach since 1999 has been to focus on building awareness of the *e-file* brand and educating taxpayers and preparers about the benefits of filing electronically. The key messages of annual campaigns promote *e-file* features such as faster refund, accuracy, acknowledgment of receipt of return, file-now-pay-later, and other key benefits.[407]

As the IRS marketing budget grew from $9 million in 1999 to $13 million in 2004, marketing expanded to include paid placement of advertisements on television and radio and in cinemas, magazines, and other venues typically used for private sector

---

[404] *Internal Revenue Service Restructuring and Reform Act of 1998 (RRA98)* p. Sec.2001(c)
[405] Wongtrakool, B. M. (1998) *Does Paperless Mean Painless? Electronic Tax Return Filing in the New Millennium*
[406] *Internal Revenue Service Restructuring and Reform Act of 1998 (RRA98)* p. Sec.2001(c)
[407] IRS (2008) *Marketing*

marketing campaigns. The expanded marketing campaigns also promoted other IRS initiatives as determined by SPEC and Taxpayer Education and Communication (TEC). Marketing reverted to PSAs when the marketing budget shrank in 2005 to $1.2 million. Currently, the budget is $2.5 million to market *e-file* and Free File.[408]

Tax season marketing campaigns have focused on building awareness of IRS initiatives and educating taxpayers and preparers about the benefits of filing electronically. Marketing campaigns have been adjusted based on feedback from the target audience and based on changes in research and strategic priorities, including lessons learned.

The 2007 marketing campaign promoted *e-file* and Free File through radio and television PSAs, a comprehensive public education campaign, online media, and directed stakeholder outreach[409]. The campaign contrasted the benefits of electronic filing with those of paper filing, including ease of use, convenience, rapid feedback for received returns, and the availability of Free File in Spanish. The IRS also expanded the number of partners working with the IRS to promote *e-file* and Free File across five national partners.[410]

For more information on taxpayer and preparer motivations and perceptions of currently marketed benefits, see Chapters 4, 5, and 6.

It is unclear, however, whether these benefits resonate with the population of taxpayers and preparers who continue to file on paper. This Section reviews IRS experiences with incentives to date, while Section 10.4 explores whether continuing on this same path will reach the intended target population of *e-file* holdouts.

10.2.2.1 Faster Refund and Direct Deposit

On average, e-filing *with direct deposit provides the fastest return.*

Direct deposit is a feature that allows refunds to be deposited directly from the IRS into the taxpayer's bank account. Although this feature is available for both paper and electronic filing, historically, IRS marketing of and literature on *e-file* has been heavily focused on promoting the benefit of a faster refund through the use of direct deposit.

Recent estimates show that the average wait to receive a refund from a paper return is up to 40 days, whereas the average length of time to receive a refund from an *e-filed* return is closer to 8 to 15 days (when using direct deposit) and an estimated 15 to 22 days for *e-filed* returns requesting a paper check to be mailed[411]. The fastest refund is expected for taxpayers who both *e-file* and use direct deposit, resulting in an estimated 75% decrease in average refund time[412].

---

[408] IRS (2008) *Marketing*

[409] The public education campaign for 2007 included press releases, online press kits containing fast facts, frequently asked questions and in depth articles with key audience messages for the media. IRS hosted English and Spanish television and radio satellite media tours in mid-January and an additional English tour in March for last minute filers. The Director of ETA conducted numerous interviews with the media during the 2008 filing season. Targeted TV and radio placement launched to target audiences in March with another aggressive push in early April. Leveraging existing partnerships with the Society for Human Resource Management, the Direct Sellers Association, the American Payroll Association, and National Restaurant Association, the IRS developed articles throughout the tax season in support of primary and secondary messages.

[410] IRS (2008) *Marketing*

[411] The 2008 IRS *e-file* Refund Cycle Chart at www.irs.gov/efile shows taxpayers when to expect a direct deposit to be sent or a paper check to be mailed depending on when a particular *e-filed* return is transmitted and accepted. The chart shows a 7-day difference between the two. (IRS (2008) *2008 IRS e-file Refund Cycle Chart*)

[412] IRS (2006) *Report to Congress on Uses of the Debt Indicator Tool — and Whether it Facilitates the Use of Refund Anticipation Loans (RALs) — the Debt Collection Offset Practice, the Use of RALs, and Evaluations of*

In addition to promoting the direct deposit feature's speed, the IRS also promotes the direct deposit feature as being secure (no chance of losing the check in the mail) and convenient (no "special trip to the bank" to deposit the check)[413]. As the IRS continues to modernize its systems, moving to daily rather than weekly return processing, faster refund processing is anticipated[414].

Beginning in 2007, for refunds paid through direct deposit, the taxpayer could choose to split the refund and direct deposit into multiple accounts; in this first year of offering the split refund option, the IRS processed 80,000 split refund requests[415]. This is an option that is also available to those who file on paper but only if a separate form (Form 8888) is completed[416].

10.2.2.2 Debit/Credit Card and Electronic Funds Transfer Payment Options

Using a debit/credit card or an EFT payment allows taxpayers to "file now and pay later" — up to April 15.

Similar to a direct deposit for refunds, Electronic Funds Transfer (EFT) payments allow the transfer of funds to the IRS directly from the taxpayer's bank account. Unlike direct deposit, the EFT feature is available only to those who *e-file* their returns. This feature — allowing taxpayers to use their debit or credit cards or to set up an EFT payment when a balance is due — was introduced to *e-file* in 1999. Taxpayers benefit from EFT because it enables them to file any time and then delay the payment of any balance due until a date of their choosing, up until the tax deadline of April 15. This "file now pay later" marketing approach counters the misperception that *e-filing* requires immediate payment. (*E-filers* who pay on April 15 are likely paying sooner than last minute paper filers because their balances are deducted from their accounts electronically, which is faster than if they had mailed a check.) A credit card payment also allows filers to delay actual payment in accordance with the terms of the credit card.

These features speak to ease and convenience in that the taxpayer can file and pay in one transaction, and with EFT payment, a taxpayer knows when the payment clears the bank.

RAL Alternatives, and Use of Debit Cards for Refunds, Iincluding Recommendations on How to Deliver Tax Refunds More Quickly

[413] IRS (2008) *Receive Your Refund Faster with Direct Deposit*

[414] Government Accountability Office (2007) *Tax Administration: 2007 Filing Season Continues Trend of Improvement, but Opportunities to Reduce Costs and Increase Tax Compliance Should be Evaluated*

[415] Description of the split refund was mentioned as part of Linda Stiff's official response included in the 2007 GAO annual report. Stiff also explained that the number of split refund users was 1.4 million lower than was anticipated and cited the fact that "several major software vendors did not provide the ability to split refund in their tax preparation software and may have contributed to the lower than expected volume." (Government Accountability Office (2007) *Tax Administration: 2007 Filing Season Continues Trend of Improvement, but Opportunities to Reduce Costs and Increase Tax Compliance Should be Evaluated* p. 41)

[416] IRS (2008) *Form 8888: Direct Deposit of Refund to More Than One Account*

10.2.2.3 Automated Error Checks

E-file *error checks allow filers to correct items that may hold up return processing, but when these checks become cumbersome, they can act as an* e-filing *demotivator.*

IRS Publication 17 markets accuracy as an *e-file* benefit because "IRS computers quickly and automatically check for errors or other missing information" that would prevent a return from being accepted for further processing[417].

Approximately 600 validation controls check for errors on an electronic return, resulting in a 1.99% error rate for *e-filed* returns, compared with a 24.51% error rate for paper returns[418]. This error checking refers only to mistakes that would prevent a return from being accepted by the *e-file* system; acceptance does not preclude a return from being selected for audit.

Electronic error checking prevents downstream delays in processing and, by extension, refunds. Errors are identified within 48 hours and the refund is returned to the taxpayer (or ERO) for correction, enabling "taxpayers and IRS to promptly and efficiently resolve problems on legitimate returns, and … help stop fraudulent returns"[419]. In contrast, similar errors on paper-filed returns must be identified after they are manually keyed into the system (i.e., transcribed, which also accounts for some errors), and the correspondence required to correct information can add weeks or months to the process. In part, the low error rate for *e-filed* returns may be attributed to the fact that returns that are prepared using software are able to take advantage of built-in error checks through the software, a benefit to preparing returns electronically that shifts the burden of accuracy to third party partners.

For more information on error checks as a perceived benefit, see Section 5.4.

Although accuracy is marketed as a time-saving incentive to *e-file*, the error-checking process can sometimes be cumbersome and create new complications for filers. Some reject codes require complicated resolution among related taxpayers (e.g., who is entitled to claim certain exemptions) and may result in time-consuming back and forth between the IRS and multiple taxpayers. According to the IRS, invalid dependent Social Security Numbers (SSN) and invalid electronic signatures are the most frequent reject codes, resulting from errors in validating data such as SSNs and AGIs that cannot be identified by current third party return preparation software.

According to ETAAC, the number of *e-filed* returns could increase by addressing the "about nine percent" of returns historically rejected because of these error checks or "social security number mismatches." Although these returns are typically able to be successfully *e-filed* once errors are corrected, this percentage of returns may ultimately correspond to the group of taxpayers classified as *e-file* Quitters, because ETAAC estimates that "more than 20 percent never try to e-file again."[420]

The IRS Oversight Board echoes an ETAAC recommendation stating "the process the IRS uses for resolving the errors on the attempted *e-file* transmissions should be user friendly and done in a way that does not create an incentive for these filers to revert to paper. Any revisions to the IRS error correction process should employ these principles"[421].

---

[417] IRS (2007) *Your Federal Income Tax*

[418] IRS (2008) *IMF Electronic Filing - ERS Fall-Out: Cumulative Year to Date Information through April 4, 2008*; IRS (2008) *Miscellaneous Monitoring Report for Week of April 4, 2008*

[419] IRS Oversight Board (2008) *Electronic Filing 2007: Annual Report to Congress* p. 33

[420] Electronic Tax Administration Advisory Committee (2007) *Annual Report to Congress* p. 9

[421] IRS Oversight Board (2008) *Electronic Filing 2007: Annual Report to Congress* p. 33

E-filers *benefit from the convenience of a quick confirmation that their returns have been received.*

10.2.2.4 Acknowledgments

One aspect of *e-filing* recognized as an incentive is electronic acknowledgment of receipt and acceptance of the *e-filed* return. A corresponding acknowledgment for paper filers is United States Postal Service Certified Mail, which, for a cost, offers a receipt stamped with the date of mailing with a unique article number allowing online verification of delivery. For an additional fee, a paper filer can request a copy of the Certified Mail signature record before or after delivery with Return Receipt. For some taxpayers, eliminating the trip to the Post Office and the worry about whether the IRS received their returns is perceived as a major convenience.

The IRS markets "quick confirmation" as a benefit of filing electronically. *E-filer*s receive an electronic acknowledgment within 48 hours confirming that a return has either been accepted for processing or rejected for correction (as described above)[422].

E-file *can be particularly attractive for last minute filers.*

10.2.2.5 24x7 Availability

Although paper preparation is also technically available around the clock, ETAAC points out the "24x7 availability" of *e-filing* as a "huge convenience factor for Americans who choose to wait until the last minute to file"[423]. Self-preparers typically prepare their tax returns online from a home computer where they can take advantage of the 24-hour-a-day, 7-day-a-week availability and other convenience features[424].

In fact, ETAAC reports that the number of "last minute" filers choosing electronic over paper filing is on the rise. Looking at the last week of the regular filing season for 2007, the number of *e-filed* returns increased 35% compared with the same week in 2006. "This increase occurred in an environment where the overall number of paper and electronic returns received during the same week rose only 12%"[425].

The IRS offers other electronic services that may attract individual taxpayers to e-file.

10.2.2.6 Offering Other Electronic Services to Individuals

The IRS Oversight Board, ETAAC, and the TAB have discussed *e-filing* within the context of a "comprehensive e-service vision"[426]. Although it currently offers a range of products and services, the IRS has not yet formally developed a broader strategy for e-government.

Electronic services other than *e-filing* — such as the current "Where's My Refund?" or the forthcoming "My IRS Account" tool — are not limited to taxpayers who file taxes online. These broader service offerings provide an indirect incentive to *e-file*, the rationale being that as more individuals look to the IRS for online services, *e-filing* will become a natural extension of their contact with the IRS.

Further research is needed to determine how effective IRS electronic services are in inducing users to *e-file.*

One of ETAAC's strategies is to encourage *e-filing* as part of a larger package of services that help taxpayers more quickly understand and meet their tax responsibilities and thus reduce taxpayer burden. Over the years, the IRS has "made progress in providing

---

422 IRS (2008) *IRS e-file for Individuals*
423 Electronic Tax Administration Advisory Committee (2007) *Annual Report to Congress* p. 2
424 IRS Oversight Board (2008) *Electronic Filing 2007: Annual Report to Congress* p. 23
425 Electronic Tax Administration Advisory Committee (2007) *Annual Report to Congress* p. 4
426 Electronic Tax Administration Advisory Committee (2007) *Annual Report to Congress* p. 12; IRS (2006) *The 2006 Taxpayer Assistance Blueprint, Phase 1;* IRS (2007) *The 2007 Taxpayer Assistance Blueprint, Phase 2;* IRS Oversight Board (2008) *Electronic Filing 2007: Annual Report to Congress* pp. 5-6, 14-15, 34

electronic access to information and services that assist with preparing, filing, reporting and otherwise meeting tax related obligations".[427]

Examples of these services available through the IRS.gov web site include the following:

- Downloadable forms, instructions, and publications as well as FAQs and topic-specific articles[428].
- Where's My Refund feature on the IRS web site introduced in 2003 allows taxpayers to check the status of their tax refunds (which has also increased in usage each year to more than 22 million taxpayers in fiscal year [FY] 2005)[429].
- Online tools for determining whether taxpayers owe Alternative Minimum Tax (AMT) or qualify for Earned Income Credit (EIC).
- Enhancements to the online payment agreement application for installment agreements and approval notification.
- Payment of 1040 quarterly estimated tax payments through the Electronic Federal Tax Payment System (EFTPS)[430].

Other proposed services include the My IRS Account tool, which will allow individuals to register for online service access and view account information online (including several years of prior year tax information).

10.2.2.7 Offering Electronic Services to Preparers Who *E-file*

The IRS currently makes a number of electronic services available to preparers.

An incentive that is similar to offering a broader range of electronic services to individuals is the incentive derived from offering e-services (business-related incentives) specifically to preparers, in an effort to influence their clients to *e-file*. These services differ slightly from those designed for individuals, however, in that they are intended to provide business value to the third party partners that use them.

In 2000, the IRS began developing a suite of electronic services on the IRS.gov web site specifically for the use of third parties assisting taxpayers. Launched in 2004, this suite, called e-services, includes the following[431]:

- Disclosure Authorization, the ability to file powers of attorney electronically.
- Transcript Delivery Service, the ability to obtain transcripts of taxpayer transactions with the IRS electronically.
- Electronic Account Resolution, the ability to resolve taxpayer account issues via secure e-mail.

Initially, as an incentive to convert preparers to *e-file*, the IRS restricted access to e-services to preparers electronically filing 100 or more returns. Even though there is no direct evidence of how many preparers became Electronic Return Originators (ERO) to qualify for e-services, according to conversations with the IRS, there is some anecdotal evidence to that effect, including requests from preparers filing fewer than 100 returns

---

[427] Electronic Tax Administration Advisory Committee (2007) *Annual Report to Congress* p. 11
[428] IRS.gov, originally named the IRS Digital Daily, started in 1996 and has gone through many enhancements since then making it more attractive to users as a channel (according to the TAB, the number of visits to IRS.gov has increased by 72% over the past three years (IRS (2006) *The 2006 Taxpayer Assistance Blueprint, Phase 1* p. 30).
[429] IRS (2006) *The 2006 Taxpayer Assistance Blueprint, Phase 1* p. 30
[430] IRS (2007) *Electronic Federal Tax Payment System*
[431] IRS (2008) *IRS e-file Application - Answers to Frequently Asked Questions*

who wished to be included in the program. Shortly after introducing e-services, the IRS reduced the filing threshold from 100 to five returns, and in late 2007, the IRS opened e-services to all Circular 230 practitioners regardless of whether they filed tax returns at all.[432]

Other online services include EFTPS for individual and business returns. There are also a number of other business-related incentives that apply to business, partnership, and information returns, which are outside of the scope of this study.

The Fed/State program enables taxpayers to file both their Federal and State returns at once.

For more information about the Fed/State program, see Chapter 2.

10.2.2.8 Fed/State Program

As described in Chapter 2, the Fed/State program enables taxpayers and preparers to file both Federal and State returns in a single submission to the IRS. The IRS then makes the State return information available to the appropriate State. Taxpayers benefit from having to complete forms only once. (Some tax return preparation software offers this benefit as well, without requiring that the return be *e-filed*.) States also benefit from this close relationship with the IRS in that many errors are eliminated before the return reaches the State.

Free File allows eligible taxpayers to electronically prepare and file their tax returns free of charge.

10.2.2.9 Filing Electronically for Free

Through the Free File program, eligible individuals can use tax preparation software and *e-file* (and in some cases file State returns) for free over the Internet. This incentive is provided indirectly by the IRS though its agreement with the Free File Alliance (FFA). Although Free File may cover up to 70% of taxpayers through its overall eligibility requirement that the taxpayer's AGI be $54,000 or less (for TY2007), the vendors' products can and do impose additional criteria, which vary from vendor to vendor[433]:

- Many vendors do not offer free service to mature taxpayers (e.g., age 50+) or those under 19.
- Some vendors impose a maximum AGI threshold of less than $54,000, and some have a minimum AGI threshold as well.
- Some vendors use military service as an eligibility criterion.

Additionally, Free File products impose the following limitations or considerations[434]:

- Some products do not inform taxpayers that they are ineligible for Free File until after they have completed the majority of the return.
- Not every product is available in every State; taxpayers with a preference for a specific product (e.g., based on experience) may find that the product is not available because of their State of residence.
- Taxpayers residing in States that provide Federal government *e-filing* solutions that the FFA perceives as competition may have fewer or no Free File options available to them.

---

[432] IRS (2008) *Incentives to e-file*

[433] IRS (2008) *Free File Alliance Online Tax Preparation Companies;* IRS (2008) *Free File: Frequently Asked Questions*

[434] IRS (2008) *Free File Alliance Online Tax Preparation Companies;* IRS (2008) *Free File: Frequently Asked Questions*

- Some products do not support preparation or filing of State returns. Vendors of products that do support State returns tend to charge extra for State returns and/or for State electronic filing.
- Some products do not support all individual forms and schedules (e.g., Form 982, Mortgage Forgiveness Debt Relief; Form 4868, Extensions; Schedule C; Form 4562, Depreciation and Amortization).
- Some products do not support all current tax situations and credits (e.g., AMT).
- Some products do not support more than four dependents.
- Web-based design necessarily entails sharing personal information with a private company, although assurances of confidentiality are given.
- The large number of FFA products, many of which are not highly recognized brand names, may be confusing, especially to less sophisticated taxpayers.
- All products are web-based, requiring a computer and an Internet connection.
- All products are accessible only through the IRS Free File web site.

For more information on the relationship between the IRS and the FFA, see Section 2.2.1.3.

Since increased marketing and the possible expansion of Free File will be explored as potential options in upcoming Sections of this Chapter, it is instructive to consider the use of the Free File program to date, as shown in Table 10-1[435].

Table 10-1 Free File Adoption (2003–2007)

Tax Year	Total # Returns Filed	FFA-Eligible Ceiling [a]	% of All Taxpayers [b]	# Free Filed Returns	Adoption Rate as % of Ceiling	Adoption Rate as % of Total
2003	130,836,700	78,502,020	60%	2,800,000	3.6%	2.1%
2004	131,297,500	78,778,500	60%	3,500,000	4.4%	2.7%
2005	133,023,100	79,813,860	60%	5,140,000	6.4%	3.9%
2006	135,197,441	94,638,209	70%	3,900,000	4.1%	2.9%
2007 [c]	136,767,900	95,737,530	70%	4,680,000	4.9%	3.4%

Notes: (a) This ceiling reflects only the AGI limitation as defined by the IRS in that particular year. Given the further restrictions (e.g., lower AGI, age limit) imposed by some FFA firms, the actual ceiling for each year is lower. (b) Note that the target threshold changed from at least 60% to no more than 70%. (c) 2007 data estimated.

In addition to promoting the Free File program, the IRS encourages its third party partners to reduce or offset the cost of e-filing.

The fact that the adoption rate for Free File is relatively low suggests that cost may not be the greatest factor behind the adoption of Free File. As discussed in the upcoming Sections, a number of taxpayers who are eligible for Free File are choosing to *e-file* through other means (e.g., through a preparer or by purchasing other tax preparation software to help with self-preparation). When considering the contribution of Free File to the 80% *e-file* goal, the target population consists of eligible taxpayers who currently self-prepare and file on paper.

In addition to Free File, other IRS programs encourage third parties to reduce the cost burden to taxpayers. For example, in 2008, the IRS continued a program that provides

[435] IRS (2003) *IRS Details Free File Initiative; Millions Eligible for Free Online Preparation and E-Filing;* IRS (2004) *IRS Details 2004 Free File Initiative;* IRS (2005) *IRS e-file Now Available; Free File Opens Third Year;* IRS (2006) *2006 IRS e-file;* IRS (2006) *RALs Removed on Free File; 93 Million Eligible for Program;* IRS (2008) *Free File: Frequently Asked Questions;* IRS (2008) *Most Taxpayers Eligible to File Their Taxes Online for Free*

indirect monetary incentives to taxpayers filing individual returns through services offered by third party partners. Through the IRS Stakeholder Partnerships, Education and Communication (SPEC) Office, the 2008 Individual *e-file* Partnership Program facilitates collaboration between the IRS and approved third party partners to encourage and promote *e-filing*.

For more information about SPEC, see Section 2.2.1.2.

These are non-monetary partnerships with commercial businesses, non-profit organizations, and State or local governments that apply for annual partnership status. Although the partnerships themselves are non-monetary — the IRS does not offer funding or monetary compensation to the partners — the program encourages the partners to provide monetary incentives directly to taxpayers, such reduced return preparation and electronic filing costs. The program also includes guidance and materials for partners to promote *e-filing*.

10.2.2.10 Third Party Offerings — Bank Products

10 million taxpayers — 14% of all e-filers *— applied for RALs in 2005.*

Millions of taxpayers take advantage of third party bank product offerings, including loans and services such as the following:

- Refund Anticipation Loans (RAL) — Very short-term loans offered by banks and preparers that are secured by Federal and/or State refunds.
- Refund Anticipation Checks (RAC) — A financial institution sets up a temporary account for a taxpayer to which the IRS can directly deposit refund money.

RALs allow individuals to receive their anticipated refunds, less any fees and finance charges, in approximately 1 or 2 days, which is 80% to 90% faster than the IRS's ability to deposit refunds[436]. In 2005, 10 million taxpayers — 14% of all *e-filer*s — applied for RALs[437].

RACs create temporary bank accounts so refunds can be direct deposited. This benefits taxpayers without bank accounts and taxpayers that want their return preparation fees deducted from their refunds. RACs can take an estimated 9 to 15 days to set up.

Some consumer advocates consider these third party products — available only to *e-filers* — to be controversial due to their target population and the associated interest rates and fees. These products have inherent positive and negative aspects, which are out of scope for this report. They are reviewed here because of their indirect contribution to *e-filing* (*e-filing* is a requirement to get RALs and RACs). In its report to Congress, the IRS noted "the fact that 10 million people apply for RALs indicates strongly that the demand is real"[438].

---

[436] IRS (2006) *Report to Congress on Uses of the Debt Indicator Tool — and Whether it Facilitates the Use of Refund Anticipation Loans (RALs) — the Debt Collection Offset Practice, the Use of RALs, and Evaluations of RAL Alternatives, and Use of Debit Cards for Refunds, Iincluding Recommendations on How to Deliver Tax Refunds More Quickly* p. 5

[437] IRS (2006) *Report to Congress on Uses of the Debt Indicator Tool — and Whether it Facilitates the Use of Refund Anticipation Loans (RALs) — the Debt Collection Offset Practice, the Use of RALs, and Evaluations of RAL Alternatives, and Use of Debit Cards for Refunds, Iincluding Recommendations on How to Deliver Tax Refunds More Quickly* p. 18

[438] IRS (2006) *Report to Congress on Uses of the Debt Indicator Tool — and Whether it Facilitates the Use of Refund Anticipation Loans (RALs) — the Debt Collection Offset Practice, the Use of RALs, and Evaluations of RAL Alternatives, and Use of Debit Cards for Refunds, Iincluding Recommendations on How to Deliver Tax Refunds More Quickly* p. 6

As *e-file* adoption has grown, RAL adoption has remained steady: compare the 10 million RAL users in 2005 with the 9.5 million taxpayers that applied for RALs in 1994 (65% of that year's *e-filers*)[439]. As the turnaround time for refunds likely decreases in the future due to IRS system enhancements, the attraction of RACs and RALs should also decrease.

10.3 State Experiences

States offer many of the same e-file *incentives as the IRS. However, very little information about specific State incentives exists.*

State tax agencies have experience offering incentives to taxpayers and preparers to encourage electronic filing. According to the FTA, States offer many of the same benefit-based incentives currently provided or planned for by the IRS, including the following[440]:

- Faster refunds — States reported to FTA a 6 to 12 week difference in refund response time between paper and electronic filing.
- Direct deposit.
- Electronic refund inquiry (e.g., from a State web site).
- Electronic account updates.
- Automated extensions.
- Free tax preparation software (through Free File or through a State offering).

Also similar to the Federal experience, FTA explains that "the greater the perceived benefits to the tax preparer community, the less resistance to e-filing in general"[441].

Further research is needed on the types of State incentives offered and their effectiveness.

Two examples of State experiences with incentives follow:

- South Carolina, which ranks among the top 10 States in percentage of taxpayers who file their individual income tax returns electronically, extended the State electronic filing deadline to encourage filers to give up paper[442].
- In the late 1990s, Oklahoma partnered with a third party to provide free tax preparation and electronic filing for State and Federal returns from the State's web site. Under this arrangement, taxpayers were able to access services free from the State's web site, and the State paid the third party at a reduced rate. After several years, the program was dropped due to cost considerations. Today, Oklahoma participates in the Free File program.[443]

More research to evaluate how these and other State-based incentives have affected State electronic filing rates could provide instructive lessons learned for the IRS.

---

[439] IRS (2006) *Report to Congress on Uses of the Debt Indicator Tool — and Whether it Facilitates the Use of Refund Anticipation Loans (RALs) — the Debt Collection Offset Practice, the Use of RALs, and Evaluations of RAL Alternatives, and Use of Debit Cards for Refunds, Iincluding Recommendations on How to Deliver Tax Refunds More Quickly* p. 18

[440] Federation of Tax Administrators (2005) *Electronic Filing Mandates: Lessons Learned* p. 1

[441] Federation of Tax Administrators (2005) *Electronic Filing Mandates: Lessons Learned* p. 1

[442] The South Carolina Department of Revenue promotes this incentive explicitly on their web site: "Taxpayers that file via either of the [South Carolina] EFile methods have until May 1, 2008 to both file their return and pay any balance due with no penalty or interest being incurred. This special incentive does not apply to Federal returns or to [South Carolina] taxpayers that file paper returns!" (South Carolina (2008) *Electronic Services-Individual Income*)

[443] Korchanke, J. & Hulsey, G. (2008) *Interview of E-file Coordinator, and 2D Barcode and Software Developer Coordinator and Manager of Imaging, State of Oklahoma Tax Commission*

10.4 Incentive-Based Options

Effective incentives are linked to the motivations and behavior of a specific group.

RRA98 authorized the Secretary of the Treasury to promote the benefits and encourage the use of electronic tax administration programs. These options fall into two categories:

- Provide Monetary Incentives — Reward *e-filers* directly (e.g., cash, tax credit).
- Reinforce/Refocus *E-file* Benefits — Improve and increase marketing on existing *e-file* benefits and/or offer new value-added features to drive uptake.

Chapter 15 lists incentive-based options that may be viable but were out of scope for this report.

The design of a successful incentive should be based on a thorough understanding of the motivations of taxpayers and preparers who are still using paper to file. This Section offers examples of some enhancements or new incentives. As the IRS better understands the concerns and needs of *e-file* holdouts, it can develop additional new incentives to more effectively target and convince this population to convert to *e-file*.

10.4.1 Incentive Option 1: Direct Monetary Incentives

Direct monetary incentives offered to all e-filers *would be costly and if only offered to new* e-filers, *could subvert overall progress if current* e-filers *revert to paper to take advantage of the incentive the following year.*

Incentive Option 1 involves the Federal government providing a direct monetary reward (e.g., cash, tax credit) for filing electronically. This option inherently requires a disbursement of Federal funds or a reduction in Federal revenue. Examples include the following:

- The IRS provides a $5 to $20 tax credit to taxpayers who file electronically.
- The IRS pays preparers/EROs based on a negotiated rate per return or flat fixed fee for each return filed electronically. In this scenario, preparers/EROs would provide free filing to taxpayers (i.e., zero transmission cost), but the taxpayer may still be charged for preparation services or for preparation software. Only the cost to actually file would be waived under this option.

Although allowable under RRA98, no proposals are currently pending.

10.4.1.1 Targeted Population/Potential *E-file* Contribution

While specific contribution to the 80% *e-file* goal is difficult to assess, this option targets taxpayers and preparers who are still not filing electronically primarily because of the cost.

10.4.1.2 Considerations

This option has two significant implications for both the 80% *e-file* goal and the cost: rewarding everyone to *e-file* is expensive, and rewarding only those new to *e-file* may have a detrimental effect on the majority who currently *e-file*.

As pointed out on its web site, "the IRS does not charge a fee for electronic filing"[444]. Rather, *e-filers* are charged by third parties — preparers, software vendors, and transmitters. Because the IRS does not control the amount charged to *e-file* by third parties, a monetary incentive to the taxpayer may not necessarily offset the total cost of *e-filing* (e.g., preparers may bundle the previously separate *e-file* charge into the overall

[444] IRS (2008) *Authorized IRS e-file Providers for Individuals: Is There a Fee for IRS e-file?*

price, pocket some or all of the incentive, or raise their rates). Some form of oversight or authority may be required to ensure that the incentive gets to the intended party.

Another consideration is whether a monetary reward/tax credit aimed at enticing *e-file* holdouts would need to be extended to all *e-filer*s, offering an unnecessary — and costly — incentive to the nearly 60% who already file electronically.

10.4.2 Incentive Option 2: Targeted Marketing of *E-file*

Paper filers must be carefully researched and understood before incentives and marketing can strategically target their concerns and motivations.

Incentive Option 2 provides the 44% of taxpayers and preparers who continue to file on paper focused marketing attention. The IRS has accumulated a great deal of research and information about all filers and could benefit from closely analyzing data about the remaining paper filers and developing tailored marketing strategies for them.

Late adopters of technology are skeptical consumers who acquire a product only after it has become commonplace and, in their avoidance of change, may not adopt a product until traditional alternatives are no longer available[445]. This is a daunting challenge to the IRS given that paper returns will almost surely remain an option. It could be prudent for the IRS to identify the late adopters within the 39% of paper filers and then focus marketing attention on those who are more likely to convert.

10.4.2.1 Targeted Population/Potential *E-file* Contribution

In general, this option targets taxpayers and preparers who do not file electronically for reasons that can be addressed through awareness and education about the benefits of *e-file*.

For some of the specific current incentives described in Section 10.2, additional information concerning the targeted population associated with each incentive is provided in Table 10-2.

---

445 Rogers, E. M. (2003) *Diffusion of Innovations, Fifth Edition* p. 281

Table 10-2 Potential Contribution of Non-Monetary Incentives to 80% *E-file* Goal

Current Incentive	**Reference in This Report**	**Current Effect**	**Potential Effect on 80% *E-file* Goal/Target Population**
Faster Refund through *e-filing* and Direct Deposit	§5.8 Taxpayer Demand, §5.11 Perceived Benefits	85% of taxpayers who filed electronically received a refund in 2006[446].	60% of taxpayers who filed on paper received a refund in 2006[447].
Debit/Credit Card or EFT Payments Accepted on Balance Due Returns	§5.8 Taxpayer Demand, §5.11 Perceived Benefits	13% of taxpayers who filed electronically had a balance due in 2006[448].	33% of taxpayers who filed on paper had a balance due in 2006[449].
Offering Other Electronic Services to Individuals	§5.6 Ease and Convenience	IRS.gov had 176 million visits in FY2005[450]. Where's My Refund feature had 22 million users in FY2005[451].	Unknown. Offering additional electronic services has an indirect effect on electronic filing. Further research needed to determine how effective it is as a motivator of paper filers.
Offering Other Electronic Services to Preparers	§6.3 Availability	57,452 preparers are using the suite of e-services[452].	Unknown effect. Surveys show that these are valued services, but whether these services attract new preparers to *e-file* is unclear.
Error Correction	§5.4 Accuracy	9% of returns are rejected yearly because of errors, though 80% of these are corrected without the need for time-consuming mail correspondence[453].	An estimated 1.8 million taxpayers intended to *e-file* but could not due to errors they could not or chose not to correct[454].
24x7 Availability	§5.6 Ease and Convenience, §4.3 Taxpayer Communications Tracking Study	39% of last minute filers preparing *e-file* in 2005[455].	Unknown effect. It is unclear how many last-minute paper filers or V-Coders could be encouraged to *e-file*.

[446] IRS (2006) *Tax Year 2006 Taxpayer Usage Study*
[447] IRS (2006) *Tax Year 2006 Taxpayer Usage Study*
[448] IRS (2006) *Tax Year 2006 Taxpayer Usage Study*
[449] IRS (2006) *Tax Year 2006 Taxpayer Usage Study*
[450] IRS (2006) *The 2006 Taxpayer Assistance Blueprint, Phase 1*
[451] IRS (2006) *The 2006 Taxpayer Assistance Blueprint, Phase 1*
[452] IRS (2008) *Summary e-Services Report*
[453] Electronic Tax Administration Advisory Committee (2007) *Annual Report to Congress*
[454] Electronic Tax Administration Advisory Committee (2007) *Annual Report to Congress* p. 9
[455] IRS (2005) *Findings From The 2004-05 Taxpayer Communications Tracking Study* p. 26

The IRS must first understand e-file holdouts and how to address their concerns and motivations.

Practitioners who switched to e-file attributed their change to learning more about e-file benefits such as fast refunds, cost savings, ease of use, accuracy, efficiency, and greater acceptance among clients.

For more information about PBI, see Section 4.7.

10.4.2.2 Considerations

The key question for this option is whether the benefits as currently marketed offer the most attractive incentives for taxpayers who have yet to be convinced to *e-file*.

ETAAC recommends that the IRS develop education and public relations initiatives with messages targeted to overcome barriers or perceived barriers to *e-filing* in the areas of privacy, security, and reliability of electronic transactions; risk of audit; and comfort with the status quo/comfort with traditional paper filing[456]. According to ETAAC, "targeted messages and enhanced eServices that deliver real benefits are critical to change the behavior of this group [those who are comfortable with paper filing]"[457]. The IRS Oversight Board agrees with this recommendation, explaining "Many taxpayers still need a compelling reason to switch to electronic tax administration channels"[458].

Findings from a 2005 IRS study suggest that preparers would also respond well to increased marketing of *e-file* benefits. Key findings from re-contacting preparers who previously V-Coded but migrated to *e-file* point directly to marketing and education. Preparer "responses here showed that a critical mass of changes in attitudes toward *e-file* had developed based on this segment's learning (or learning more) about *e-file* — especially its benefits in terms of fast refunds, paper/cost savings, ease of use, accuracy, efficiency to their practice, and greater acceptance among clients". [459]

The study concludes: "these benefits… are those which IRS must emphasize in any future communications to the V-Coder audience. Highlighting these benefits would help fill the knowledge and belief gaps mentioned in the Key Findings… and educate V-Coders about the benefits of *e-file* to their Business, Themselves, and Their Clients."[460]

The same study asked preparers who were Committed Users of the *e-file* program in 2004 and preparers who V-Coded in 2005 to provide input about how the IRS could make implementation of the *e-file* program easier. Their suggestions included the following[461]:

- Provide more training/information/promotion (e.g., seminars, education, easy-to-understand information, advertising).
- Make changes to the *e-file* program (e.g., make *e-filing* mandatory, have more forms available for *e-filing*, eliminate signature forms, explain errors/provide information on rejected returns).
- Provide incentives/ease the cost burden (e.g., provide incentives/compensation, make *e-file* free, buy software for preparers).

The researchers took the suggestions provided in 2004, created a list of some of those suggestions, and asked V-Coders in 2005 to rank them in terms of importance; the results are presented in Table 10-3[462].

---

456 Electronic Tax Administration Advisory Committee (2007) *Annual Report to Congress* p. 16
457 Electronic Tax Administration Advisory Committee (2007) *Annual Report to Congress* p. 16
458 IRS Oversight Board (2008) *Electronic Filing 2007: Annual Report to Congress* p. 36
459 IRS (2005) *Findings From Practitioner Business Impact Research PBI-2 and PBI-3* p. 29
460 IRS (2005) *Findings From Practitioner Business Impact Research PBI-2 and PBI-3* p. 29
461 IRS (2005) *Findings From Practitioner Business Impact Research PBI-2 and PBI-3* p. 7
462 IRS (2005) *Findings From Practitioner Business Impact Research PBI-2 and PBI-3* p. 7

Table 10-3 Suggestions from V-Coding Preparers for Making *E-file* Implementation Easier (as of 2005)

Top Suggestions for Making *E-file* Implementation Easier	25%+ V-Coders
The IRS should give practitioners who *e-file* some customer service incentives to use *e-file*.	33%
The IRS should work with the software industry to improve *e-file* for all business tax and information returns. [a]	30%
The IRS should offer special seminars/workshops to train practitioners in how to use *e-file*.	19%
The IRS should make practitioner use of *e-file* mandatory. [b]	9%
The IRS should do more in communicating the benefits of *e-file* directly to preparers not using *e-file*.	9%

Notes: (a) Out of scope for this report. (b) See Chapter 11 for more information on mandates.

10.4.3 Incentive Option 3: Increased Marketing for Free File

Incentive Option 3 considers retaining the current Free File program as is (no changes to eligibility) but increasing and better targeting the program's marketing and communications.

10.4.3.1 Targeted Population/Potential *E-file* Contribution

To convert those eligible for Free File but not using it, the IRS must have a better understanding of their motivations and concerns.

Although about 95 million individuals, or 70% of all taxpayers, meet the Free File maximum AGI of less than $54,000, this technical definition of eligibility does not tell the whole story when it comes to the portion of the paper-filing population likely to be motivated by a Free File–like program to switch to electronic filing.

A more accurate description of the population targeted for contribution to the 80% *e-file* goal for Incentive Option 3 includes those eligible for Free File who meet the following two conditions:

- **Paper filers, including V-Coders** — Because attracting eligible individuals who already file electronically will not help advance the 80% *e-file* goal.
- **Self-preparers** — As described in Chapters 5 and 6, research suggests that individuals already using a preparer are not likely to switch to a self-prepare option (for individuals using a preparer, other options may be more appropriate).

An ongoing challenge in marketing — determining its effectiveness in driving desired behavior — merits further research for IRS *e-file* and Free File.

To reach this population, the IRS must have a better understanding of the motivations behind filing for free and/or specifically using the Free File program. As part of its 2007 Annual Report to Congress, ETAAC recommended that the IRS "invest more to market the Free File program and to assess the reasons why more taxpayers do not take advantage of the program's services"[463]. This recommendation could go a long way in helping the IRS better understand this target population.

[463] Electronic Tax Administration Advisory Committee (2007) *Annual Report to Congress* p. 8

10.4.3.2 Considerations

As previously discussed, the impact of cost on filers' behavior is a complex issue. Although some studies suggest that cost is a key factor in motivating taxpayer behavior, it is not immediately clear what other motivators counteract the cost motivation or encourage taxpayers to go in other directions. In the case of the Free File program, the IRS's primary vehicle for offering free tax preparation and *e-filing* (albeit indirectly), usage rates indicate that although the overall pool of eligible taxpayers is large (70% of all taxpayers), the number of taxpayers historically taking advantage of this free service is not.

According to the IRS, "the number of tax returns filled via Free File as of the end of February [2008] has jumped more than 12% compared with the same period last year"[464]. Even with this progress, however, the actual adoption rate is still quite low and suggests behavior driven by more complex motivations than simply cost (see Table 10-1).

Understanding why eligible filers have not used Free File will help improve marketing for the program.

As part of its 2007 report to Congress, ETAAC recommended that the IRS focus on better understanding and strategically marketing to the target population for Free File[465]. The IRS marketing budget from 1999 to 2004 grew from $9 million to $13 million for both *e-file* and Free File. In 2005, the budget was reduced to $1.2 million for both programs. Currently, the budget is $2.5 million.[466]

According to the IRS, for TY2007, online marketing initiatives included paid placement of search and banner messages on a wide variety of media sites to promote the benefits of Free File and *e-file* to employers, preparers, and consumers. The IRS began running a digital advertisement in cinemas frequented by taxpayers with an AGI of less than $54,000 during the November 2007 Thanksgiving weekend, anticipating "that many Free Filers file early and receive refunds in the season." The IRS then began running a second digital ad in cinemas to promote *e-file* in late February. In addition, the IRS expanded the radio PSA campaign from the previous year to include a broader and enhanced distribution.[467]

Along with revisiting the marketing effort, however, the second part of the ETAAC recommendation is worth repeating — the need to "assess the reasons why more taxpayers do not take advantage of the program's services"[468].

79% of those who migrated from Free File used another e-file *method the following year.*

To that end, the IRS has been running queries in its marketing database to look specifically at the patterns of Free File participants over certain years[469]. In addition,

---

[464] IRS (2008) *Use of Free File Growing in 2008*

[465] ETAAC noted that "Despite the lack of growth in Free File, the number of free returns offered by software companies outside of the purview of Free File appears to be on the rise, creating its own competitive model within the tax preparation software industry. While the IRS has no way of tracking the effectiveness of this model on overall *e-file* growth for do-it-yourself filers, this appears to be an emerging trend that warrants observation" (Electronic Tax Administration Advisory Committee (2007) *Annual Report to Congress* p. 8). GAO also found that "IRS Officials attributed this decline in part to companies offering free electronic online filing separate from the Free File program" (Government Accountability Office (2007) *Tax Administration: 2007 Filing Season Continues Trend of Improvement, but Opportunities to Reduce Costs and Increase Tax Compliance Should be Evaluated* p. 11).

[466] IRS (2008) *Marketing*

[467] IRS (2008) *Marketing*

[468] Electronic Tax Administration Advisory Committee (2007) *Annual Report to Congress* p. 8

[469] IRS (2007) *2007 Free File Survey Report and Presentation*

there have been a number of research projects, including the 2007 Free File Survey and the March 2008 Free File Migration Study[470].

The latter looked at Migrators, or taxpayers who used Free File one year but did not use the program the next year, to better understand why some taxpayers leave the program and what it would take for them to return. Some of the key findings include the following[471]:

- Participants had an "overall disposition toward Free File," with 88% saying they would "recommend it to friends and family" and just 14% responding that they would "not use it again."
- 79% of Migrators used another *e-file* method the following year (59% of self-preparers and 20% of paid preparers *e-filed*).
- Many Migrators were "driven by a desire for convenience/ease of use" and did not have "strong feelings about which methods they [used]."
- The "top specific reason for migration" among participants who remembered why they switched is that they "went directly to the web site of the company they used in 2006," possibly because they "thought they were continuing to use Free File by going back to [last year's] provider".
- If there is an identified barrier, it is a "perceived difficulty of use and some confusion in use," although this was only mentioned by 10% of Migrators.

With the current FFA agreement due to expire in 2009, the IRS has the opportunity to examine the Free File program and continue to make improvements to attract more taxpayers. Over the past few years, Free File was improved to ensure taxpayers are not subjected to marketing and advertising messages from the participating return preparation software vendors while preparing their returns. For TY2007, among other items, the following improvements were made[472]:

- Free File was available to individuals who do not usually file taxes but needed to do so for the economic stimulus payment.
- Changes to software were made in accordance with changes in tax legislation (e.g., stimulus payments, debt forgiveness associated with mortgage payments).

A better understanding of the motivations behind filing for free and/or specifically using the Free File program will inform enhancements to the program and more effective marketing.

10.4.4 Incentive Option 4: Expand the Free File Program

If Free File has yet to attract most of its eligible users, it is reasonable to question why any other eligible population would adopt Free File .

Incentive Option 4 entails expanding the Free File program to make it available to more taxpayers. If the pool of eligible taxpayers is increased (by adjusting AGI limits and/or addressing other constraints such as vendor-specific eligibility criteria), the same issues associated with Incentive Option 3 apply regarding the need for a clear understanding of what portion of that eligible pool will actually be motivated to use Free File.

---

[470] IRS (2008) *Findings From The Free File Migration Study*
[471] IRS (2008) *Findings From The Free File Migration Study* pp. 3,5
[472] IRS (2008) *Use of Free File Growing in 2008*

10.4.4.1 Targeted Population/Potential *E-file* Contribution

Similar to when a subset of the 70% of taxpayers eligible to use Free File actually use it, the actual contribution to the 80% *e-file* goal for an expanded Free File program is more likely to be tied to a smaller subset of that eligible population. However, the better the IRS understands why eligible individuals use or do not use Free File, the more effective any efforts to enhance the program will be.

10.4.4.2 Considerations of Expanded Free File Program

If Incentive Option 4 is selected, the IRS will need to negotiate these changes with FFA in a new agreement.

Expanding the Free File program under the current agreement would require negotiations between the IRS and the FFA. Although a new agreement will be considered in 2009, the FFA has a financial disincentive to expand Free File eligibility requirements because it will cut into the pool of potential customers who will pay for the services and products they sell.

In addition, before moving to expand Free File eligibility, the IRS will need to carefully analyze the currently eligible population and its reaction to the program. If Free File has not yet attracted more users from this population, it is reasonable to question why a different group of potential users (e.g., those with a slightly higher AGI) will have a substantially different reaction.

10.4.5 Incentive Option 5: Develop New Benefits

Extending the payment deadline for e-filers *is one example of a new incentive that could help the IRS reach the 80%* e-file *goal.*

Incentive Option 5 includes the broad category of developing new benefits (i.e., *e-file* incentives) that are attractive to targeted populations. There is a range of potential new benefits and incentives that the IRS might consider to attract *e-file* holdouts to *e-file*. One example is to extend the filing and/or payment deadline for *e-filers* beyond April 15. Other potential options are listed in Chapter 15 but are out of scope for full consideration in this report.

The current "file now pay later approach" stops short of allowing individuals to pay later than the April 15 deadline. Under current tax law, individual taxpayers must file their returns, and pay any tax balances due, on or before April 15 following the close of the calendar year. A taxpayer may request an extension to file a return, but no extension is available for making tax payments.[473]

The most commonly discussed extension would allow *e-filer*s who use direct deposit for refunds or use EFT or credit/debit cards for paying their balances due to file and pay by April 30, while the due date for returns filed on paper would remain April 15. Another option is to extend only the payment deadline for *e-filer*s, while maintaining April 15 as the deadline for filing (on paper or electronically) the return[474]. A payment extension for *e-filer*s would presumably put balance due *e-filer*s on equal footing with their paper filer counterparts, because paper filers who pay by check with an April 15 postmarked return benefit from the "float" between when the check is mailed and when the check is actually processed.

---

[473] Department of the Treasury (2005) *General Explanations of the Administration's Fiscal Year 2006 Revenue Proposals*

[474] As suggested by CERCA (Council for Electronic Revenue Communication Advancement (2003) *Response to Request For Comments on the Proposal to Extend the Tax Filing and Payment Deadline for Individuals Who E-File Their Returns*)

In fact, since the drafting of RRA98, when a provision for a 30-day extension was considered but not included in final legislation, there has been ongoing debate over whether electronic filers should be offered an extension as a benefit[475].

In December 2001, the IRS submitted a proposal to change the due date for electronically filed individual tax returns to April 30 (two options were considered — a 10-day extension to April 25 and a 15-day extension to April 30, the latter selected for the sake of simplicity, among other considerations)[476]. Other proposals followed, all of which maintained the April 15 deadline for returns filed on paper:

- **2002** — The IRS proposal was included in the President's budget request submitted to Congress February 4, 2002. No resulting action followed.
- **2003** — H.R. 1528, the Taxpayer Protection and IRS Accountability Act of 2003, was introduced in the House of Representatives (the legislation was renamed the Tax Administration Good Government Act by Senate amendment), including a provision for a 15-day extension of the due date for electronically filed returns. That part of the bill did not pass.[477]
- **2005** — A similar proposal for an extension, Extend the Due Date for ELF Returns, was included in the administration's FY2006 revenue proposal, which would have also extended the filing due date by 15 days for *e-filed* returns if taxpayers paid their balances due by EFT. No resulting action followed. [478]

No legislation or other internal actions are currently pending to change the due date for electronic filers. The existing documentation on some of these initiatives provides additional detail and may include cost/benefit analysis.

10.4.5.1 Targeted Population/Potential *E-file* Contribution

Extending the payment deadline for e-filers *targets the 19.5 million filers who owe a balance — a potential 14% contribution to the 80%* e-file *goal.*

The option of extending only the payment deadline for *e-filer*s (while maintaining the April 15 deadline for submitting the return itself) primarily targets taxpayers with balances due who file on paper because they want to keep their money for as long as possible — specifically during the float time between the deadline of April 15 and when their check is cashed by the IRS.

In 2006, approximately 33% of 58.5 million paper filers (19.5 million) owed a balance[479]. These 19.5 million filers represent a maximum potential contribution of 14% to the 80% *e-file* goal, although research is required to determine how many in this group would be convinced by the deadline extension benefit to give up paper. Extending both the filing and payment deadline for *e-filers* may also offer encouragement, particularly to late filers, to give up paper.

---

[475] Wongtrakool, B. M. (1998) *Does Paperless Mean Painless? Electronic Tax Return Filing in the New Millennium*
[476] IRS (2001) *Proposal to Change the Due Date For Electronically Filed Form 1040 Returns to April 30*
[477] *Taxpayer Protection and IRS Accountability Act of 2003*
[478] Department of the Treasury (2005) *General Explanations of the Administration's Fiscal Year 2006 Revenue Proposals*
[479] IRS (2006) *Tax Year 2006 Taxpayer Usage Study*

10.4.5.2 Considerations

Input from stakeholders is important to crafting an effective e-file *incentive.*

Any new incentive requires consideration and input from key stakeholders, including input on the following:

- **Benefit to Taxpayers** — Taxpayers filing electronically benefit from additional time and those with balances due have the opportunity to accrue further interest on money owed to the IRS[480].
- **Additional Complexity/Potential for Confusion** — Having two deadlines may create confusion among taxpayers about who is eligible to file when (i.e., depending on how the option is written, taxpayers who file electronically but pay by check would not be eligible for the extension). This could also "compromise the significance of the April 15 date in the eyes of taxpayers" (a concern raised by the IRS and stakeholders alike)[481]. This potential will make communication and outreach important. The IRS included a marketing/communication plan in its 2003 Policy Council Briefing[482].
- **Preparer Concerns** —Many preparers close their offices on April 16 each year. An extension would require these preparers to modify business practices. CERCA echoed this concern in its comments to Congress in 2003[483].
- **Effect on States** — According to the IRS, 30 of the 39 States responding to a survey about extending the Federal *e-file* deadline indicated they would "support the initiative or follow the IRS' lead"[484]. However, concerns have been raised about the potential inconsistencies in State and Federal practices and pressure on States to make deadline changes of their own[485]. Three States (Arkansas, Louisiana, and Virginia) already have a due date later than April 15 for all returns regardless of filing method, and at least one State, South Carolina, has a due date of April 30 for *e-filed* returns[486].

---

[480] IRS (2001) *Proposal to Change the Due Date For Electronically Filed Form 1040 Returns to April 30*

[481] Council for Electronic Revenue Communication Advancement (2003) *Response to Request For Comments on the Proposal to Extend the Tax Filing and Payment Deadline for Individuals Who E-File Their Returns;* IRS (2001) *Proposal to Change the Due Date For Electronically Filed Form 1040 Returns to April 30;* Winters, M. M. *et al.* (2003) *Response to Request For Comments on Proposal to Extend Tax Filing Deadline to April 30 for Individuals Who File Electronically* p. 4

[482] IRS (2001) *Proposal to Change the Due Date For Electronically Filed Form 1040 Returns to April 30;* IRS (2003) *Proposal to Change the Electronic Filing Due Date; Briefing for ETA Policy Counsel*

[483] Council for Electronic Revenue Communication Advancement (2003) *Response to Request For Comments on the Proposal to Extend the Tax Filing and Payment Deadline for Individuals Who E-File Their Returns;* IRS (2001) *Proposal to Change the Due Date For Electronically Filed Form 1040 Returns to April 30*

[484] IRS (2003) *Proposal to Change the Electronic Filing Due Date; Briefing for ETA Policy Counsel* p. 6

[485] Council for Electronic Revenue Communication Advancement (2003) *Response to Request For Comments on the Proposal to Extend the Tax Filing and Payment Deadline for Individuals Who E-File Their Returns;* Winters, M. M. *et al.* (2003) *Response to Request For Comments on Proposal to Extend Tax Filing Deadline to April 30 for Individuals Who File Electronically* p. 3

[486] IRS (2001) *Proposal to Change the Due Date For Electronically Filed Form 1040 Returns to April 30*

THIS PAGE INTENTIONALLY LEFT BLANK.

11. Mandate-Based *E-filing* Options

Contents of Chapter 11:

Mandates for *e-filing* would require specified groups of paid preparers to *e-file* individual tax returns. This Chapter examines mandate-based options for advancing *e-file* and the bump in *e-file* volumes that would be incurred by imposing mandates. This Chapter also examines the change to Federal law that would be needed to implement a Federal mandate strategy for *e-file*, considers current State experiences with mandates, outlines Federal implementation options, and discusses overall implications for *e-file* participation. Themes identified in this Chapter include the following:

- A Federal mandate on preparers to *e-file* individual returns increases *e-file* volumes with minimal taxpayer burden, although the extent of the increase depends on how the mandate is designed.
- State experiences with mandates help frame the discussion for Federal options. In addition to providing examples of how mandates might work at the Federal level, the IRS/State relationship is also important for these reasons:
  - State mandates affect Federal *e-file* volumes.
  - A Federal mandate could affect State electronic filing efforts.
- Successful mandates require a focus on strong partner relationships.

11.1 Overview

A number of States have successfully mandated that preparers file electronically; an IRS e-file *mandate could be tailored to apply to the Federal context.*

In general, mandates for electronic filing require specified groups of preparers and/or taxpayers to file certain tax returns electronically. In common practice, however, mandates typically focus on businesses and organizations (business returns) and paid preparers of individual returns who file more than a specified number of tax returns, rather than on individual taxpayers.

Mandates have been tried in a number of States with general success. While a Federal mandate solution may look somewhat different, State experiences have informed the general dialogue around mandates, and much of the discussion concerning mandate features and design comes from those experiences.

Mandates can be implemented as stand-alone strategies or in conjunction with other options (e.g., technology or system-based options) for advancing *e-file*.

For more information on the characteristics of mandates, see Section 11.4.

Because the nature of mandates varies, any mandate solution would require a definition of the specific mandate and a description of applicable features. Some general characteristics of mandates may include the following:

- **Scope Definition** — Definition of scope to clarify which tax returns must be filed electronically (e.g., individual income tax returns, business tax returns).
- **Criteria or Thresholds** — Definition of which groups (e.g., paid preparers who filed a certain number of returns in the prior year) must comply with the mandate and by when (e.g., starting at the intended target or lowering the

threshold over time to gradually increase the base of preparers that fall under the mandate)[487].

- **Hardship Exceptions** — Allowance of a grace period for implementation[488].
- **Opt-Out Provisions** — Opt-out procedures for individuals who choose not to allow their paid preparers to *e-file* on their behalf (this is why taxpayer behavior plays a role even in mandates on preparers).
- **Enforcement** — Options/penalties for non-compliance with mandates.
- **Acceptable Alternatives** — Provision for acceptable alternatives to *e-filing* (e.g., a machine-friendly requirement for paper filing such as 2D barcodes).

Scope of Chapter

This report considers options for mandates on paid preparers only. It does not consider placing mandates on individual self-preparers, charging a fee for filing on paper, or requiring vendors to provide *e-file* free of charge.

This report considers mandate options for paid preparers only — not on individual self-preparers. Similarly, consideration has not been given to related options such as charging a fee for filing on paper. Also, even though this Chapter focuses exclusively on mandates that would require paid preparers who file a certain number of returns to do so electronically, there are possibilities for other kinds of mandates that may require other third parties (including software vendors) to adopt other practices (e.g., a Federal mandate to limit or eliminate the amount that a vendor may charge taxpayers to electronically transmit their returns to the IRS). This type of mandate is out of scope for this Chapter but is discussed briefly in Chapter 15.

11.2 History and Background

A Federal mandate to e-file *individual tax returns requires a change in Federal law. Three key oversight bodies call for lifting the current legislative ban on such Federal mandates.*

Currently, Federal law prohibits the IRS from requiring electronic filing of income tax returns for individuals, estates, and trusts[489]. For Federal mandates on individual returns to be seriously considered and ultimately implemented, Congress would need to change the law to accommodate this option. A number of stakeholder groups have made recommendations related to allowing Federal mandates, including ETAAC, GAO, and the IRS Oversight Board. All three organizations advocate the repeal of the current prohibition but vary on whether they support implementing mandates at this time.

ETAAC

ETAAC considers mandates the "single biggest opportunity for the IRS to increase e-filing *rates" for individual returns.*

In each of its annual reports for the past 3 years, ETAAC included the recommendation of a Federal mandate strategy for preparers of individual returns. In its 2007 annual report, ETAAC repeated its recommendation that the IRS mandate that paid preparers *e-file* 1040 returns, describing mandates as "a quick and relatively painless way to increase *e-filing*"[490]. ETAAC recommended that "Congress repeal the prohibition against preparer mandates and grant the IRS the discretion to implement such mandates at a time that is appropriate"[491]. ETAAC also provided the specific recommendation that the IRS adopt Federal mandates with "reasonableness standards and exceptions" for preparers filing more than 50 individual returns in a year[492]. In 2007, ETAAC called the

[487] Federation of Tax Administrators *Electronic Filing Mandates: Lessons Learned* p. 1
[488] Federation of Tax Administrators *Electronic Filing Mandates: Lessons Learned* p. 1
[489] *Department of the Treasury, Internal Revenue Service, 26 CFR Parts 1 and 301: Returns Required on Magnetic Media*
[490] Electronic Tax Administration Advisory Committee (2007) *Annual Report to Congress* p. 6
[491] Electronic Tax Administration Advisory Committee (2007) *Annual Report to Congress* p. 7
[492] Electronic Tax Administration Advisory Committee (2007) *Annual Report to Congress* p. 6

mandate solution "the single biggest opportunity for the IRS to increase *e-filing* rates of 1040 returns"[493].

GAO

In the GAO 2006 and 2007 filing season reports, GAO recommended a repeal of the prohibition against making preparer *e-filing* mandatory and endorsed a solution that includes Federal mandates on preparers meeting certain criteria[494]. In the 2007 report, GAO echoed its recommendation from the previous year suggesting that Congress mandate electronic filing by paid preparers meeting certain criteria, such as the number of returns filed. GAO cited the mandate option, coupled with a barcoding strategy, as a method for addressing the issue of V-Coders. The report recognizes that "mandating electronic filing would not convert all V-Coders because it would not apply to taxpayers who prepare their own returns on a computer" but states, "still, most V-Coders use a paid preparer (68% in 2006)"[495].

IRS Oversight Board

The IRS Oversight Board supports mandates as a last resort after exhausting all reasonable steps for voluntary participation.

In its 2006 and 2007 Annual Reports to Congress, the IRS Oversight Board echoed the ETAAC recommendation for Congress to lift the ban that prohibits the IRS from making *e-filing* of Form 1040 tax returns mandatory, but the IRS Oversight Board came short of recommending that Federal mandates be put into place at this time[496]. In the 2007 report, the IRS Oversight Board encouraged the IRS to "use innovative and effective strategies to increase the voluntary *e-file* participation among both paid and self-preparers, along with the Congressional elimination of the prohibition against IRS *e-file* mandates for individual returns"[497]. The IRS Oversight Board added, however, that it considered the latter option a "last resort" and did not recommend mandates until other options are exhausted[498]. Instead, in 2007, the IRS Oversight Board encouraged Congress to "grant the agency the discretion to implement *e-file* mandates for paid return preparers at a later date, if needed to reach the 80% *e-file* goal"[499]. Further, the IRS Oversight Board recommended that two conditions be met before the IRS actually implements any kind of Federal mandate. According to the 2007 report, these conditions are as follows[500]:

- The IRS must first exhaust all reasonable steps to maximize voluntary participation in individual *e-filing*.
- The IRS must carefully study the trade-offs between the expected benefits from increased *e-file* participation and the burden imposed on filers and their preparers before setting specific mandate criteria.

---

[493] Electronic Tax Administration Advisory Committee (2007) *Annual Report to Congress* p. 6
[494] Government Accountability Office (2006) *Tax Administration: Most Filing Season Services Continue to Improve, but Opportunities Exist for Additional Savings;* Government Accountability Office (2007) *Tax Administration: 2007 Filing Season Continues Trend of Improvement, but Opportunities to Reduce Costs and Increase Tax Compliance Should be Evaluated* pp. 15, 34
[495] Government Accountability Office (2007) *Tax Administration: 2007 Filing Season Continues Trend of Improvement, but Opportunities to Reduce Costs and Increase Tax Compliance Should be Evaluated* p. 15
[496] IRS Oversight Board (2007) *Electronic Filing 2006: Annual Report to Congress;* IRS Oversight Board (2008) *Electronic Filing 2007: Annual Report to Congress*
[497] IRS Oversight Board (2008) *Electronic Filing 2007: Annual Report to Congress* p. 30
[498] IRS Oversight Board (2008) *Electronic Filing 2007: Annual Report to Congress* p. 30
[499] IRS Oversight Board (2008) *Electronic Filing 2007: Annual Report to Congress* p. 6
[500] IRS Oversight Board (2008) *Electronic Filing 2007: Annual Report to Congress* p. 30

During the 109th Congress, S. 1321 included a provision that would have granted the IRS the authority to require preparers to file individual income taxes electronically. The GAO pointed to this bill as an indication that Congress has some degree of interest in increasing electronic filing among the preparer community[501]. In the Senate Report accompanying the bill, the Senate Committee on Finance wrote, "The Committee wants to encourage increased use of electronic filing…. The Committee believes that giving the IRS the authority to require electronic filing of individual tax returns will increase the number of returns that are filed electronically"[502]. The bill would have also given the IRS authority to impose penalties for non-compliance.

IRS History with Mandating Business Returns

Although the IRS does not have a history with Federal mandates for individual returns, Federal mandates on other kinds of returns are permissible by Congress. The thresholds for these mandates on organizational (versus individual) taxpayers are different from the thresholds described for individual returns. The IRS mandates *e-filing* for the following[503]:

- Corporations filing 250 or more information returns per year.
- Partnerships with more than 100 partners.
- Large tax-exempt organizations with more than $10 million in assets filing 250 or more information returns per year.
- Entities registering 25 or more heavy highway vehicles (e.g., trucks).

According to the IRS Oversight Board, the IRS strategy for imposing such mandates for corporate returns has been limited and has translated into "piecemeal attempts" that have "yielded negligible results in many instances"[504].

Full discussion of business and information returns is outside the scope of this report.

To address such challenges, ETAAC has made recommendations for business and information returns, and the IRS Oversight Board has commented on those recommendations. For example, ETAAC included recommendations in its 2007 Annual Report to Congress for adjusting the thresholds for corporate and partnership returns, mandating *e-filing* for employment tax returns (e.g., Forms 940 and 941), and modifying *e-filing* thresholds for information returns[505]. The IRS Oversight Board agreed "with the intent of the ETAAC recommendations" and included a number of considerations to assist the IRS in developing an overall "strategic approach" for handling mandates for these returns[506].

---

[501] Government Accountability Office (2006) *Tax Administration: Most Filing Season Services Continue to Improve, but Opportunities Exist for Additional Savings* p. 16

[502] *U.S. Congress. Senate. Report 109-336 - To accompany Telephone Excise Tax Repeal And Taxpayer Protection And Assistance Act of 2006*

[503] IRS (2007) *Internal Revenue Bulletin 2007-49: Returns Required on Magnetic Media;* IRS (2008) *e-file for Charities and Non-Profits;* IRS (2008) *Electronic Excise Tax Returns Are Here - Formerly Known as "ETEC" (Excise Tax e-File & Compliance) Form 2290, 720 and 8849 Join The Ranks of e-file! 2008 2290 e-file Returns May Be Submitted July 1, 2008;* IRS (2008) *Modernized e-file (MeF) for Partnerships*

[504] IRS Oversight Board (2008) *Electronic Filing 2007: Annual Report to Congress* p. 30

[505] Electronic Tax Administration Advisory Committee (2007) *Annual Report to Congress* p. 7

[506] IRS Oversight Board (2008) *Electronic Filing 2007: Annual Report to Congress* p. 32

Many States with mandates have seen increases in both State and Federal electronic filing rates and have not seen any major negative effects on relationships with the preparer community. State experiences help frame key issues when Federal mandates are considered.

11.3 State Experiences

Unlike the IRS, States are not restricted in their authority to mandate that individual State tax returns be filed electronically[507]. In 2001, Minnesota was the first State to implement an electronic filing mandate strategy, followed by Michigan, Oklahoma, and Wisconsin in 2003. By 2005, 12 States had State personal income tax mandates in place for certain populations of preparers. As shown in Table 7-2, as of May 2008, at least 18 States have imposed mandates on a select population of preparers who file individual State tax returns; two States have a mandate on software developers (rather than on preparers) to create electronic returns or paper returns with 2D barcodes.

The experiences in the States provide a series of snapshots of mandates as potential solutions for increasing *e-filing* and provide a set of issues for consideration. As explored in this Section, the States have shared overall success with mandates, with success defined here as noticeable increases in both State and Federal electronic filing rates for individual returns with relatively minor disruptions to relationships with partner organizations. The degree of this success and the chosen path to implementation varies slightly from State to State, though there are commonalities that help inform the mandate discussion. Also, given the States' relationship with the IRS, this Section explores how the decisions that States make about mandates affect Federal *e-filing* rates and how the decisions that the IRS may make about implementing mandates may affect State electronic filing programs.

State mandate policy typically includes specific criteria that define which preparers will be affected by the mandate (e.g., each preparer who filed any number of individual returns above a certain threshold in the year before the mandate takes effect will be required to file all returns electronically once the mandate is in place). Even though most States set a threshold of this kind, State mandates differ in where those thresholds are set. Thresholds may also be phased in over time; therefore, a threshold may start higher, often at 200 to 250 returns (affecting larger preparation firms) and then ramp down over a period of typically 2 to 4 years to 50 to 100 returns (to include smaller preparation firms).[508]

Table 11-1 shows recent threshold levels for States that are currently implementing mandate strategies[509].

[507] State mandates tend to come under one three umbrellas: specific statute, regulatory under general authority, or administrative rule.
[508] Duncan, H. T. (2006) *Preparing Your Taxes: How Costly Is It?* p. 10
[509] IRS (2008) *Summary of State Mandates for Individual Tax Returns*

Table 11-1 Thresholds for States with Preparer Mandates (as of PY2008)

State	First PY	Threshold
Alabama [a]	2005	50
California	2004	100
Connecticut	2006	50
Indiana	2008	100
Louisiana [b]	2008	100
Maine [c]	2008	200
Massachusetts	2005	100
Michigan	2003	200
Minnesota	2001	100
New Jersey	2005	50
New Mexico	2008	25
New York	2006	100
Oklahoma	2003	50
Oregon [d]	2007	n/a
Rhode Island [d]	2003	n/a
South Carolina [a]	2008	100
Utah [a]	2006	101
Virginia [a]	2005	100
West Virginia	2007	100
Wisconsin	2003	100

Notes: (a) Paper returns with 2D barcodes also meet the mandate. (b) 30% must be electronically filed in 2008; 60% in 2010; 90% in 2012. (c) Threshold reduced to 100 for PY2009 and to 50 for PY2010. (d) Mandate on software vendors (not preparers) to require final output as electronic returns or paper returns with a 2D barcode.

11.3.1 Growth in Electronic Filing of State Returns

In 2005, four of the five States with the highest electronic filing rates had an electronic filing mandate for paid preparers.

For more information on state filing methods, see Chapter 7.

Electronic filing volumes for State individual returns have grown alongside Federal *e-filing* volumes since the first Fed/State program was piloted in 1990. In 2005, the number of State electronically filed returns reached approximately 50 million. As shown in Figure 7-6, in 2005, 11 States received more than half their returns electronically and two, Iowa and Minnesota, received more than 60% electronically. Four out of five States with the highest proportion of electronically filed returns have an electronic filing mandate in place — Minnesota, Wisconsin, California, and Michigan.[510]

According to the FTA, in the 2004, 2005, and 2006 filing seasons, States that were first implementing a mandate experienced a higher rate of electronic filing growth than other States. FTA calculations (based on data submitted by the States) indicated that on

[510] Duncan, H. T. (2006) *Preparing Your Taxes: How Costly Is It?* p. 4

average, electronic filing in States with mandates in place grew 25% to 50% faster than in their counterparts that did not implement mandates.[511]

Electronic filing rates for State returns grew 25% to 50% faster in States with mandates.

For example, New York and Connecticut implemented mandates for the first time in 2006 and saw growth rates in electronic filing of 30% and 20%, respectively. Together, these two States accounted for 25% of the total increase in State electronically filed returns. This is a difference from 2005 (pre-mandate), when together these two States accounted for 7% of all State electronically filed returns. Vermont was the only State without a new mandate that saw growth at a 20% rate in 2006, and many States' growth rates were in the single digits.[512]

11.3.2 Overview of State Approaches to Mandates

Information about State experiences from the first State mandate in 2001 until today has been compiled and documented by a number of different organizations, primarily the FTA[513]. Although not all States have made the same implementation choices, they all had to make decisions around the same set of questions. It is likely that the IRS would have to make similar kinds of decisions if it decides to explore implementing a Federal *e-filing* mandate.

The Sections below present shared experiences and observations as different States have implemented their various mandates. Not all of these experiences apply to every State.

Collaboration with Preparers and Individuals

Successful mandates require a focus on communication and strong partner relationships.

Many of the findings from the States focus on State collaboration with both preparers and individuals to ensure that all stakeholders had a clear understanding of how the different mandates worked and what was expected of the affected preparers.

As part of this collaboration, many States chose to provide exceptions to ease the burden of converting to electronic filing during the transition period. In general, there are two kinds of exceptions — one aimed at paid preparers and one at individuals[514]:

- **Hardship Exceptions** — These exceptions are intended for preparers who are not able to convert to electronic filing in the time prescribed by a mandate. This is a temporary exemption that allows for gradual implementation and acknowledges the potential hardship that smaller preparation firms may face in transitioning to electronic filing (e.g., computer costs, learning how to use new tax preparation software, business process changes).
- **Opt-Out Provisions** — These exceptions are intended to provide an option for individual taxpayers who, for whatever reason, do not want their preparers to

For more information on preparer motivations and concerns, see Chapter 6.

[511] Duncan, H. T. (2006) *Preparing Your Taxes: How Costly Is It?* p. 11

[512] Duncan, H. T. (2006) *Preparing Your Taxes: How Costly Is It?* p. 6

[513] See e.g., (Duncan, H. T. (2006) *Preparing Your Taxes: How Costly Is It?;* Federation of Tax Administrators (2005) *Electronic Filing Mandates: Lessons Learned;* Federation of Tax Administrators (2005) *FTA Briefing Paper: 2005 Electronic Filing Season Results: A Review of State and Federal Data;* Federation of Tax Administrators (2007) *2-D Barcode Frequently Asked Questions;* Federation of Tax Administrators (2008) *State Electronic Commerce Programs: State EC Snapshots Updated March 13, 2008;* Government Accountability Office (2006) *Tax Administration: Most Filing Season Services Continue to Improve, but Opportunities Exist for Additional Savings;* IRS (2007) *State Preparer Mandate Summary Matrix;* IRS (2008) *State E-file Analysis;* IRS (2008) *Summary of State Mandates for Individual Tax Returns*).

[514] Federation of Tax Administrators (2005) *Electronic Filing Mandates: Lessons Learned*

file electronically on their behalf. Unless otherwise indicated by an opt-out mechanism, mandated preparers must file the return electronically. Such mechanisms include using specially designed forms, signed paper returns, or other methods defined by the State.

In addition, many States accompanied their mandate programs with increased communication — communication with software developers, preparers, and tax authority personnel to provide information on the scope of the mandate and details for complying with the mandate. Communication often included positive messages, training and education materials and programs, FAQs and other publications, and a focus on developing partner relationships with stakeholders. Other ways to collaborate with those most affected by mandates have included the following[515]:

- **Scope Considerations** — States had to define which preparers were included in the mandate and how to handle preparers who file in more than one State.
- **Excluding Low-Volume Forms** — Some States have worked with partners to identify which forms are more cost-effective to continue to file on paper because they are not filed as often.
- **Providing E-Services** — Enhanced electronic services for preparers such as electronic account access and payment extensions may ease acceptance of the mandate.

Timing of Mandate Implementation

Timing, flexibility, and communication are important tools to ensure a smooth transition to mandated electronic filing.

Timing of mandate implementation refers to deciding on the type of threshold (e.g., adjustable or fixed) and deciding when to begin the mandate. Thresholds may also allow for phasing in or allow for lead time to work with preparers and software developers.

- **Adjustable Thresholds** — Allowed some States to phase in mandates by adjusting the thresholds over time; this allowed for a gradual transition aimed at bringing in small volume preparers as implementation proceeded[516]. For example, Wisconsin, Massachusetts, and Connecticut designed mandate programs with adjustable thresholds. Wisconsin and Massachusetts set a threshold of 200 returns for the first year and reduced the threshold to 100 returns for the second year. Connecticut followed suit, but has plans to reduce the threshold a third time to 50 returns in the third year.[517]
- **Providing Lead Time** — Allowed some States time to prepare for implementation and to prepare applicable stakeholders. This also allowed for prior-year messaging and other communications. According to the FTA, "allowing sufficient time to discuss the mandate, identify issues and answer software developer and tax practitioner questions will achieve positive results once the mandate is in place"[518].

---

[515] Federation of Tax Administrators (2005) *Electronic Filing Mandates: Lessons Learned*
[516] Federation of Tax Administrators (2005) *Electronic Filing Mandates: Lessons Learned*
[517] IRS (2007) *ETA Tax Year 2005 Full Year Database Analysis*
[518] Federation of Tax Administrators (2005) *Electronic Filing Mandates: Lessons Learned* p. 5

Many States avoid imposing penalties provided by law, preferring instead a collaborative compliance approach.

Penalties

As of 2005, only two States authorized the imposition of penalties on preparers who do not adhere to the prescribed mandates. Minnesota imposes a $5 processing fee for each return submitted on paper, unless the tax department requires the return to be filed on paper. California may assess a penalty of $50 per return against preparers for every return that is not filed electronically. As of the date of this report, California has chosen not to impose a penalty and has opted for an approach that includes communicating by letter and working with the paid preparers to encourage compliance. This approach is echoed by FTA: "Broadly applied penalties will attract protest and resistance. Compliance is better achieved through an aggressive campaign of communication and education"[519].

11.4 Mandate-Based Options

Implementation of mandates for individual tax returns can either be done at the Federal level (new option) or at the State level (as exists today). This Section explores the option of designing a Federal mandate strategy, on the assumption that Congress lifts the prohibition against Federal mandates for the electronic filing of income tax returns for individuals.

Even though this Chapter presents only one option — a Federal mandate for a subset of paid preparers — there are numerous ways to design and implement this mandate option, with varying results. In addition, this Section considers what would happen if Federal law is not changed (i.e., the potential effect of not imposing a Federal mandate but allowing or encouraging States to continue to set their own mandates). In this scenario, with no nationwide mandate policy, States would continue to set their own threshold levels and choose features of mandates that are most in line with the needs of their States.

11.4.1 Mandate Option 1: Federal Mandate on Paid Preparers

There is no single formula for mandating e-file *for paid preparers. The extent to which mandates drive increases in* e-file *volume depends on the threshold level and other key factors.*

There are a number of ways to design and implement a mandate solution, depending on the desired outcome. With multiple variables for consideration, any Federal mandate solution would require a definition of the specific mandates and a description of applicable features.

As discussed throughout this Chapter, mandates are most commonly considered for paid preparers rather than individual filers — either setting a threshold for the number of preparers included in the mandate (based on the number of returns prepared or other measures) or developing a timeline for adjustable thresholds. Factors that may contribute to the definition of a Federal mandate include the following:

- **Level of Threshold to Gain Desired Impact** — For example, ETAAC recommends a mandate for paid preparers filing more than 50 individual returns a year[520].

[519] Federation of Tax Administrators (2005) *Electronic Filing Mandates: Lessons Learned* p. 4
[520] Electronic Tax Administration Advisory Committee (2007) *Annual Report to Congress* p. 6

- **State Thresholds Already in Place** — Setting a Federal mandate could "provide a national standard for all States to adopt thus improving consistency between Federal and State tax administration"[521]. Conversations with some State agencies suggest that setting a Federal mandate would do just that (Oklahoma, Connecticut); others encourage the Federal government to carefully consider other States before deciding on a threshold (California).
- **Accompanying Policies/Exceptions** — An opt-out provision or waiver that allows taxpayers to choose to not have their preparers file electronically shifts the burden from the taxpayer to the paid preparer. As discussed earlier in this Section, other waivers for preparers (e.g., hardship waiver) may assist in easing the transition to electronic filing.
- **Relationship with Third Parties** — As part of mandate implementation, there is the opportunity to offer communication and training to paid preparers and respond to their concerns.
- **Combination with Other Solutions** — These include encouraging voluntary compliance. The IRS Oversight Board and ETAAC have both expressed a concern that focusing exclusively on mandates would decrease emphasis on voluntary options[522].

11.4.1.1 Targeted Population/Potential *E-file* Contribution

A Federal mandate on preparers could add 5% to 20% to the bottom line e-file *rate, depending on the threshold and actual compliance.*

The overall target for paid preparer mandates is tied directly to the number of returns from preparers that are not yet filed electronically, in particular those that are prepared by a preparer on a computer first and then mailed to the IRS (V-Coder population)[523].

In TY2006, about 63% of individual returns were filed by paid preparers (98% of paid preparer–filed returns were computer-prepared). However, about half of the paper returns — approximately 30 million — were from paid preparers and were computer prepared. The effect of tapping into this targeted population of preparers (V-Coders) would depend on how thresholds are set.[524]

Table 11-2 provides IRS data from the ETA Business Master File (BMF) Marketing Database from PY2006 on the number of preparers who prepared a certain number of individual returns[525]. Using the information in this table, it is possible to determine a ceiling for how many preparers and how many preparer-filed returns would be converted from paper to electronic filing if a mandate were put in place.

---

[521] Electronic Tax Administration Advisory Committee (2007) *Annual Report to Congress* p. 6

[522] Electronic Tax Administration Advisory Committee (2007) *Annual Report to Congress* p. 7; IRS Oversight Board (2007) *Electronic Filing 2006: Annual Report to Congress* p. 5

[523] This targeting of the V-Coding preparer population is discussed by the IRS Oversight Board, ETAAC, and GAO in their respective annual reports. For example, the IRS Oversight Board explained: "Sizeable volumes of returns prepared by tax practitioners using computer software are nevertheless filed on paper, and … mandates for certain paid preparers to *e-file* these paper returns would be an effective means toward achieving the 80 percent *e-file* goal" (IRS Oversight Board (2008) *Electronic Filing 2007: Annual Report to Congress* p. 29). Similarly the ETAAC wrote in their 2007 Annual Report: "In that professionally prepared returns represent 60 percent of all returns, a preparer mandate represents the single biggest opportunity for the IRS to increase *e-filing* rates of 1040 returns" (Electronic Tax Administration Advisory Committee (2007) *Annual Report to Congress* p. 6).

[524] IRS (2006) *Tax Year 2006 Taxpayer Usage Study*

[525] IRS (2008) *IIRAPHQ Report: Individual Income Received and Processed - Headquarters [returns e-filed as of 25 April 2008];* IRS (2008) *IRS Master File Data on Total and e-filed Individual Returns CY2007 and Q1 CY2008;* IRS (2008) *Number of Preparers Broken Out by Number of Returns Prepared*

Table 11-2 Potential Effect of Various Paid Preparer Thresholds on *E-file* Rate (PY2006)

Threshold (Returns/Year)	# Preparers in Threshold	# Paper Returns Filed	Net *E-file* Effect	Total *E-file* Effect
1,000+	11,773	6,678,344	4.9%	59.4%
501+	32,698	12,013,605	8.9%	63.4%
201+	81,257	18,909,012	14.0%	68.5%
101+	125,963	22,403,793	16.6%	71.1%
51+	171,590	24,519,993	18.1%	72.6%
26+	218,141	25,757,058	19.1%	73.5%
1+	786,274	27,591,572	20.4%	74.9%

For example, if the Federal threshold were set at 200 or more preparers (which is higher than the thresholds in most States), 81,257 preparers would be required to move from paper filing to *e-filing*, resulting in 18,909,012 new *e-filed* returns — a 14% contribution to the 80% *e-file* goal, which would bring the total *e-file* rate to 68.5%.

Alternatively, lowering the threshold to 50 or more as recommended by ETAAC would require 171,590 preparers to file 24,519,993 returns electronically — yielding an 18.1% contribution to the 80% *e-file* goal, which would bring the total *e-file* rate to 72.6%.

Given the changes from TY2005 to today, further research is needed to obtain a better estimate of the expected increase in *e-filing* from a Federal preparer mandate.

It is important to note that this estimate used PY2006 data — the most complete data set currently available through the IRS — to define the segments of number of preparers by threshold of returns filed per year. Therefore, further research will be required to obtain a more current estimate given that:

- The number and proportion of filers has changed since PY2006 (e.g., the use of paid preparers has increased since then).
- The *e-file* adoption rate has grown to 59.8% since the 54.5% rate of PY2006.

11.4.1.2 Considerations

Trade-Off: Preparer Impact/Expected Benefits

The IRS Oversight Board urges careful consideration of mandate thresholds and their impact on preparers. However, State experiences suggest that the disruption is manageable and has not posed a major problem in the State-preparer relationship.

As shown above, there is a balance between how many preparers would be required to convert from paper filing to *e-filing* under a mandate and how big a result would be achieved by that requirement. The IRS Oversight Board recommended that the IRS examine the "tradeoffs between the expected benefits from increased *e-file* [from paid preparer mandates] and the burden imposed on filers and their preparers" before deciding to mandate or set a specific threshold aimed at reaching a certain percentage of the non–*e-filing* population[526]. The IRS Oversight Board suggested that "broadly-defined mandates could have an impact on a large number of preparers in a manner disproportionate to the additional *e-file* returns generated" and recommended that the IRS conduct a threshold analysis before developing a mandate strategy[527].

The IRS Oversight Board also pointed out that "as the threshold is lowered, the percentage increase in tax practitioners affected is higher than that of additional e-

[526] IRS Oversight Board (2008) *Electronic Filing 2007: Annual Report to Congress* p. 6
[527] IRS Oversight Board (2007) *Electronic Filing 2006: Annual Report to Congress* p. 5

returns generated"[528]. As part of this analysis, the IRS Oversight Board noted that the preparer community has been a "major contributor to the success of *e-file* to date" and expressed concern that the potential burden of a mandate may affect the third party relationship with the IRS[529]. Similarly, the IRS suggested that preparer lobbies, especially among small businesses, may oppose Federal mandates because most small business and self-employed taxpayers use a paid preparer[530].

Experience in the States, however, has suggested that with sufficient communication and collaboration with the preparer community, the assumed burden could be minimized or mitigated. In conversations with States and preparer organizations, there is a general sense that although some have expressed concern about the potential burden before a mandate goes into effect, actual experience has shown that it is less burdensome than expected. This sentiment was echoed in interviews the IRS conducted with a number of States in early 2007 and in materials provided by FTA. For example, in its *Electronic Filing Mandates: Lessons Learned*, FTA describes experiences in California:

> Although California announced its mandate in June 2003 (legislation was adopted August 2003 for a January 1, 2004 implementation date), the State made great efforts to partner with professional organizations, IRS and external partners to ensure those affected by the mandate would receive the education and training necessary to transition to e-file. Because of this effort, California reported limited negative response to the mandate.[531]

Further research may be needed to confirm that the burden on preparers may be less than expected under certain conditions.

Furthermore, when considering a Federal mandate for preparers, it would be worth considering the effect that States with mandates may have already had on paving the way for preparer readiness for a Federal preparer mandate — not just because States have built sustaining relationships with the preparer community, but also because preparers who have already converted their practices to support electronic filing to meet State mandates will be well-positioned to support a similar Federal *e-file* effort.

Effect of State Preparer Mandates on Federal E-file Volumes

States with mandates have seen increases in both State and Federal electronic filing rates and a reduction of V-Coding at the Federal level.

Independent of a Federal mandate effort, research and experience suggest that the IRS has indirectly benefited from State efforts to impose paid preparer electronic filing mandates, in that as States mandate preparers to electronically file, the result is not only an increase in the State electronic filing volumes, but also an increase in Federal *e-file* volumes.

This Section considers the possible effect of not implementing a Federal mandate but continuing to encourage State mandate programs, particularly in States that participate in the Fed/State electronic filing program or that have infrastructures similar to the IRS. This option currently does not consider adding additional incentives to States to implement mandate programs, but such incentives could potentially be explored if deemed necessary. The estimated contribution to the 80% *e-file* goal is uncertain at this time, but the remainder of this Section looks at how Federal *e-file* numbers have historically received a boost from State mandates.

FTA research suggests that for States that both participate in the Fed/State program and implement mandates, the IRS may see a bump in Federal *e-filed* returns as an indirect

[528] IRS Oversight Board (2007) *Electronic Filing 2006: Annual Report to Congress* p. 23
[529] IRS Oversight Board (2007) *Electronic Filing 2006: Annual Report to Congress* p. 5
[530] IRS (2007) *Bar Coding and e-Filing Mandates* p. 13
[531] Federation of Tax Administrators (2005) *Electronic Filing Mandates: Lessons Learned* p. 5

result of States' mandate policies. For example, the FTA calls attention to States such as Michigan, Oklahoma, and Wisconsin, where State returns are "first filed with the IRS and are thus likely to be to be accompanied by a Federal return"[532]. For States that are not part of the Fed/State program, such as Minnesota and California, the FTA noted, "the infrastructure for State electronic filing is closely related to that for Federal filing, and the marginal cost of also filing the Federal return electronically is minimal"[533]. In addition, for States using the Fed/State model, preparers will need to sign up for and use IRS *e-file* to meet State mandates.

IRS analysis shows that the Federal electronic filing rates in States with mandates (grouped together as a whole) increased from 2000 to 2005, and in 2005, the rates for States with mandates exceeded electronic filing rates for the total population. Similarly, the percentages of paid preparers filing V-Coded returns have gone down in that time period and dropped below the rate of the overall filing population in 2004 and 2005.[534]

In the same IRS report, case studies for Wisconsin and Massachusetts showed increased *e-filed* and decreased V-Coded returns among paid preparers in those States. Both States had a threshold of 200 returns for the first year of implementation and reduced the threshold to 100 in the second year. Connecticut showed similar results, with plans to reduce the threshold to 50 in the third year of implementation. This has led the IRS to conclude the following:

> Based on our analysis of mandated States from TY2000 to TY2005, States with electronic filing mandates, on average, have a higher percentage of electronically filed (Federal) returns and a lower percentage of V-Coded returns when compared to States as a whole. These numbers imply that continued strong growth in *e-filing* may require the adoption of additional electronic filing mandates.[535]

In a separate IRS study, researchers looked at growth rates for electronically filed Federal returns (Form 1040 series) before and after certain States implemented their mandate programs. This information, which was compiled from *e-file* returns based on selected editions of IRS Document 6187, indicated growth in 10 States[536].

GAO found that States with mandates outpaced the national average electronic filing growth.

In a 2006 report, the GAO compared the growth of electronic filing rates in Federal returns for nine States that had mandates in effect before 2006 with national averages (not including States that implemented mandates in 2007)[537]. As shown in Table 11-3, the GAO found that "in eight of these nine States the growth rate of electronically filed Federal returns increased the year the mandate was implemented"[538]. Other findings include the following[539]:

---

[532] Federation of Tax Administrators (2005) *Electronic Filing Mandates: Lessons Learned* p. 2
[533] Federation of Tax Administrators (2005) *Electronic Filing Mandates: Lessons Learned* p. 2
[534] IRS (2007) *ETA Tax Year 2005 Full Year Database Analysis* pp. 48, 50
[535] IRS (2007) *ETA Tax Year 2005 Full Year Database Analysis* p. 74
[536] IRS (2007) *Bar Coding and e-Filing Mandates* p. 16
[537] The findings from the 2006 GAO report were also presented at a CERCA meeting in May 2007 (White, J. (2007) *How GAO Assesses Electronic Tax Administration* p. 15).
[538] Government Accountability Office (2006) *Tax Administration: Most Filing Season Services Continue to Improve, but Opportunities Exist for Additional Savings* p. 45
[539] Government Accountability Office (2006) *Tax Administration: Most Filing Season Services Continue to Improve, but Opportunities Exist for Additional Savings* pp. 14-15

- Four States had electronic filing increases of between 7% and 48%.
- The electronic filing growth rates in four other States more than doubled, including California, whose growth rate nearly tripled.
- In all but one of these cases, the growth in electronic filing rates for States in the year that the State mandates were implemented was higher than the nationwide electronic filing growth rate in that same year.

Table 11-3 *E-filing* Growth in States with Mandates Compared with US Averages (as of 2006)

State	Tax Year Mandate Implemented	*E-filing* Rate Before Mandate	*E-filing* Rate After Mandate	Change in *E-filing* Rate	National Change in *E-filing* Rate
Alabama	2004	9.9%	14.6%	48.0%	11.2%
California	2003	14.8%	55.7%	276.7%	12.3%
Massachusetts	2004	11.2%	28.1%	150.9%	11.2%
Michigan	2003	14.2%	40.3%	184.1%	12.3%
Minnesota	2000	32.6%	34.9%	7.2%	13.6%
New Jersey	2004	12.7%	35.0%	176.5%	11.2%
Oklahoma	2003	8.9%	12.6%	42.0%	12.3%
Virginia [a]	2004	12.4%	11.0%	-10.6%	11.2%
Wisconsin	2002	23.4%	29.6%	26.6%	16.6%

Notes: (a) The growth rate declined in Virginia because it had previously counted 2D barcoded paper returns as being electronically filed, and this was not consistent with the IRS counts.

In the 2006 report, the GAO reported that IRS officials attributed State mandates increasing the electronic filing of Federal individual returns to the possibility that once paid preparers were required to file State returns electronically they "converted their entire practice to electronic filing"[540].

Other Considerations for a Federal Mandate on Paid Preparers

A mandate would not address the 28 million individuals who self-prepare and paper file or V-Code.

Other considerations for designing and implementing a Federal *e-file* mandate for paid preparers include the following:

- **Effect on States** — If Federal mandate thresholds are different from State thresholds (e.g., if a Federal threshold is set for 50 returns), what effect would this have on a State that has a higher threshold, such as 100 or 200 returns? This question has come up in conversations with States, but further research may be needed to determine the positive and negative effects.[541]
- **Coupling with Other Improvements** — A mandate strategy may be coupled with other improvements (e.g., standards, screening) for preparers. This consideration has been mentioned anecdotally, and although it ties to States' experience, which led some States to consider ERO certification impacts brought about by mandates, it may also be a topic for further research.

[540] Government Accountability Office (2006) *Tax Administration: Most Filing Season Services Continue to Improve, but Opportunities Exist for Additional Savings* p. 14
[541] Beach, C. (2008) *Interview of Director, Filing Methods Bureau, California Franchise Tax Board*

For more information on MeF, see Section 12.1.2.

- **Target Population** — A mandate strategy would not address the volumes of self-preparers who file on paper or V-Code. According to the IRS Oversight Board, “Preparers have provided solid support for Form 1040 *e-file* without Federal mandates (although *e-file* mandates at the State level have played a role); and a greater challenge exists with the lower *e-file* rate among the self-prepared returns where preparer mandates would have no effect”[542].
- **Timing** — The IRS Oversight Board recommends that the IRS examine whether the new Form 1040 MeF platform — “with its more customer friendly computer technology” — should be in place prior to implementing a Federal mandate strategy.[543]

Among stakeholders such as the IRS Oversight Board and ETAAC, there is general agreement that there is still need to promote voluntary *e-filing*, especially among individual filers. According to the IRS Oversight Board, “The Board does not want mandates to become a substitute for making electronic filing more convenient and attractive”[544].

[542] IRS Oversight Board (2008) *Electronic Filing 2007: Annual Report to Congress* p. 30
[543] IRS Oversight Board (2007) *Electronic Filing 2006: Annual Report to Congress* p. 24
[544] IRS Oversight Board (2007) *Electronic Filing 2006: Annual Report to Congress* p. 5

THIS PAGE INTENTIONALLY LEFT BLANK.

12. Internet-Based *E-filing* Options

Contents of Chapter 12:

This Chapter discusses Internet-based *e-filing* options, which the IRS may leverage to help reach the 80% *e-file* goal. An overview of the IRS's current methods, including the role of third parties, provides an understanding of Internet-based *e-filing* in general. The Chapter then reviews State tax administrations' recent experiences with Internet-based filing and concludes with a survey of the various options available to the IRS. Themes identified in this Chapter include the following:

- While these options have some impact on technology, their more substantive implications are political and operational. Two of the three options require a major shift in the third party model, transferring ownership of pieces of the current *e-file* program from third parties to the Federal government.
- Estimating the number of filers who might migrate to these options is challenging and requires consideration of a number of complex factors in addition to cost to the taxpayer.
- Determining these options' potential contributions to the 80% *e-file* goal requires understanding whether the options will attract paper filers or merely shift current *e-filers* to a new method.

12.1 Overview

This Chapter describes opportunities to use Internet technology to advance *e-file*. The options in this Chapter do not necessarily introduce new technical solutions, but their implementation may result in new *e-file* service roles for the IRS or its third party counterparts. While these options are technical in nature, at their core, they are driven by behavior and motivators and may affect relationships with third parties.

Options in this category may raise broader philosophical policy questions about the meaning of "good government" and its role and responsibilities to citizens — that is, how far must government go in helping citizens meet their tax obligations? While not attempting to answer such questions, this report does recognize these concerns as potential drivers.

12.2 History and Background

For more information about *e-file* history, see Chapter 2. See Chapter 3 for more information about *e-file* growth and projections.

The electronic filing of individual returns is part of the IRS *e-file* program. The *e-file* program provides a submission service for individual tax returns that supports the current model of third party preparation with third party transmission. To set the stage for the discussion of future Internet-based options for advancing *e-file*, this Section describes how electronic filing occurs in the current IRS system environment and how planned system enhancements may affect *e-filing*.

12.2.1 *E-filing* Individual Federal Tax Returns in the Current Environment

Through its current electronic filing program the IRS has been able to achieve continuous growth toward the 80% e-file *goal.*

The process for electronically filing Federal individual income tax returns begins with preparation of the return and ends with IRS sending an electronic acknowledgment of acceptance of the return to the taxpayer or preparer.

Figure 12-1 provides a high-level depiction of the *e-file* process. Green arrows indicate a potential cost to the taxpayer (i.e., the taxpayer may pay for a preparer's services, or tax software if the taxpayer self-prepares, and may pay to *e-file*). The process begins with the taxpayer or preparer using tax preparation software, which is purchased or used for free (e.g., through the Free File program). These tax preparation solutions allow for the electronic filing of 1040, 1040A, or 1040EZ returns and most associated forms and schedules through an *e-file* transmitter. The transmitter formats the returns in the IRS proprietary format and bundles them into submission files (batches of returns) for electronic transmission to the IRS. The role of the transmitter is unseen by most filers who simply press "send" to *e-file* their returns and may assume that their returns go directly from their software product to the IRS.[545]

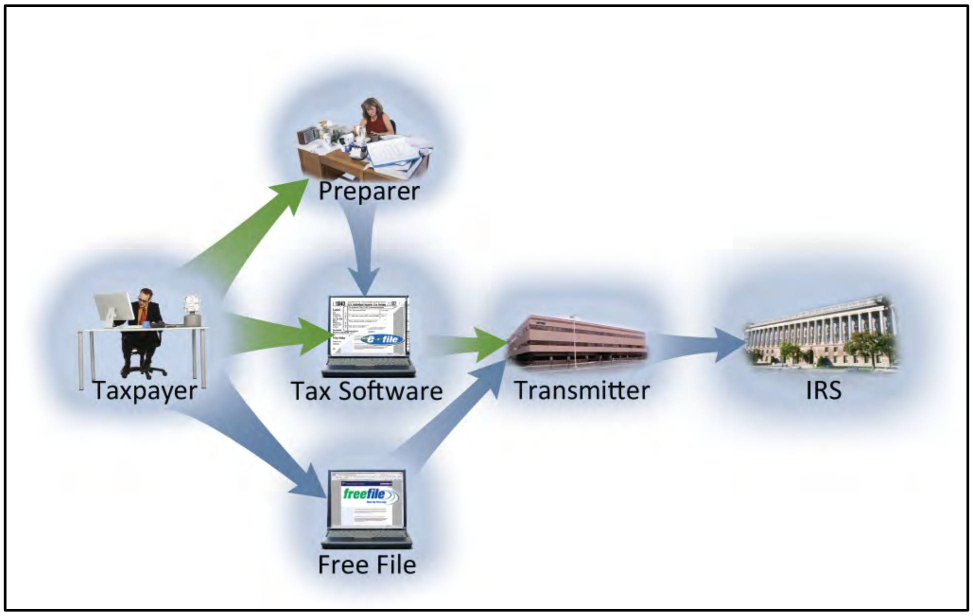

Figure 12-1 Federal *E-filing*

For more information about EROs and transmitters and a high-level overview of the electronic filling process, see Chapter 2.

An individual return filed through the IRS *e-file* program may be completely paperless or a composite of electronically transmitted data and paper documents (a small number of forms cannot be submitted electronically)[546]. IRS Publication 1345, *Handbook for Authorized IRS e-file Providers*, is a reference guide for transmitters outlining the rules for the submission of individual tax returns.

[545] IRS (2008) *Internal Revenue Manual: 3.42.1. Overview of Electronic Tax Administration (ETA) Programs*
[546] IRS (2005) *Handbook for Authorized IRS E-File Providers of Individual Income Tax Returns* p. 5

For more information about electronic signatures, see Section 5.6.

As with an income tax return submitted to the IRS on paper, an electronic return must be signed by the taxpayer as well as by the paid preparer, if applicable. Taxpayers may sign individual income tax returns either electronically or on a paper declaration.[547]

The current IRS system for receiving electronically filed returns from transmitters is called the Electronic Management System (EMS). As an *e-file* submission gateway, EMS provides protocol translation, telecommunications structure, security, and data management support for submission of individual returns to the IRS *e-file* program. Business returns are handled through a separate system. Submission files are received at the IRS by secured methods (i.e., dedicated telecommunications lines or secured transmission protocol over the Internet).[548]

For more information about error checking and acknowledgments, see Section 10.2.2.3.

Usually within 2 business days, the IRS sends the *e-file* transmitter an electronic acknowledgment indicating whether each return was accepted or rejected. The transmitter then informs the taxpayer or preparer of the status the return. Rejected returns must be resubmitted and acknowledged as accepted before they will be processed.[549]

For more information about *e-file* cost structures and bundling, see Section 5.7.

The IRS does not charge transmitters or any other registered third parties to participate in the *e-file* program (the IRS accepts electronic returns for free from registered transmitters). In the current environment, however, these third parties may and often do charge taxpayers to *e-file* to cover their operating expenses and desired profit. There is currently no regulation of those charges. Depending on the service and the specific provider, the *e-file* cost to the filer varies. Third parties are increasingly bundling the historically separate *e-file* fee with the fee for the preparation service or software. This practice of bundling hides the *e-file* cost in the total cost but does not necessarily remove it.

12.2.2 Modernized e-File

In 2004, the IRS launched a new *e-file* system for corporations called Modernized e-File (MeF). MeF is a web-based system allowing electronic filing of business income tax returns through the Internet. MeF uses the widely accepted eXtensible Markup Language (XML) format, a standardized way of identifying, storing, and transmitting data. The MeF program has expanded to include tax-exempt organizations and partnerships.[550]

For these types of returns, businesses originate their electronic submissions to MeF by doing one of the following[551]:

- Electronically sending returns to a transmitter that, in turn, sends the returns to the IRS.
- Directly transmitting returns to the IRS (only for authorized, very large corporations).
- Providing returns to an Intermediate Service Provider for processing prior to transmission to the IRS.

---

[547] IRS (2005) *Handbook for Authorized IRS E-File Providers of Individual Income Tax Returns* p. 22
[548] IRS (2007) *Electronic Return File Specifications for Individual Income Tax Returns (Tax Year 2007)* p. 2
[549] IRS (2008) *Internal Revenue Manual - 3.42.5 e-file of Individual Income Tax Returns*
[550] IRS (2008) *e-file for Large and Mid-Size Corporations - Frequently Asked Questions (January 2008)*
[551] IRS (2008) *e-file for Large and Mid-Size Corporations - Frequently Asked Questions (January 2008)*

The IRS plans to incrementally expand its Modernized e-File program to include 1040 returns beginning in 2009. This shift will enhance the program currently offered through EMS and is expected to improve services for individual e-filing.

Transmitters may use the Internet to transmit electronic return data to the IRS MeF system. The IRS included two new Internet options in the design of MeF: Internet Filing Application (IFA) and Application-to-Application (A2A). These were designed to meet the needs of registered transmitters who send large complex returns.[552]

MeF improves on the electronic acknowledgment capability of EMS. Each return in a transmission is either accepted or rejected for specific reasons. Similar to *e-file*, returns that meet the processing criteria are considered "filed" as soon as they are accepted. Rejected returns that fail to meet processing criteria are considered not filed. MeF, however, provides acknowledgments in minutes versus hours or days.[553]

The IRS recently announced that it will expand MeF to include individual tax returns. This expansion preserves the current methods taxpayers or their preparers use to prepare returns, as well as the roles of third parties such as EROs and transmitters in originating and transmitting the returns electronically. The IRS plans an incremental release of the 1040 series of returns on the MeF system starting in the summer of 2009 through 2011. This enhancement will improve the integrity and efficiency of the process between preparers and the IRS. Because adding individual tax returns to MeF is a planned update to an existing system, this topic is addressed in more detail in the discussion of Internet Option 1 in Section 12.3.1.

12.3 State Experiences

The relevance of State electronic filing experiences depends on demographic, political, technical, and economic factors.

This Section focuses on the Internet-based solutions currently implemented at the State level for self-prepared State Personal Income Tax (PIT) returns. In most cases, these programs provide an alternative to filing State PIT returns through the Fed/State program. As seen in other option areas, the IRS may be able to gain insights about how these approaches affect the States' electronic filing rates. At the same time, when looking at these examples, factors that can vary widely between the State and Federal levels (e.g., scalability, complexity, political climate, cost, overall usage) should be taken into account. In general, the States use two Internet-based alternatives described by the FTA as follows:

- **Direct Internet Filing (I-File) Programs** — Enable electronic filing directly to the State through a State-developed and State-administered web site with no related fees.
- **Online Filing Programs** — Enable electronic filing from PCs and approved commercial software routed through transmitters (most are independent arrangements with transmission directly to States, but some States also participate in the Fed/State program).

12.3.1 Direct Internet Filing (I-File)

State direct I-File programs offer State taxpayers a web-based set of forms (often electronic versions of paper forms) or web pages (interactive technology often following a question/answer format) to file their State PIT returns directly with the State's tax

---

[552] IRS (2005) *Corporate e-File*

[553] IRS (2008) *Modernized e-File (MeF) Information for Authorized IRS e-file Providers and Large Taxpayers (Corporations, Partnerships and Tax Exempt Organizations) Tax Year 2007*

See Chapter 7 for a map of the States offering free I-File as of 2006.

administration — almost all States that currently provide I-File use a form-based (versus guided interview) interface. In general, these programs offer web forms or pages free of charge with key features such as automated calculations, hyperlinks to supporting material, and the ability to save and return to the form at a later date. These solutions typically target more simplistic income tax returns, usually with a limited number of associated schedules or forms.

I-File systems, in their many variations, are the most commonly used technical solution offered by States as a free electronic filing method. The States offering free I-File for filing State PIT returns are shown in Figure 7-3 in Chapter 7.

To illustrate the range of features and eligibility requirements associated with State I-File programs, Table 12-1 provides an overview of the system features for eight State solutions sampled by the GAO[554].

Table 12-1 Overview of I-File System Features for Eight States (as of 2006)

State (System)	Year Started	Key Features	Eligibility Requirements
California (CalFile)	2003	· Log-in/create account · Perform calculations · Hyperlinked to other forms and publications	· Limits on residency, amount of income, type of income, itemized deductions, type of credits, number of dependents, types of payments
D.C. (On-line Tax Filing Service)	2002	· Log-in/create account · Perform calculations · Hyperlinked to other forms and publications · Ability to save and return to form · Auto populate some fields · Status checks	· Must have filed a return the previous year
Indiana (I-File)	1998	· Log-in/create account · Perform calculations · Hyperlinked to other forms and publications · Ability to save and return to form · Auto populate some fields	· Limits on type of form · Must have not legally changed first or last names since the last filed return
Kansas (Webfile)	2001	· Log-in/create account · Perform calculations · Hyperlinked to other forms and publications · Ability to save and return to form · Auto populate some fields · Status checks	· Limits on income · Open to nonresidents · Must have filed a State return the previous year

[554] Government Accountability Office (2007) *Taxpayer Service: State Experiences Indicate IRS Would Face Challenges Developing an Internet Filing System with Net Benefits* pp. 16-17

State (System)	Year Started	Key Features	Eligibility Requirements
Maryland (I-File)	2001	· Log-in/create account · Perform calculations · Hyperlinked to other forms and publications · Ability to save and return to form · Auto populate some fields · Status checks · View prior year's information	· Limits on number and type of forms · Open to nonresidents
Pennsylvania (pa.direct.file)	2000	· Log-in/create account · Perform calculations · Hyperlinked to other forms and publications	· Limits on type of income, type and number of forms, credits, and types of deductions
South Carolina (SCnetFile!)	1999	· Log-in/create account · Perform calculations · Hyperlinked to other forms and publications · Auto populates some fields	· Limits on type of income, type of forms, and type of credits · Open to nonresidents
Utah (TaxExpress)	2001	· Log-in/create account · Perform calculations · Hyperlinked to other forms and publications · Status checks	· Limits on income, type of deductions, and type of credits · Must have filed a State return the previous year

While usage may be generally low, all States with I-File implementations have seen some degree of increased electronic filing through I-File.

The effectiveness of State I-File programs in increasing State electronic filing rates varies. However, for the eight States reviewed by GAO in 2006, usage was generally low, ranging from less than 1% to just over 5% of total filers, as shown in Table 12-2[555]. For information about States not reviewed by GAO, additional research is needed.

One of the factors that may contribute to lower I-File usage rates is limited eligibility. As shown in Table 12-1, each of the eight States profiled by GAO had at least some restrictions on eligibility, including income, residency, number of deductions, and previous filings. According to conversations with one State, allowing first time filers to I-File could increase usage volumes, though that could negatively affect fraud detection efforts[556]. In addition, lack of marketing may be a factor affecting usage.

---

[555] Government Accountability Office (2007) *Taxpayer Service: State Experiences Indicate IRS Would Face Challenges Developing an Internet Filing System with Net Benefits* p. 18

[556] Annino, J. (2008) *Interview of Electronic Filing Coordinator, Electronic Commerce Unit, Connecticut Department of Revenue Services*

Table 12-2 I-File Adoption Rates for Eight States (as of 2006)

State	Total # of I-File Users	Total # of Eligible Filers	Total # of Filers	I-File as % of Eligible Filers	I-File as % of Total Filers
California	111,436	6,400,000	14,600,000	1.7%	0.8%
D.C.	9,285	n/a	300,000	n/a	3.2%
Indiana	83,422	n/a	3,000,000	n/a	2.7%
Kansas	50,999	n/a	1,400,000	n/a	3.6%
Maryland	115,678	n/a	2,800,000	n/a	4.2%
Pennsylvania	300,552	1,500,000	5,600,000	20.0%	5.3%
South Carolina	29,241	1,500,000	2,000,000	2.0%	1.4%
Utah	25,267	n/a	1,000,000	n/a	2.5%

Notes: n/a indicates not applicable.

Other Considerations

I-File solutions require that States have direct ownership of the entire tax preparation and filing process. The development, implementation, support, and maintenance (including customer support) of the entire system, whether contractors are utilized, is the sole responsibility of the State to fund and manage. This would be the same for the IRS if it were to undertake an *e-file* solution modeled on I-File.

Results from States that have implemented I-File solutions are mixed. The GAO Report on Taxpayer Service highlighted the challenge of obtaining accurate cost information from the States and the IRS to determine the true cost of paper and electronically filed returns:

> Although incomplete, the available data combined with the decision by three States to discontinue their systems raise the possibility that in at least some States the benefits were less than costs. According to officials in two of the three States that discontinued their I-File systems, the benefits did not appear greater than costs and the system was not providing a good return on their investment. One agency official reported experiencing low usage and high costs. Officials with Iowa's Department of Revenue said the State had hoped to see major growth in electronic filing usage by introducing an I-File system, yet the system use peaked at 22,815 I-filed returns in 2004. Like Iowa, Arkansas discontinued its I-File services. According to a State official, Arkansas's I-File system operated for 5 years beginning in tax year 2000 and processed a total of 5,149 returns; the highest usage was in 2005, with 1,382 returns processed[557].

Although I-File is a State mechanism for offering free electronic filing, depending on the service offered, doing so may prevent the States from participating in the State-level Free File program because it may go against the agreement with the FFA.

[557] Government Accountability Office (2007) *Taxpayer Service: State Experiences Indicate IRS Would Face Challenges Developing an Internet Filing System with Net Benefits* pp. 25-26

12.3.2 Online Filing Programs

State online filing programs are similar to IRS *e-file* for individuals but may be independent from the Fed/State program. Taxpayers and preparers use commercial software for tax preparation and electronically file returns through transmitters to the State. The EROs may impose a filing fee for the electronic filing of the returns.

Seven States (California, Illinois, Maine, Massachusetts, Minnesota, Ohio, and Utah) offered the independent filing alternative for returns prepared by preparers or taxpayers and originated to transmitters in 2007[558]. Three of these States (Illinois, Ohio, and Utah) also leveraged the Fed/State program for electronic filing.

Depending on whether State offerings are perceived by the FFA to be in competition with its members' products, these States may be eligible for participation in the State-level Free File program.

12.4 Internet-Based Options

This Section introduces a number of Internet-based options to increase Federal *e-file* volumes. The Section provides a working definition of each option, acknowledging potential variations within each; discusses the targeted audience and potential contribution to the 80% *e-file* goal; and addresses other considerations for each option.

Because a number of these options would require shifting ownership of certain pieces of the current *e-file* program from third parties to the Federal government, each option is reviewed in the context of the historical relationship between the IRS and third parties and its potential effect on changing the third party model described in Chapter 2. In most cases, the options do not necessarily introduce new technical solutions, but implementation of the options may mean new *e-file* services for the IRS or its third party counterparts. Excluded from discussion of each of the options is consideration of specific technology (i.e., types of hardware and software).

Because Internet-based *e-filing* options are many and varied, for the purposes of this report, they have been grouped into three main categories:

1. **Enhance IRS Systems** — This represents the status quo from a program standpoint while the IRS continues to incrementally upgrade its systems.
2. **Direct Filing** — Use of third party tax preparation software with the option to *e-file* directly to the IRS at no cost (the preparation method remains commercial).
3. **IRS-Provided Preparation and Filing** — Use of IRS-provided tax preparation software and *e-filing* directly to the IRS at no cost (for software or *e-filing*).

For each of the three options that are considered in this Chapter, there are a number of potential ways to implement these options. While all options have components that are owned and managed by the Federal government, options may differ in who operates the solution: the government or a contractor. Variations of these solutions may be a vendor-maintained direct file solution (government-owned, contractor-operated) or an IRS-maintained direct file solution (government-owned, government-operated). Detailed consideration of implementation particulars is out of scope for this report, and these variations will be examined in later phases. At a high level, however, it is

---

[558] Federation of Tax Administrators (2007) *State Electronic Filing Programs For Individual Income Tax*

important to understand that each of these variations differ in the level of direct IRS involvement in the implementation and operation of the systems.

Scope of Options Considered

For more information on filing for free, see Section 10.4.3, Section 10.4.4, and Chapter 15.

A fourth option category was purposefully omitted from this Chapter — File for Free — which would largely preserve the current tax preparation and filing methods but directly or indirectly subsidize the *e-filing* cost to the taxpayer. Options in this category would not involve building new system capabilities but would in fact be more closely aligned with incentives (i.e., eliminating the *e-file* fee taxpayers are charged by tax preparation software vendors). The specific option to subsidize and/or regulate *e-file* fees is noted in Chapter 15. Related options, Increased Marketing for Free File and Expand the Free File Program, are addressed in Chapter 10. In addition, a pre-filled return solution is not discussed as an option in this report[559].

12.4.1 Internet Option 1: Enhance IRS Systems

Internet Option 1 involves enhancing e-file *to remove system constraints and provide new services as incentives.*

Under Internet Option 1: Enhance IRS Systems, the IRS follows through on its plan to continue maintaining EMS while preparing an incremental release of the 1040 family of forms on the MeF system from 2009 through 2011. The current methods of *e-filing* are supported during the transition to MeF. Figure 12-2 illustrates how Internet Option 1 operates and how it is identical from a Federal filing perspective to the current system shown in Figure 12-1.

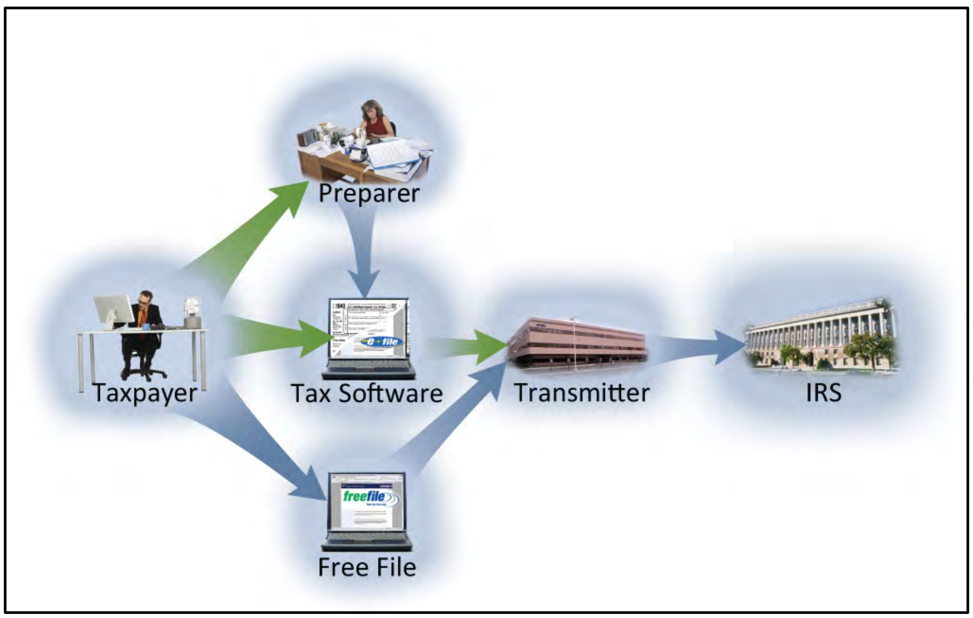

Figure 12-2 Internet Option 1: Enhance IRS Systems

[559] See e.g., Department of the Treasury (2003) *Report to The Congress on Return-Free Tax Systems: Tax Simplification Is a Prerequisite*, for more information on issues related to pre-filled returns.

MeF 1040 utilizes a new technology base to improve the *e-filing* experience. The projected benefits to moving individual returns to the MeF system include the following[560]:

- **Faster Confirmation of Return Acceptance or Rejection** — MeF returns are processed as they are received instead of being delayed in a batch system, as they are under the current *e-file* program.
- **Specific Explanation of Errors** — Under the current *e-file* program, one error code may apply to multiple types of *e-file* errors. MeF error codes use simple wording to clarify each error that triggers a rejected return.
- **Ability to Attach Documents** — The current no-attachment rule severely limits the number of returns that can be *e-filed*.
- **Ability to File Amended or Prior Year Returns** — This option is not available under the current *e-file* program.

12.4.1.1 Targeted Population/Potential *E-file* Contribution

Because MeF is only available to registered providers, these improvements to the current *e-file* program only target the preparer community, specifically:

- Preparers who currently file on paper primarily because of the restrictions in the number of forms supported by *e-filing*.
- Preparers who currently *e-file* some, but not all, returns because of the forms restriction.

It appears that the combined size of these populations is not large; however, the actual number is unclear. Further research is required to better understand these preparer populations and whether these enhancements would "move the dial" to a significant extent.

12.4.1.2 Considerations

Considerations for Internet Option 1 include the following:

- This option preserves existing stakeholder roles and business models.
- As return preparation software vendors integrate new MeF capabilities into their products, the larger population of V-Coding self-filers may in turn benefit from these MeF enhancements.
- Similar to incentives and other options, this option relies on marketing, education, and training to drive awareness and usage.

For more information about error checking, see Section 10.2.2.3.

As a part of planned enhancements, the IRS may find opportunities to expand the scope as well as the quality of its *e-file* offerings. For example, in terms of improving error resolution, the IRS may want to consider the ETAAC recommendation for the IRS to do the following:

[560] Caplan, R. (2008) *IRS Announces New Release Date for 1040 Modernized E-File Program*

> …evaluate its more than 600 validation controls with the goal of increasing *e-filing* rates while also mitigating erroneously filed returns. In pursuit of this goal, ETAAC encourages the IRS to collaborate with software developers to explore ways to further reduce controllable rejects.[561]

12.4.2 Internet Option 2: Direct Filing

While maintaining the third party role in preparation, the Direct Filing option puts the IRS in the position of receiving returns directly from taxpayers and preparers, thereby diminishing the third party role in transmission, though that would remain as an option. This approach shifts the roles of the electronic filing transmission process, requiring the IRS to augment its current Internet *e-filing* capability (or MeF) to handle direct user interaction for individual taxpayers and preparers. This approach allows taxpayers and preparers to prepare returns with an IRS-authorized tax preparation software package (all major commercial packages are currently IRS-authorized) and file their returns, at no charge, over the Internet directly to the IRS.

Figure 12-3 illustrates how Internet Option 2 operates compared with the current system shown in Figure 12-1.

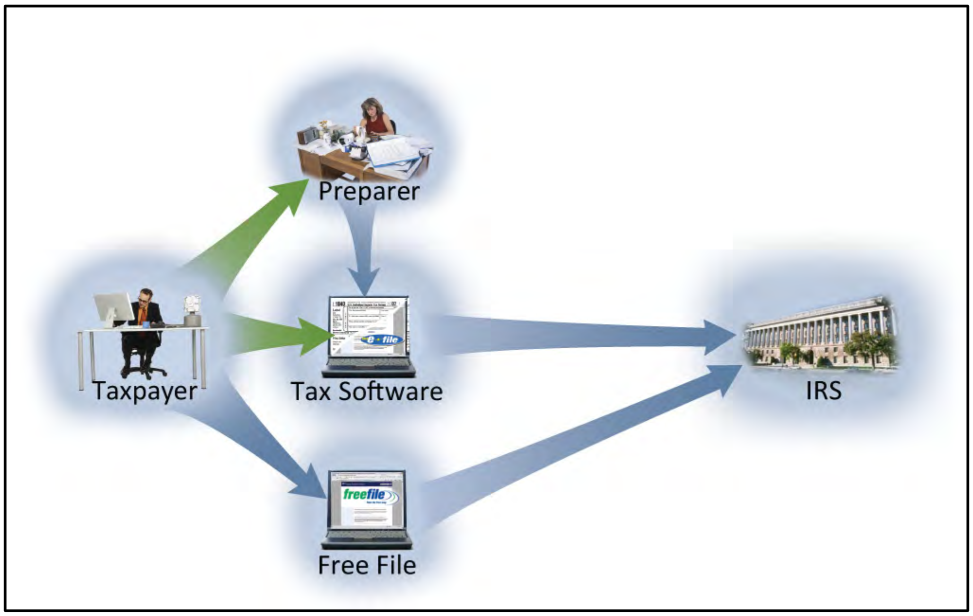

Figure 12-3 Internet Option 2: Direct Filing

Similar to the current system, preparation software support remains the responsibility of the software vendors, and *e-filer*s are responsible for access to the Internet.

12.4.2.1 Targeted Population/Potential *E-file* Contribution

The most likely target population for Internet Option 2 includes taxpayers and preparers who use the computer to prepare returns but do not take the final step of *e-filing* (V-Coders), primarily because they object to the cost, are concerned about sharing

[561] Electronic Tax Administration Advisory Committee (2007) *Annual Report to Congress* p. 9

information with a third party (transmitter), or both. Such returns constitute a portion of the 38 million V-Coded returns (30% of all returns filed) shown in Figure 4-1.

Further research is required to better understand the taxpayer and preparer population and whether these enhancements would move the dial to a significant extent.

12.4.2.2 Considerations

Although Internet Option 2 is intended to remove the fee for transmission, it may not have a significant impact on the cost to the taxpayer. The IRS would need to provide capabilities like those of transmitters: receive, analyze, correct, package, and retransmit return data; receive acknowledgments; retransmit returns; invest in and manage/maintain associated security, telecommunications, and hardware and software, all of which are costs that would ultimately be borne by the taxpayer.

Eliminating the third party transmitter cost does not preclude software vendors from increasing charges for tax preparation software. Given the industry trend toward bundling *e-file* charges with the cost of online tax preparation products and even some boxed products, the cost of preparation may increase even though the price of filing is zero. In the absence of government regulation, taxpayers are at the mercy of the market and how competition drives the cost of tax preparation software and transmission. A number of the targeted individual V-Coders who see cost as a barrier may migrate to *e-filing* since there is no additional cost for *e-filing*; depending on the market price, however, taxpayers will have to choose whether to purchase tax preparation software in the first place.

Effect on IRS–Third Party Relationship

This option changes the current IRS–third party relationship somewhat. Most preparers and return preparation software vendors would not be directly affected. Although this option does not necessarily preclude third parties from acting as transmitters, it is likely to be viewed by transmitters as the IRS entering into competition with them.

Other Considerations

Other considerations for Internet Option 2 include the following:

- Under this option, the IRS is responsible for the management, security, and support of public access to a direct filing solution. The IRS acquires significant new responsibilities for direct taxpayer and preparer support services as well as return data formatting, validation, and transmission. These new services — particularly direct customer support for filing — are outside the core services the IRS currently provides to its registered transmitters.
- It is unclear how many people would transmit returns to the IRS through a direct portal. Under the current paradigm, a finite number of transmitters are registered through the IRS; if this portal is open to the general public to file directly, it may attract paper filers as well as current *e-filers*.
- Implementation of this option may spur growth in the tax software preparation industry by encouraging the development of new products that enable taxpayers to transmit returns directly to the IRS, not by means of a third party transmitter.
- This option may offer the benefit of near real-time response for acknowledgments because returns are not routed through a third party.

12.4.3 Internet Option 3: IRS-Provided Preparation and Filing

The two IRS-Provided Preparation and Filing option variations discussed in this Section expand the preparation methods available to taxpayers to include IRS-provided tools that would also utilize direct filing for return transmission. By requiring the IRS to offer (and own/manage) tax preparation and filing services within the *e-filing* program, options in this category eliminate the taxpayer cost burden for self-prepared return preparation and filing. These options are designed with the individual taxpayer in mind. Although preparers could use these methods, they typically use a different class of software to accommodate their business needs.

Figure 12-4 illustrates how Internet Options 3a and 3b operate compared with the current system shown in Figure 12-1.

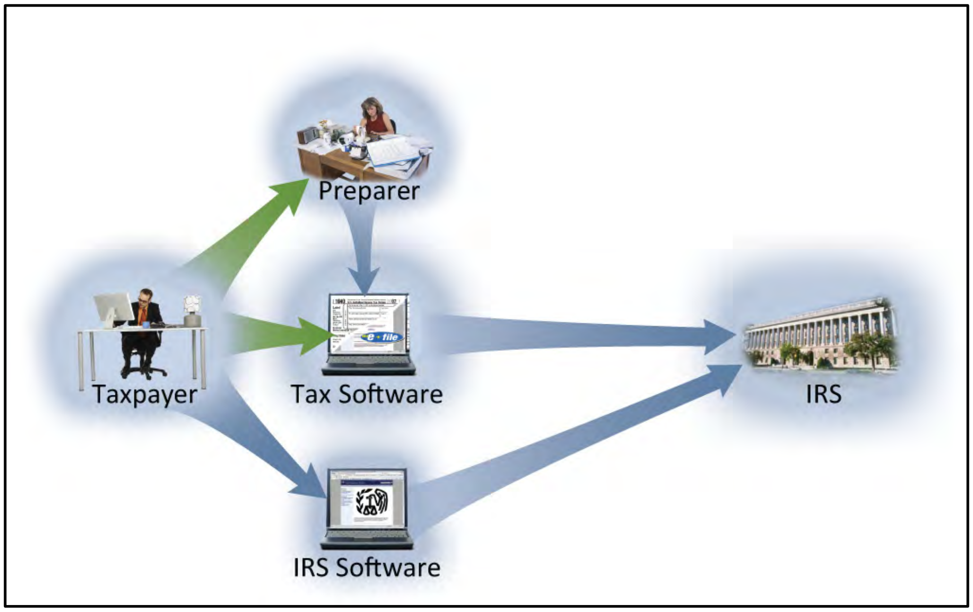

Figure 12-4 Internet Option 3: IRS-Provided Preparation and Filing

There are at least two ways for the IRS to offer IRS-Provided Preparation and Filing: through fillable forms or through applications using a guided interview approach. Each of these options is considered separately below, including descriptions of the features and functions of each. Conceptually, these options are similar and share many considerations. They are distinguished by their potential user base and by the implications and complexity — technical, operational, and political — of the solution.

12.4.3.1 Internet Option 3a: Form-Based Preparation Tool

Under Internet Option 3a, the IRS offers fillable forms that can be *e-filed* directly to the IRS for free, which is an upgrade from the current IRS offering of fillable PDFs, which can only be printed and mailed (i.e., fill-and-print forms). This option could include fillable PDF or web-based forms that could contain check boxes, option lists and text boxes, automated calculations, and hyperlinks to supporting material (e.g., instructions). This option is often referred to as I-File among the State electronic filing programs.

12.4.3.1.1 Targeted Population/Potential *E-file* Contribution

The most likely target population for Internet Option 3a includes individuals who are comfortable using forms and do not need the additional assistance of an interactive interface (guided interview). This group includes people who handwrite or type their returns and forms on paper and V-Coders who currently use IRS fill-and-print forms.

In TY2006, handwritten or typed returns comprised about 26% of paper returns (11% of all returns)[562]. Likely motivators for those filing this kind of return include comfort with paper, cost, objection to third party involvement, and availability (e.g., access to a PC and the Internet). Although the 26% of paper returns included some returns filed by preparers, this option is less likely to be used by preparers.

It is difficult to estimate the number of returns derived from fill-and-print forms because the IRS does not distinguish between form-based and tax-software–based V-Coded returns. The number of downloadable forms on IRS.gov — 19.6 million between January and April 2006 — could serve as a rough approximation of the maximum number of fill-and-print returns[563]. Likely motivators for the targeted population to adopt this option are cost and objection to third party involvement.

In both cases, closer examination of taxpayer motivations and concerns is required to obtain better estimates of the target population.

12.4.3.1.2 Considerations

Technical Challenges

Internet Option 3a requires that the IRS build on its current form development capability to provide fillable forms with automated calculations and hyperlinks to supporting material (e.g., instructions) and possibly develop a set of online form management services to allow the taxpayer to leave a session and continue at a later time. In addition, the option requires that the IRS build a solution for accepting the transmissions from these potentially *e-filed* forms. The IRS would be required to provide end user support for the forms' functions, calculations, and supporting material.

This option requires the IRS to take on responsibilities that are new and significantly different from its current business operations. The IRS would need to plan and fund every aspect of forms development, systems management, and end user support. In its April 2007 report, GAO expressed concern about "whether IRS has the systems management capability needed to develop such a program"[564]. Despite the agency's improvements since GAO designated IRS system modernization efforts as high-risk in 1995, the IRS has yet to fully implement and institutionalize critical management controls and capabilities.[565]

---

562 IRS (2006) *Tax Year 2006 Taxpayer Usage Study*

563 IRS (2006) *IRS.gov Download Statistics Report: April 2006;* IRS (2006) *IRS.gov Download Statistics Report: February 2006;* IRS (2006) *IRS.gov Download Statistics Report: January 2006;* IRS (2006) *IRS.gov Download Statistics Report: March 2006*

564 Government Accountability Office (2007) *Taxpayer Service: State Experiences Indicate IRS Would Face Challenges Developing an Internet Filing System with Net Benefits* p. 30

565 Government Accountability Office (2007) *Taxpayer Service: State Experiences Indicate IRS Would Face Challenges Developing an Internet Filing System with Net Benefits* p. 30

Effect on IRS–Third Party Relationship

Evaluating this option requires considering its effect on the IRS's relationship with third parties. In particular, this option removes the need for third party transmitters since taxpayers can *e-file* their completed forms directly to the IRS. In addition, the tax preparation software industry could perceive this option as the IRS entering into competition with it.

An alternative would be to leverage the existing relationship between the IRS and third parties to provide *e-filing* services. Working with third parties may provide the desired result of offering taxpayers a free service for filing returns electronically with the IRS, while minimizing the impact on the taxpayer, preparers, and the IRS. This would include pending legislation H.R. 3457, which provides a fillable form solution through the FFA.

Costs Versus Benefits

Although a detailed cost/benefit analysis is out of scope for this report, some basic considerations are worth mentioning. This option is essentially an "I-File" capability for the IRS. The GAO noted that in 2006, 21 States offered I-File, allowing taxpayers to prepare and file their returns directly on the State tax agencies' Internet web sites. Three States have since discontinued their I-File systems due to low usage and costs that exceeded the benefits provided. The GAO report also discussed how potential cost savings to the IRS from an I-File system are based on the number of taxpayers who convert from paper to electronic returns.[566]

Given the State experiences with I-File solutions and the low usage rate, the IRS would likely face a similar challenge in attracting *e-file* users. Increasing the options for taxpayers to file electronically may increase voluntary compliance, but there is no guarantee that individuals will migrate to this service.

A report commissioned by the Computer & Communications Industry Association summarized its review of I-File as follows: "Our review of the evidence suggests that any effort by the IRS to implement an I-File program would generate costs far in excess of any possible benefits. Accordingly, we recommend against pursuing such an effort"[567]. Note that the provision of government services to citizens should be determined on the basis of factors in addition to their cost.

Furthermore, as with Internet Option 2, the IRS would incur costs to provide these capabilities that would ultimately be borne by the taxpayer.

12.4.3.2 Internet Option 3b: Interview-Based Preparation Tool

Internet Option 3b involves the IRS developing and supporting an application for taxpayers to prepare and transmit their returns. The application includes a guided-interview–like software program — an interactive interface that simplifies the preparation process, similar to most current commercial products — accessed online or installed locally on the taxpayer's computer. Other features of the new IRS application likely include interactive assistance, a printing capability, and the ability to save sessions. The taxpayer files the completed return over the Internet directly with the IRS.

---

[566] Government Accountability Office (2007) *Taxpayer Service: State Experiences Indicate IRS Would Face Challenges Developing an Internet Filing System with Net Benefits* p. 51

[567] Litan, R. E. *et al.* (2008) *The Benefits and Costs of I-File* p. 50

12.4.3.2.1 Targeted Population/Potential *E-file* Contribution

Similar to Internet Option 2, the most likely target population for this option includes taxpayers and preparers who use the computer to prepare returns but do not take the final step of *e-filing* (V-Coders), primarily because they object to the cost, are concerned about sharing information with a third party (transmitter), or both. The distinguishing factor for this target population is that their cost objection is related to the preparation fee in addition to the *e-file* fee. The target population is a portion of the 38 million V-Coded returns (30% of all returns filed) shown in Figure 4-1.

More research is required to determine whether this target population can be estimated more closely, bearing in mind that moving current *e-filers* to this new method would have no effect on progress toward the 80% *e-file* goal.

12.4.3.2.2 Considerations

To the extent that Internet Option 3b provides services beyond those noted for Internet Option 3a, many of the considerations from that option apply here as well.

Taxpayer Preference

The fact that there is a thriving tax preparation software industry offering products that simplify the tax code and preparation process through a series of multiple-choice questions suggests that many taxpayers prefer this method to filling in a form. They are willing to pay for the step-by-step assistance of a guided interview because they see the value in this approach. The question then becomes, would taxpayers prefer free government-provided software over commercial alternatives?

It appears that some free return preparation software alternatives exist, even outside of Free File.

The current *e-file* program offers free return preparation software services, using guided interviews, through the FFA. In addition, there are other tax preparation sites such as TaxAct and TaxNet that offer free online tax preparation software for the 1040 family of forms with few or no restrictions. The fact that there is low uptake for these free options suggests that a similar IRS-provided free option may have similar challenges attracting users.

This option could force taxpayers to migrate to the IRS-provided solution against their wishes if commercial tax return preparation vendors leave this market en masse. The IRS must be prepared to effectively support current *e-filers* that migrate to the government solution. Failure to meet taxpayer expectations could lead to taxpayers abandoning *e-file* altogether due to dissatisfaction with the IRS-provided solution and the lack of viable alternatives.

Policy Implications

Providing this tax return preparation software product will likely put the IRS in the position of being asked for tax advice by users of this product, although the IRS currently fields millions of taxpayer questions per year dealing with tax law and specific situations. While other tax authorities have balanced the roles of administering taxes and providing preparation and filing services to its citizens, it is not clear whether US citizens would embrace the IRS in this role, nor to what extent a perception of a conflict of interest may undermine adoption. Third party providers would likely position themselves as trusted intermediaries and call attention to the potential conflict of interest.

The IRS entering the software market would significantly alter its relationship with third party partners.

Effect on IRS–Third Party Relationship

Given the potential economic effect on its industry, the return preparation software vendor community is likely to offer stiff resistance to this option. In addition, this option will likely negatively affect the Free File program, possibly to the point of its dissolution, given the IRS agreement with the FFA. Current return preparation software vendors may abandon their offerings rather than face direct competition with the government. Others may position themselves as trusted third parties or offer other value-added services and features to competitively differentiate themselves from an IRS offering.

Other Challenges

This option presents even greater technical challenges than those presented under Internet Option 3a, requiring the IRS to develop (or acquire), manage, and support the tax return preparation software that is currently provided by its private sector partners (see discussion of GAO report under Internet Option 3a). To field a product users would accept, the IRS must be prepared to not only provide annual updates that address any changes in tax law, but as a part of its annual release cycle, include ongoing usability enhancements and additional features as requested by its customers.

Furthermore, as with Internet Option 2, the IRS would incur costs to provide these capabilities that would ultimately be borne by the taxpayer.

THIS PAGE INTENTIONALLY LEFT BLANK.

13. Phone-Based *E-filing* Options

Contents of Chapter 13:

This Chapter looks at the option of using telephone-based technology to help the IRS reach the 80% *e-file* goal. This option would serve taxpayers who, without access to a computer or the Internet, cannot take advantage of other *e-filing* options. This Chapter provides an overview of phone-based *e-filing* methods, a high-level summary of the now-defunct IRS Telefile program, a description of current State Telefile efforts, and an introduction to a forward-looking phone-based *e-filing* option. Themes identified in this Chapter include the following:

- The IRS experience with the cost-effectiveness of Telefile highlights the importance of providing a broad group of taxpayers with a phone-based *e-filing* option.
- As a result of changes in demographics, user behavior, and technology, phone-based *e-filing* opportunities currently exist that did not during the original development of IRS Telefile.
- More research is required to explore ways to use mobile phone technology (e.g., text messaging) to file taxes.

13.1 Overview

Phone-based e-filing *is another electronic filing channel besides the Internet.*

In this report, phone-based *e-filing* refers to using a phone — an analog or digital landline or mobile phone — to prepare and submit a return electronically. The following mobile and landline phone capabilities are included as possible phone-based methods for *e-filing*:

- Using the numbers on the phone keypad with traditional touch-tone phone input systems.
- Using spoken commands and keypad choices with interactive voice response (computer recognition of voice input) systems.
- Using the phone keypad/keyboard to text message.
- Using the phone keypad/keyboard to control the phone's web browser (i.e., using the phone both as a platform for and connection to the Internet).

As discussed in more detail in Section 13.2, the IRS had a Telefile program, which was limited in its eligible population, usage, and technologies employed and supported. This Chapter recognizes that technology and usage have changed since the IRS and State governments deployed Telefile in the 1990s, including taxpayer behaviors and preferences and *e-file*, mobile phone, and Internet adoption.

With limited capabilities compared with a computer with Internet access, phones more readily address the filing needs of taxpayers with relatively simple returns. A phone-based *e-filing* option may even be attractive to taxpayers who do have computers and Internet access. A 2003 IRS study determined that 75% of users of Telefile — the IRS's discontinued phone-based *e-filing* program — had Internet access, and 84% of those had access in their homes[568].

13.2 History and Background

Telefile served a specific population well — 3.3 million to 6 million taxpayers.

Between 1997 and 2005, the IRS ran the telephone-based *e-filing* program Telefile, which allowed a set of pre-qualified 1040EZ filers to file by phone[569]. Telefile accounted for about 3% of the *e-filing* rate, and loss in the *e-filing* rate due to the Telefile termination was perhaps 1% to 2%, based on TIGTA estimates of the percentage of Telefile users who reverted to paper filing[570].

Through the Telefile program, pre-qualified individuals received a Personal Identification Number (PIN) to use along with their Taxpayer Identification Number (TIN) to authenticate to the Telefile system. Eligible taxpayers also received an instruction booklet as part of their tax packages. The number of Telefile packages mailed varied, from 24.5 million in 1995 to 15.1 million in 2005, as the IRS attempted to improve its prediction of which taxpayers would use the service[571].

The Telefile program included a joint Federal/State capability such as the Fed/State program for Internet-based *e-filing*. Seven States participated in this portion of the program: Georgia, Indiana, Kentucky, Maryland, Missouri, Oklahoma, and West Virginia[572]. The capability allowed the taxpayer, after filing a Federal return, to enter additional information necessary for the State return and file the State return during the same telephone call.

The Telefile program met with initial success and in fact allowed greater *e-file* usage among Self-Simple taxpayers than the Internet. According to TY2003 *e-file* research, only 38.7% of taxpayers in the Self-Simple category *e-filed*, compared with an overall *e-filing* rate of 48.4%[573]. For the same period, 45.9% of taxpayers eligible for Telefile used the program[574].

The IRS cited cost and low usage in terminating Telefile, a decision that was criticized by oversight bodies.

However, the number of taxpayers using Telefile declined over the life of the program from 6 million in 1998 to 3.3 million in 2005[575]. In March 2003, TIGTA issued a report on Telefile addressing the eligibility limitations of the program and suggesting possible expansions[576].

In terminating the program in April 2005, the IRS cited the decline in usage as well as high operating costs:

---

[568] IRS (2003) *TeleFile Survey Report* pp. 19-20
[569] Telefile also supported submission of Form 4868 (Request for Automatic Extension) and Form 941 (Employer's Quarterly Tax Payment), though these are not discussed in this report.
[570] Treasury Inspector General for Tax Administration (2007) *Eliminating TeleFile Increased the Cost and Burden of Filing a Tax Return for Many Taxpayers* p. 7
[571] Treasury Inspector General for Tax Administration (2007) *Eliminating TeleFile Increased the Cost and Burden of Filing a Tax Return for Many Taxpayers* p. 17
[572] Ebersole, N. (2002) *Federal/State Telefile* p. 3
[573] IRS (2005) *Tax Year 2003 IRS E-File Research* p. 17
[574] Treasury Inspector General for Tax Administration (2007) *Eliminating TeleFile Increased the Cost and Burden of Filing a Tax Return for Many Taxpayers* p. 17
[575] Treasury Inspector General for Tax Administration (2007) *Eliminating TeleFile Increased the Cost and Burden of Filing a Tax Return for Many Taxpayers* p. 17
[576] Treasury Inspector General for Tax Administration (2003) *Opportunities Exist to Expand the TeleFile Program*

> Despite its initial success, the program has since experienced a decline in use for most forms as other electronic filing alternatives have become available. This, coupled with increasing costs to maintain the Telefile infrastructure, led the IRS to decide to discontinue the program.[577]

The decision to terminate the Telefile program was criticized by Congress and consumer organizations, mainly on the grounds that the IRS eliminated a free direct-file program while not addressing the shortcomings (in their view) of the Free File program[578]. In a 2007 audit, TIGTA also criticized the Telefile termination, arguing that the IRS improperly ended it before comparable free filing alternatives were available; that the IRS, by limiting the number of Telefile packages sent to taxpayers, adversely affected the level of participation in the program; and that IRS's cost analysis used to support the decision was incomplete and inaccurate[579]. While TIGTA's own cost analysis found a lower breakeven point (5.4 million returns) than the IRS's (10 million returns), actual Telefile usage in 2005 was still about 2.1 million returns below even TIGTA's breakeven point[580]. As shown in Figure 13-1, the number of returns filed, as a percentage of the number of packages mailed, remained relatively steady. The number of returns filed, as a percentage of those eligible for Telefile, while declining during the period 2002 to 2005, was nevertheless almost the same at the end of the program (42%) as at the beginning (41%)[581].

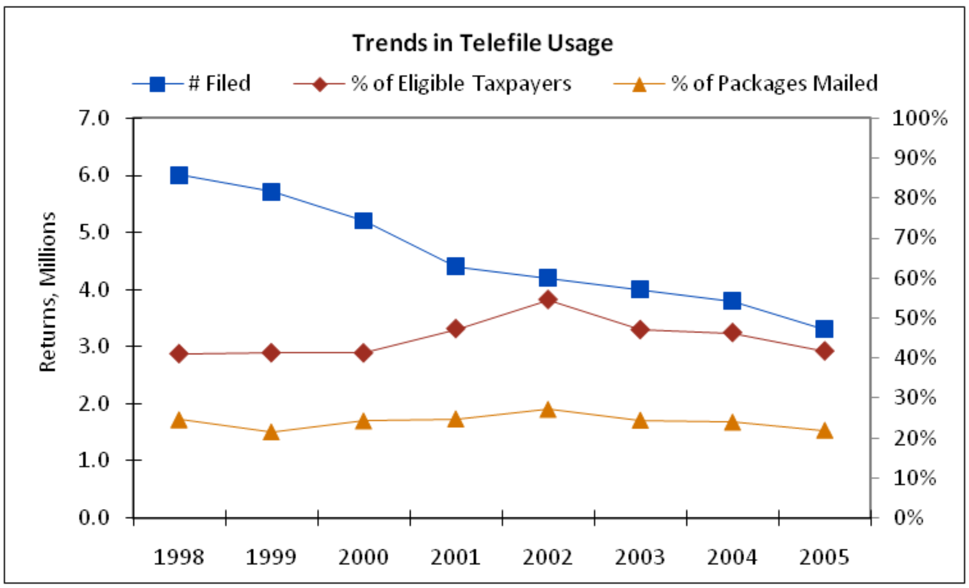

Figure 13-1 Trends in IRS Telefile Usage (1998–2005)

---

[577] IRS (2005) *Internal Revenue Bulletin: 2005-17: Announcement 2005-26: IRS to Discontinue TeleFile* p. 1

[578] Fox, J. A. *et al.* (2006) *Letter to the Honorable Charles Grassley, Chairman and The Honorable Max Baucus, Ranking Member of Senate Finance Committee;* U.S. Senate (2006) *Grassley, Baucus Express Concern Over Continued Tax Free File Program Problems*

[579] Treasury Inspector General for Tax Administration (2007) *Eliminating TeleFile Increased the Cost and Burden of Filing a Tax Return for Many Taxpayers* pp. 1-3

[580] Treasury Inspector General for Tax Administration (2007) *Eliminating TeleFile Increased the Cost and Burden of Filing a Tax Return for Many Taxpayers* pp. 12-13

[581] Treasury Inspector General for Tax Administration (2007) *Eliminating TeleFile Increased the Cost and Burden of Filing a Tax Return for Many Taxpayers* p. 17

TIGTA's audit also highlighted the increased burden to taxpayers as a result of discontinuing Telefile. Based on an analysis of a survey of Telefile users, TIGTA concluded the following:

- In 2006, more than 541,500 taxpayers who would have remained eligible to use Telefile for free spent an estimated $23.6 million to file their tax returns[582].
- Regardless of the actual cost savings from discontinuing the Telefile program, the result, in effect, was to shift those costs from the IRS to taxpayers because former Telefile users paid almost $24 million to file their tax returns in 2006[583].

TIGTA asserted that "the Telefile Program was discontinued before comparable free alternatives were available"[584].

When the Telefile program was terminated, the IRS estimated that processing costs for a Telefile return were greater than those for a paper 1040EZ return. Annual savings from discontinuation were estimated at $17 million to $23 million[585].

As shown in Figure 13-2, a 2007 TIGTA study found that 52% of former Telefile users *e-filed* by other methods, including 32% who used Free File[586].

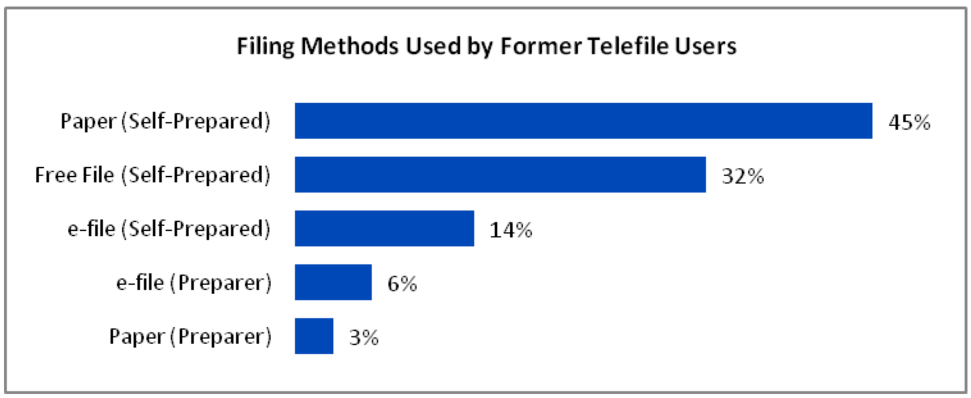

Figure 13-2 Filing Methods Used by Former Telefile Filers (as of 2006)

[582] Treasury Inspector General for Tax Administration (2007) *Eliminating TeleFile Increased the Cost and Burden of Filing a Tax Return for Many Taxpayers* p. 5
[583] Treasury Inspector General for Tax Administration (2007) *Eliminating TeleFile Increased the Cost and Burden of Filing a Tax Return for Many Taxpayers* p. 11
[584] Treasury Inspector General for Tax Administration (2007) *Eliminating TeleFile Increased the Cost and Burden of Filing a Tax Return for Many Taxpayers* p. 7
[585] Treasury Inspector General for Tax Administration (2007) *Eliminating TeleFile Increased the Cost and Burden of Filing a Tax Return for Many Taxpayers* p. 2
[586] Treasury Inspector General for Tax Administration (2007) *Eliminating TeleFile Increased the Cost and Burden of Filing a Tax Return for Many Taxpayers* p. 7

As of May 2008, eight States had a Telefile program, though only the programs in Massachusetts, Ohio, and Pennsylvania were considered "significant" by the FTA.

13.3 State Experiences

According to TIGTA, 31 States had Telefile programs in 2005. Nine States eliminated their programs prior to the Federal Telefile discontinuation, and 12 more discontinued their programs after the Federal Telefile program was terminated. Several of these States cited the Federal Telefile discontinuation as a factor in closing their Telefile programs. Most of the States that participated in the joint Federal/State Telefile program discontinued support for Telefile when the IRS program was discontinued.[587]

As of May 2008, only eight States operated a Telefile program, and only three of those programs — the ones operated in Massachusetts, Ohio, and Pennsylvania —were considered by the FTA to be "significant"[588].

It appears that a larger proportion of taxpayers is eligible for State Telefile programs than was eligible for the discontinued Federal program. Colorado, for example, asserts on its web site that "most full-year Colorado residents who file a Colorado income tax return" use Telefile[589]. One reason for broader eligibility may be that State returns are generally simpler than Federal.

Other ways in which State programs differ from the discontinued Federal Telefile program and offer broader eligibility include the following[590]:

- Most of the State Telefile programs do not require pre-qualification. Connecticut, Nebraska, and Ohio are exceptions.
- In several States, taxpayers can contact a customer-service line prior to using Telefile to obtain a PIN or change an address, which increases the eligible population.
- Unlike most offerings, Massachusetts allows first-time filers to Telefile.

There seems to be limited research on States' experiences with Telefile. Understanding the elements that contribute to States' success or failure with their Telefile programs could offer insights to the IRS for developing any future phone filing option.

User behaviors and technology have changed considerably since the IRS closed Telefile in 2005, let alone since Telefile was designed in the 1990s.

13.4 Phone-Based *E-filing* Options

Technology and its users have changed since the days of Federal Telefile. In its March 2008 report, the Pew Internet & American Life Project noted the pace of change since 2002, which indicates "a sharp reversal in how people viewed these technologies"[591].

Mobile phone usage has continued to grow, and people are increasingly connecting to the Internet wirelessly. Mobile phone usage in the United States has reached 255 million users[592]. The percentage of users logging on to the Internet with a wireless connection — a laptop computer, a handheld personal digital assistant (PDA), or mobile phone — grew from 34% to 41% in just the space of a year (December 2006 to

---

[587] Treasury Inspector General for Tax Administration (2007) *Eliminating TeleFile Increased the Cost and Burden of Filing a Tax Return for Many Taxpayers* p. 14
[588] Duncan, H. T. (2008) *State Electronic Filing: Recent Performance* p. 7
[589] Colorado (2008) *Colorado Department of Revenue: Telefile*
[590] Massachusetts (2008) *Massachusetts Department of Revenue: Telefile*
[591] Pew Internet & American Life Project (2008) *Data Memo: Mobile Access to Data and Information* p. 1
[592] Cellular Telecommunications and Internet Association (2008) *Wireless Quick Facts: Year End Figures*

December 2007)[593]. Pew reported that "58% of adult Americans have used a cell phone or PDA to do at least one of ten mobile non-voice data activities, such as texting, e-mailing, taking a picture, looking for maps or directions, or recording video"[594].

As noted previously, phone-based *e-filing* may be attractive to those filing simple returns, but the phone may be the only electronic channel available to those without access to a computer and the Internet. The population of taxpayers without computers or Internet access is significant. In 2003, the Census Bureau estimated that among households with an income below $25,000, 59% did not have computers and 69.2% did not have Internet access[595]. While these percentages are declining, for the foreseeable future, there will be a sizeable group of taxpayers for whom filing taxes using a computer and Internet access is not an option. Although taxpayers without computers or an Internet connection at home may be able to access these at other locations (public libraries, work) or take advantage of Taxpayer Assistance Centers or VITA facilities, these options have a number of limitations as TIGTA and others have pointed out[596].

People lacking computer and Internet access at home are more likely to have a mobile phone than those who have access.

Interestingly, research shows that the population less likely to have a computer and Internet access at home is more likely to have a mobile phone. Pew found that "Cell phone users are more likely to be found in groups that have generally lagged in Internet adoption, such as senior citizens, blacks, and Latinos"[597]. As a result of these advances in technology and demographic trends, phone-based *e-filing* opportunities exist that did not during the development of Telefile in the 1990s.

However, given this changed landscape, further research is required to evaluate the best option to take advantage of phone-based technology to increase *e-filing* and to balance that goal with service to taxpayers.

13.4.1 Phone Option 1: Rethink Phone *E-filing*

A phone-based e-filing *option could leverage the widespread use of mobile phones and text messaging.*

The first step in the pursuit of a phone *e-filing* option is careful evaluation of current and cutting-edge technology as well as research on usage trends and the behavior of various target populations[598]. As noted previously, groups that have generally lagged in Internet adoption are more likely to be mobile phone users, making these populations important targets for potential new phone *e-filing* options. In addition, Pew found that young adults, Hispanics, and African Americans lead the way on wireless access. The approach to a future phone *e-filing* option should take into consideration the trends and behavior of these user segments.

593 Pew Internet & American Life Project (2008) *Data Memo: Mobile Access to Data and Information* p. 1; Pew Internet & American Life Project (2008) *Data Memo: Wireless Internet Access* p. 1

594 Pew Internet & American Life Project (2008) *Data Memo: Mobile Access to Data and Information* p. 1

595 Census (2003) *Computer and Internet Use in the United States: 2003* p. 2

596 Treasury Inspector General for Tax Administration (2007) *Eliminating TeleFile Increased the Cost and Burden of Filing a Tax Return for Many Taxpayers* p. 8

597 Pew Internet & American Life Project (2008) *Seeding The Cloud: What Mobile Access Means for Usage Patterns and Online Content* p. 1

598 Pew Internet & American Life Project (2008) *Data Memo: Wireless Internet Access* p. 5

Future options could leverage the widespread use of mobile phones and other portable networked devices. Some avenues to explore include the following:

- Use of web-based forms on PDAs and mobile phones.
- Use of SMS (text messaging) to prepare and file tax returns and pay balances due and receive refunds.

13.4.1.1 Targeted Population/Potential *E-file* Contribution

Phone Option 1 targets the population of paper filers who have access to a landline or mobile phone but do not have access to a computer. The projected contribution of any phone-based *e-filing* option to the 80% *e-file* goal depends on how scope and eligibility are defined. Historical data on Telefile usage makes clear the impact of eligibility on participation.

In the context of reaching the 80% *e-file* goal, the key benefit of a new phone-based *e-filing* option is that it reach a population not easily served by any other *e-filing* option: taxpayers who lack access to a computer and the Internet and who cannot or choose not to use options that involve computer-based filing solutions outside their homes. The 69.2% of low-income households without Internet access could be well served by such an option[599].

13.4.1.2 Considerations

A phone-based *e-filing* option could also help the IRS achieve broader taxpayer service goals in the sense that it may offer an extremely simple and easy-to-use method well-suited to simple self-prepared returns.

Historically, a key challenge for the success of Telefile was the limited pool of eligible users. Figure 13-1 shows the decrease in eligible Telefile users between 2002 and 2005. To maximize the eligible taxpayer population, several approaches could be considered:

- Allow taxpayers to determine for themselves whether they can file by phone. Eliminate the pre-qualification process used by Telefile.
- Use a model similar to the one in Massachusetts, allowing first-time filers and those whose addresses have changed to file by telephone.
- Investigate applications of new technology and innovative business practices that would expand the eligible population (e.g., allowing taxpayers with dependents to file by telephone).

Including virtually all 1040A filers would require the IRS to develop innovative solutions to a number of challenges. For example, a mechanism would have to be provided for taxpayers to declare their dependents[600].

In addition to increasing the *e-filing* rate, broader eligibility resulting in broader participation is critical to driving down the cost per return. Referencing the discontinued

---

[599] Census (2003) *Computer and Internet Use in the United States: 2003* p. 2

[600] Voice recognition or voice capture might be used, in addition to keypad entry, to address this problem. Alternatively, taxpayers could provide selected information through the IRS call centers prior to filing a Telefile return. In addition, support would have to be provided for the schedules commonly included with Form 1040A (Interest income, Child and Dependent Care), and mechanisms would have to be provided for issuing PINs (or other identification/authentication mechanisms) to first-time filers.

Telefile program, the IRS concluded that it would have had to process 10 million returns to reach the point in which the cost per return would equal that of paper returns[601].

Other organizations have had some success using phone-based technology as a channel for financial transactions. Western Union's recent announcement of a U.S.-based mobile phone remittance service offers an interesting model for the IRS. The service targets Hispanic immigrants, who are more likely to have a mobile phone than an Internet connection at home, according to the Washington-based Hispanic Institute[602]. Similarly, a successful company in South Africa is aiming its mobile banking product at the 48% of adults who do not have bank accounts or who have difficulty accessing formal financial services [603].

Security could be a key issue in terms of any phone-based *e-filing* option. Internet-based solutions can use technologies — such as Secure Sockets Layer encryption — to securely transmit data between the user's browser and the destination web site (e.g., a vendor's online return preparation software product) but voice communications and text messages are generally unencrypted and may be less secure.

Research is needed to provide the data required to determine the case for a new phone-based *e-filing* option. Among the points of consideration are the cost to the IRS of the service benefits to an underserved population and whether those benefits can be achieved more efficiently and as effectively through such actions as increased marketing and use of community-based preparers. Former Telefile users have migrated to new filing methods, including *e-filing*. It may be difficult to convince those who reverted to paper to return to a phone-based option.

If this option is pursued, new phone-based *e-filing* options should take into account both the new technology and the behavior of potential users. To pursue a phone-based *e-filing* option to boost the overall *e-filing* rate, the system should be capable of serving a population significantly larger than those eligible for the discontinued Telefile program.

---

[601] IRS (2003) *Submission Processing Visioning: TeleFile* p. 9
[602] Kang, C. (2008) *Three Firms Combine on Cellphone Remittances*
[603] Ivatury, G. & Pickens, M. (2006) *Mobile Phone Banking and Low-Income Customers: Evidence from South Africa*

14. Paper-Based Filing Options

Contents of Chapter 14:

This Chapter introduces paper-based filing options, not as methods for contributing to the 80% *e-file* goal, but rather as means for achieving the efficiency and cost-saving outcomes typically associated with *e-filing.* Even as the IRS comes closer to meeting its *e-file* goal, it will need to address the significant number of paper returns that it will continue to process for the foreseeable future. This Chapter defines ways of automating paper return processing to realize efficiencies (e.g., 2D barcodes, Character Recognition), discusses current IRS and State experiences with these technologies, and describes the potential impact and trade-offs between the paper-based filing options. It also introduces the Modernized Submission Processing (Msp) project, which the IRS recently selected as its method of automating paper return processing, and places this project in the overall context of paper-based filing options. Themes identified in this Chapter include the following:

- The IRS will need to process a vast number of paper returns for the foreseeable future, even after it achieves the 80% *e-file* goal.
- Relatively mature technologies exist to automate paper processing, and the IRS has begun to plan an automated paper processing solution, pending funding.
- 2D barcodes only work for V-Coded returns and impose a greater stakeholder burden than Character Recognition, which works for all paper returns with no stakeholder burden.

14.1 Overview

The IRS projects that individual paper returns will exceed 38 million each year through 2014.

The foundational purpose of *e-filing* is to give taxpayers flexibility and convenience in submitting their taxes while creating operational efficiencies and cost reductions for the government. This Chapter addresses options for achieving *e-file*–like results (i.e., government efficiency and cost savings) for paper returns, specifically by automating the processing of paper return submissions. By modernizing antiquated manual paper transcription systems, the IRS can save millions of dollars annually and fully integrate residual paper return data with *e-file* return data in a unified tax processing infrastructure.

Return processing automation solutions (two-dimensional [2D] barcodes and Character Recognition [CR]) do not qualify as electronic filing solutions. However, the IRS will need to process residual paper returns for the foreseeable future, and the question is how best to do this.

Processing Residual Paper Returns

Investing in paper-based filing technology may seem counterproductive regarding the IRS's goal of increasing *e-filing*. However, with paper returns continuing to be a significant percentage of individual taxpayer returns — 46% in 2006 — reliance on costly legacy transcription operations to process these returns is detrimental to the government efficiency associated with *e-filing*[604]. IRS projections through 2014 (see Table 3-2) show a decrease in paper, but the issue of residual paper will persist even when the 80% *e-file* goal is met.

Paper return processing costs the IRS $67 million annually; paper returns cost eight times more to process than electronic returns.

Additionally, continuation of legacy paper return processing costs the IRS $67 million annually in manual transcription processing, paper file and archive management, and system maintenance[605]. It is 88% less expensive per return to process electronic returns ($0.35 per return) than paper returns ($2.87 per return)[606]. The ongoing investment in the legacy manual transcription of paper returns represents an opportunity cost in that if paper submission processing becomes more highly automated, resources could be redirected to higher priority initiatives.

Modern tax processing operations around the globe have replaced labor-intensive transcription processes with less costly technology-based strategies that integrate electronic filing capabilities with automated data extraction for paper returns. Automated data extraction is accomplished using document imaging systems that employ intelligent software capable of decoding data embedded in special 2D barcodes and/or reading text directly from returns through Character Recognition.

The two most common ways to automate the processing of residual paper returns are through 2D barcodes and CR, as defined below.

2D Barcodes

The 2D barcode is truly a portable data store, printable on virtually any document or surface.

Barcodes are everywhere in our global economy — nearly everything one can purchase has a Universal Product Code (UPC) (a kind of barcode) like the one shown in Figure 14-1. Barcodes were originally nothing more than machine-readable license plates. Each label contained a relatively short unique identifier encoded in one-dimensional (1D) black-and-white bars of varying width. For 1D barcodes, the data associated with the identifier (e.g., the price of an item, the title of a book, the manufacturer name and model) is stored in a separate database; the identifier merely acts as the unique key for looking up additional information. However, the development of 2D barcodes provided a much greater data density (quantity of information per square unit area), as can be seen in the visual complexity of the barcode in Figure 14-2. Because 2D barcodes allow much more information to be directly encoded in them, they reduce or eliminate the need for the related database for looking up the full information.

Figure 14-1 Example of 1D Barcode (UPC-12 Type)

[604] IRS (2007) *Calendar Year Return Projections for the United States and IRS Campuses CY 2007-2014* p. 9

[605] IRS (2008) *Modernized Submission Processing (Msp) - Solution Concept Definition - Domain: Submission Processing* p. 14

[606] IRS (2005) *Summary for Weighted Averages of the Paper Form 1040, 1040A, 1040 EZ and e-File Form 1040, 1040A, & 1040 EZ for Submissions Processing Costs Labor costs (FY 2005 IRM 3.30.10)*

Figure 14-2 Example of 2D Barcode (PDF 417 Type)

Character Recognition

Character Recognition does not require end users to employ additional specialized technology to prepare their documents.

CR provides another approach to automated data extraction from printed documents that does not require end users to use specialized computer applications or software to prepare their documents. CR involves the application of specialized algorithms to recognize the shapes and correlate them with letters and words[607]. CR involves digitally photographing (or scanning) original documents into an equivalent electronic image. Once converted, the CR solution analyzes (reads) the electronic image and translates the many shapes (which we see as letters) on the page into their equivalent characters. CR does this by employing multiple algorithms of neural network technology to analyze stroke edges, the lines of discontinuity between the text characters, and the background. Allowing for irregularities of printed ink on paper, each algorithm averages the light and dark along the side of a stroke, matches it to known characters, and makes a best guess as to which character it is. The software then averages or polls the results from all the algorithms to obtain a single reading.

For purposes of clarity in this report, we use the term "CR" to refer to any/all of the various machine recognition subtypes (e.g., Optical Character Recognition [OCR], Intelligent Character Recognition [ICR], Handwritten Character Recognition [HWR]), and note that it is by design necessary to first create a digital image of a paper document before CR can be applied to it.

14.2 History and Background

This Section discusses how submission processing of paper returns currently works within the IRS environment and sets the context for the IRS's recognized need for modernized submissions processing.

14.2.1 Current Submission Processing

The IRS operates large regional processing centers to receive and process paper returns, remittance, and correspondence. Because the percentage of *e-file* returns has

[607] The family of Character Recognition technologies includes: Optical Character Recognition (OCR) which reads machine print; Intelligent Character Recognition (ICR) sometimes referred to as HWR, or Handwritten Character Recognition, which reads handwriting; and Optical Mark Recognition, which reads specific symbols, such as the circles one fills in with a #2 pencil on standardized tests. The ability of the U.S. Postal Service mail routing system to read even messy handwritten addresses on letters is an example of a robust CR implementation.

increased, several of these centers have been closed. By 2012, the IRS plans to consolidate the original 10 centers into the following five centers[608]:

- Austin Processing Center.
- Fresno Processing Center.
- Kansas City Processing Center.
- Cincinnati Processing Center.
- Ogden Processing Center.

The 1040 family of returns that are filed on paper are processed at the Austin, Fresno, and Kansas City centers. These returns go through an elaborate manual process from mail room receipt and sorting, remittance processing, "code and edit," transcription data extraction, and finally, filing and archiving. Of particular interest to this study is the transcription function, which requires about 5,000 seasonal workers to manually key-enter taxpayer returns and payment data into a tax return database[609].

Currently, the IRS processes the 1040 family of returns that are filed on paper using the Integrated Submission and Remittance Processing (ISRP) key-from-paper transcription system. In 1998, when ISRP was deployed, transcription, which had been used for decades to extract data from tax returns, was still the best way to process paper tax returns. Since that time, advances in automated document processing have been made. The ISRP contract is due to expire in 2012, and after 14 years its serviceable life is limited.[610]

14.2.2 Current Barcode Use at the IRS

Without a mandate for 2D barcode use, the IRS saw only single-digit adoption of 2D barcodes for K-1 (business) forms.

Even though 2D barcodes have greater capacity than 1D barcodes, 1D barcodes can still be useful for form identification and inventory control. In the current IRS environment, the IRS uses barcodes in a number ways, including to accomplish the following[611]:

- Control work on Form 5546 (Examination Return Charge-Out Sheet).
- Control Automated Underreporter (AUR) work.
- Control the inventory of computer equipment.
- Route envelopes faster.
- Process Schedule K-1s (business forms) that are voluntarily barcoded.

The IRS attempted a voluntary 2D barcode program on K-1 forms (business returns), but without a mandate, only 3.2% of the more than 820,000 forms have acceptable barcodes. The number of accepted 2D barcoded K-1s fell this year because two software companies that could program the barcode lost their certification. (The IRS requires authorized e-file providers — EROs, Intermediate Service Providers, Transmitters, Software Developers, and Reporting Agents — complete an application process including fingerprinting and a suitability background check; once all criteria are met, the IRS formally accepts the candidate and only then can they identify and act as an

---

[608] Treasury Inspector General for Tax Administration (2007) *Consolidation of Tax Return Processing Sites Is Progressing Effectively, but Improved Project Management Is Needed*

[609] IRS (2008) *Modernized Submission Processing (Msp): Submission Processing Executive Steering Committee* p. 3

[610] IRS (2008) *Introduction to ISRP & SCRIPS*

[611] IRS (2007) *Bar Coding and e-Filing Mandates* p. 8

authorized IRS *e-file* provider[612].) The Service Center Recognition/Image Processing System (SCRIPS) program office indicated that the number of K-1s with barcodes was previously about 10%, although the office could not provide historical data.[613]

For more information on mandates, see Chapter 11.

SCRIPS is a legacy mission-critical, high-speed electronic document imaging system used at four of the IRS Submission Processing Service Centers (Austin, Cincinnati, Kansas City, and Ogden) to process returns and deposits. SCRIPS processes more than 120 million submissions annually, including Federal Tax Deposits (FTD) totaling more than $63 billion; Information Return Processing (IRP) forms; 1041, 1065, and 1120S Schedule K-1 forms; and Form 940/941 returns.

14.2.3 Modernized Submission Processing

To address the remaining paper returns, the IRS has established a strategic goal of replacing legacy submissions processing with a modernized system. Failure to modernize prevents the IRS from retiring legacy information systems.

The IRS recognizes that even as it comes closer to meeting its 80% *e-file* goal, residual paper returns exist. Even if the 80% *e-file* goal is met in 2014, there would still be nearly 30 million paper returns submitted that year. To address this critical problem, the IRS has established the strategic goal of replacing ISRP legacy transcription operations with a document imaging system that utilizes automated data extraction through 2D barcodes and CR. This will give taxpayers the freedom to file paper returns if they choose while still enabling the IRS to accomplish *e-file*–like results of reducing operating costs and improving efficiencies.

The IRS has proposed several paper processing modernization projects. The IRS continues to pursue modernization to address the following critical operational concerns:

- **Paper Volume** — Although electronic filing has been steadily increasing, more than 52 million individual taxpayers filed paper returns in 2006[614]. The IRS projects that individual paper returns will exceed 38 million through 2014, and even if the 80% *e-file* goal is met in 2014, there would still be nearly 30 million residual paper returns (see Table 3-2)[615].
- **Transcription Costs** — The cost of processing paper returns through legacy transcription systems is high. Transcription is labor-intensive, and despite a very effective workforce, the IRS spends approximately $30 million annually on transcribers alone. The IRS also spends $16 million on maintenance of transcription systems and approximately $21 million on filling and archiving paper.[616]
- **Transcription Limitations** — Transcription incurs an error rate of approximately 10%, resulting in extensive correction processing. Additionally, transcription captures a subset of taxpayer-completed form fields, which is sufficient for tax processing but imposes limitations on data availability for compliance operations. Furthermore, the transcription system does not export data to the Modernized Tax Return Database (MTRDB), thus preventing retirement of the legacy Generalized Mainline Framework (GMF).

---

[612] IRS (2007) *Become an Authorized e-file Provider*
[613] IRS (2008) *Total Bar Code Counts for 2008 (K1s)*
[614] IRS (2008) *2008 Filing Season Data - Returns/Refunds for Week Ending: 6/21/2008*
[615] IRS (2007) *Calendar Year Return Projections for the United States and IRS Campuses CY 2007-2014* p. 9
[616] IRS (2008) *Modernized Submission Processing (Msp): Submission Processing Executive Steering Committee* p. 5

- **Return Availability** — Paper returns, checked out from the files manager, impede customer service, compliance, and criminal investigation operations. It can take several weeks to obtain tax return documents, and paper files are often lost in the process.

Msp is planned to optically scan paper returns, extract taxpayer data using 2D barcodes (if they exist) and CR, and export the data to the MTRDB for processing in the same manner as MeF data. The electronically imaged submission will become the official return-of-record, allowing for destruction of paper originals.[617]

14.3 State Experiences

33 States have implemented 2D barcodes for V-Coded returns; however, state data on the number of States using CR is unavailable.

Many State governments have implemented the use of 2D barcodes as part of their electronic filing strategies for tax processing. According to the FTA, many States have chosen to pursue 2D barcoding over "high-speed imaging with optical character recognition options[618]," but data is not readily available on which States have used CR to process returns, and additional research is needed in this area.

According to the FTA, while States recognize that barcodes are not as efficient as electronic filing, they have reported the following high-level benefits from their barcode programs[619]:

- Reduction in errors and rework that comes from manual data entry/transcription.
- Decrease in time and effort for processing paper returns (an estimated 50% to 90%, depending on the State program).
- Provision of a "bridge technology" to increase efficiencies while encouraging electronic filing.

Further research is needed to determine States' use of CR and long-term plans for CR and 2D barcodes.

In addition, State experience suggests that barcode programs at the State level have "not required major investment from the States"[620]. Similarly, States reported that they have "worked with the software developer community to develop standards for barcode printing to minimize developer costs"[621].

Conversations with States were for the most part in line with FTA testimony and confirmed the assertion that additional information is needed in the CR area. For example, in discussing its pilot 2D barcode effort for State returns submitted by large-volume preparers, New York described its 2D pilot as a limited tactical effort, but it is not part of its long-term strategy. 2D barcoding was initially imposed as part of a mandate on preparers, and tax software companies provided systems that print barcodes on a separate page of the return. In the future, the State intends to use CR to capture and export paper return data as XML files to be consistent with electronically filed returns.[622]

---

[617] IRS (2008) *Modernized Submission Processing (Msp): Submission Processing Executive Steering Committee* p. 5
[618] Duncan, H. T. (2006) *Preparing Your Taxes: How Costly Is It?* p. 12
[619] Duncan, H. T. (2006) *Preparing Your Taxes: How Costly Is It?* p. 12
[620] Duncan, H. T. (2006) *Preparing Your Taxes: How Costly Is It?* p. 12
[621] Duncan, H. T. (2006) *Preparing Your Taxes: How Costly Is It?* p. 12
[622] Digman, B. (2008) *Interview of Chief Information Officer, Enterprise Services Division, New York State Department of Taxation & Finance*

In California, however, 2D barcodes are not used, all paper returns are imaged, and data extraction is accomplished through CR. Only data required for tax processing is extracted at the point of receipt. Additional data needed for compliance operations is available through an electronic enterprise return retrieval system.[623]

Based on a 2006 IRS study of State 2D barcode use, Table 14-1 provides statistics on the usage of 2D barcoding and other return processing methods by States[624]. Note that even though electronically filed and transcribed returns are included in the table, returns processed by CR are not — though CR is a valid processing method used by a number of States. Whether this was a result of the study focusing on barcodes, or whether returns processed by CR were included in one of the named categories, is unclear. Regardless, additional research is required on States' use of CR and long-terms plans for both CR and 2D barcodes as paper return processing methods.

Table 14-1 State Experiences with 2D Barcodes and Return Processing Methods (as of 2006)

State	Total Returns	2D Barcoded		Electronically Filed		Transcribed	
		Quantity	%	Quantity	%	Quantity	%
Alabama	1,823,105	366,504	20%	914,406	50%	542,195	30%
Arizona	2,433,435	408,357	17%	1,015,547	42%	1,009,531	41%
California	14,362,960	163,838	1%	6,188,766	43%	8,010,356	56%
Colorado	2,158,870	123,515	6%	940,223	44%	1,095,132	51%
Connecticut	1,610,736	62,417	4%	763,442	47%	784,877	49%
Delaware	458,244	106,197	23%	200,956	44%	151,091	33%
D.C.	291,181	9,285	3%	109,930	38%	171,966	59%
Georgia	4,062,008	612,909	15%	2,044,537	50%	1,404,562	35%
Hawaii	595,035	3,268	1%	164,400	28%	427,367	72%
Idaho	593,209	53,705	9%	308,601	52%	230,903	39%
Illinois	5,733,989	1,177,895	21%	2,434,201	42%	2,121,893	37%
Indiana	2,814,332	609,617	22%	1,351,212	48%	853,503	30%
Kansas	1,406,512	43,156	3%	694,199	49%	669,157	48%
Kentucky	1,701,902	223,853	13%	858,042	50%	620,007	36%
Louisiana	1,929,659	126,693	7%	860,919	45%	942,047	49%
Maine	640,244	37,360	6%	264,590	41%	338,294	53%
Maryland	2,787,248	230,406	8%	1,136,571	41%	1,420,271	51%
Massachusetts	3,231,658	1,180,338	37%	1,589,931	49%	461,389	14%
Michigan	4,774,860	606,290	13%	2,740,314	57%	1,428,256	30%
Missouri	2,695,793	549,832	20%	1,338,746	50%	807,215	30%
Nebraska	847,693	11,276	1%	454,502	54%	381,915	45%
New Jersey	4,172,851	631,435	15%	1,729,555	41%	1,811,861	43%
New Mexico	903,946	152,529	17%	444,292	49%	307,125	34%

[623] Beach, C. (2008) *Interview of Director, Filing Methods Bureau, California Franchise Tax Board*
[624] IRS (2006) *States' Experience with Tax Return Bar Code Technology* p. Appendix 3

State	Total Returns	2D Barcoded		Electronically Filed		Transcribed	
		Quantity	%	Quantity	%	Quantity	%
New York	10,532,948	1,869,122	18%	3,101,647	29%	5,562,179	53%
North Dakota	324,219	66,564	21%	147,295	45%	110,360	34%
Ohio	5,278,678	303,511	6%	2,745,270	52%	2,229,897	42%
Oklahoma	1,434,947	272,889	19%	711,589	50%	450,469	31%
Oregon	1,642,918	197,526	12%	749,496	46%	695,896	42%
Pennsylvania	5,835,518	344,394	6%	2,496,654	43%	2,994,470	51%
Rhode Island	630,429	47,567	8%	185,154	29%	397,708	63%
Utah	974,116	69,342	7%	476,566	49%	428,208	44%
Virginia	3,774,326	739,199	20%	2,227,134	59%	807,993	21%
Wisconsin	2,743,537	92,018	3%	1,592,395	58%	1,059,124	39%
Total	95,201,106	11,492,807	12%	42,981,082	45%	40,727,217	43%

Notes: FTA data suggests that percentages have gone up in many States (e.g., Alabama, Delaware, Indiana, Missouri, North Dakota, and Massachusetts), and discussions with the States have shown that some, like California, use Character Recognition instead of 2D barcodes.

As shown in Table 14-1, as of 2005, 33 States used 2D barcodes. Thus, the capability for generating barcodes exists in some form in current tax preparation software. A number of these States used barcodes as part of their opt-out provisions for their mandates on preparers to electronically file; preparers who elected not to electronically file had to barcode their returns.

14.4 Paper-Based Options

There are two major option categories for addressing the automation of paper return submission processing: 2D barcodes (implemented on fill-and-print forms or in tax preparation software) and CR. As with other Chapters in this report, the option categories should not be considered exclusive of one another. In fact, multiple options or a hybrid — such as Msp — may be required.

The TY2006 Taxpayer Usage Study provides information on the manner in which returns are prepared and is instructive in segmenting the paper returns into categories that may be addressed by a 2D barcode or CR option. Table 14-2 provides this segmentation and shows that almost three-quarters of paper returns are computer prepared but printed on paper (V-Coded)[625].

[625] IRS (2006) *Tax Year 2006 Taxpayer Usage Study*

Table 14-2 Percentage of Paper Returns by Preparation Method (as of TY2006)

Method of Preparation	% of Paper Returns	% of All Returns
Computer Prepared (i.e., computer printed or V-Coded)	74.03%	89.02%
Handwritten	25.42%	10.75%
Typed (i.e., typed on a typewriter)	0.52%	0.22%
Computer Prepared or Typed (i.e., cannot distinguish)	0.03%	0.01%

Of the preparation methods listed in Table 14-2, only returns that are computer prepared and printed on paper will be eligible for 2D barcode, because the computer programming is needed to print the barcode on the return. Because CR does not rely on marking the return by computer, any of the methods listed could potentially be applied to a CR option. Options for 2D barcodes and CR are discussed in more detail below.

14.4.1 Paper Option 1: 2D Barcodes

2D barcodes, while promising, are limited to V-Coded returns and impose a stakeholder burden.

In 2006, the majority — 74% — of paper returns were V-Coded (i.e., prepared using third party tax preparation software but printed and filed on paper). For filers in this category who cannot be induced to *e-file*, the use of barcodes would greatly improve submission processing for a large segment of paper returns.

At a high level, any 2D barcode option would have taxpayer-entered data encoded into 2D barcodes, which is then extracted with specialized technology and merged into the same processing pipeline as *e-filed* returns. It is important to note that every 2D barcode solution not only has a barcode creation component (at the time the return is printed, based on pre-designed software capabilities) but also a barcode capture component (at the time of submission processing). Therefore, any 2D barcode solution is dependent on the IRS establishing the capability to ingest 2D barcodes as well as the ability of the filer to create them using solutions specifically designed for this purpose by the IRS and/or a third party.

For more information on the difficulty of convincing *e-file* holdouts to convert to *e-file*, see Chapters 4, 5, and 6.

Not only does 2D barcoding reduce front-end processing costs, it also allows the IRS to establish a unified system architecture with full electronic access to complete tax return data across the IRS. However, taxpayers and preparers must use specialized computer applications that will generate a barcode on the printed return. There are two ways 2D barcodes may be implemented:

- **Fill-and-print forms** — For example, by the IRS updating the 1040 family of downloadable forms on IRS.gov to include 2D barcodes. One way to obtain barcodes on tax returns is by using open standards-based PDF electronic fill-and-print forms.
- **Tax preparation software** — For example, by return preparation software vendors updating their products to allow for this capability on IRS forms.

For clarity, the discussion below notes the common issues with 2D barcoding and points out differences between 2D barcoding and CR as required.

14.4.1.1 Targeted Population/Potential *E-file* Contribution

Because the filing of machine-friendly paper returns is not considered *e-filing*, Paper Option 1 does not directly contribute to the 80% *e-file* goal. However, as noted above, there are significant cost savings and efficiency benefits from automating the extraction of data from paper tax returns.

Discussion with stakeholders suggests that there may also be a perception that 2D barcode options do not directly contribute to the 80% *e-file* goal and actually detract from goal. That is, adopting a 2D barcode strategy may send the mixed signal that even while the IRS is working actively toward its 80% *e-file* goal, it is endorsing a solution other than *e-filing* that seems to encourage (or at least accept) taxpayers and preparers continuing to file on paper. Whether this would actually have a negative effect on *e-filing* volumes is unclear (though the electronic filing rates of states which also use 2D barcodes do not appear to support this concern) and may need additional research.

2D Barcodes in Fill-and-Print Forms

The potential effect of embedding 2D barcodes in forms available on IRS.gov is difficult to estimate, but as much as 70% of paper returns may be affected if all return preparation software embeds 2D barcodes.

The potential effect of this option may be estimated by examining the current number of 1040 forms downloaded from IRS.gov and using that number as a ceiling for the possible number of 2D barcode–enabled forms that could be returned. For the 2006 filing season, January through April 2006, approximately 19.6 million individual tax return forms were downloaded from the IRS web site[626]. Table 14-3 breaks down those downloads by form.

Table 14-3 Downloads of 1040/A/EZ from IRS.gov (as of TY2006)

Month	1040	1040A	1040EZ
January	1,401,955	341,844	1,013,154
February	2,721,945	601,087	2,389,095
March	2,373,016	416,621	1,687,239
April	3,245,227	963,728	2,425,944
Totals	9,742,143	2,323,280	7,515,432

The precise number of downloaded forms that were submitted as tax returns is not known. However, it is believed that a relatively small portion of the approximately 44 million machine-printed returns (in 2006) were prepared from downloaded forms, because most computer-prepared returns are the result of tax return software (see Table 14-2). Although this represents a smaller portion of the paper return population, it has no effect on tax return preparation software vendors (no changes to existing software would be required) and less effect on taxpayers and preparers (relatively few use fill-and-print forms), though the IRS would need to redesign the 1040 forms to accommodate the 2D barcode.

However, the increasing trend toward use of preparers indicates that the potential population that would adopt this option is significantly less than the population that would adopt the option below, which uses tax preparation software to generate the barcodes if the return is paper filed instead of *e-filed*.

[626] IRS (2006) *IRS.gov Download Statistics Report: April 2006;* IRS (2006) *IRS.gov Download Statistics Report: February 2006;* IRS (2006) *IRS.gov Download Statistics Report: January 2006;* IRS (2006) *IRS.gov Download Statistics Report: March 2006*

2D Barcodes in Tax Preparation Software

The potential effect of this option may be estimated by taking the 74% of paper returns that are V-Coded and considering the average read rate for 2D barcodes (assume 95% for this calculation), which yields an upper estimate that 70% of paper returns could be processed by 2D barcodes rather than transcription.

14.4.1.2 Considerations

There are a number of considerations regarding implementing 2D barcodes:

- The relative accuracy of 2D barcodes compared with CR.
- The relative stakeholder burden imposed by 2D barcodes compared with CR.
- The technology required for 2D barcodes compared with CR.

Accuracy

2D barcodes have read rates in the mid-90s. If a 2D barcode can be successfully read, all of the encoded data will be extracted with 100% accuracy.

Barcode accuracy is somewhat different from CR accuracy. Whereas a CR system conducts human-like interpretation of printed characters, 2D barcode systems recognize binary patterns of dots. If the barcode image is legible (i.e., the recognition solution can successfully detect and read [decode] it), the data extraction is 100% accurate. Therefore, the accuracy rating of a barcode is more a measure of the percentage of a quantity of barcodes that are legible — i.e., a real-world read rate — than a measure of the accuracy of extracted data. For 2D barcodes, data extraction is an all-or-nothing proposition and wholly dependent on whether they can be read to begin with.

Character Recognition is discussed as Option 2 in this Chapter.

States' experiences with processing 2D barcodes on tax forms illustrate the net effect of real-world problems, because their read rates are in the range of 93% to 96%[627]. Potential causes of a less-than-perfect read rate include the following:

- Design issues such as correctly setting the level of built-in error correction and the physical attributes — size, aspect ratio — of the 2D barcode.
- Printing issues such as insufficient native resolution of the user's printer, insufficient print quality, and print margins impinging on the barcode.
- Handling issues such as folds, tears, writing, and other marks that occlude or damage the integrity of the barcode.
- Processing issues such as insufficient scan resolution, insufficient image cleanup, and insufficient software capabilities regarding recognizing the barcode in the scanned image and decoding it.

In a 2006 survey, respondents reported the first pass accuracy rates for 2D barcodes and CR, as shown in Table 14-4[628].

---

[627] California (2004) *Proposed Process: Implement New 2D Barcode Format for Scannable Returns;* Federation of Tax Administrators (2007) *2-D Barcode Frequently Asked Questions*

[628] The Association for Work Process Improvement and Harvey Spencer Associates (2006) *Forms Processing Data Capture Study 2006: An Analysis of Forms Processing, Data Capture and Document Capture Systems, Operations and Trends*

Table 14-4 First Pass Accuracy Rates for 2D Barcodes and Character Recognition

Technology	First Pass Accuracy Rate
2D Barcode	99%
Character Recognition — Machine Print	91%
Character Recognition — Handprint	74%

To properly understand the accuracy rates, some explanation is required. These rates are based on first pass results, meaning that multiple passes will improve results, particularly with CR. In fact, modern CR systems commonly use three recognition engines that compare and "vote" on characters to achieve significantly higher accuracy. Voting takes the output from two or more recognition engines and compares the results, voting on the most likely characters. Voting takes the recognition results from multiple, integrated CR engines and compares them — in some cases eliminating an engine's result and in others combining them to improve the result. Voting is designed to eliminate errors and increase accuracy percentages at the same time and can boost accuracy dramatically.[629]

In 2006, Forrester Research noted an average CR accuracy rate of 98%[630]. This 2006 report also found that voting reduces overall errors by up to 65%[631].

Thus, considering all the factors that help or hinder 2D barcode and CR accuracy, most robust solutions for either technology should yield comparable results.

2D barcoding imposes a stakeholder burden: it requires not only an IRS processing solution but also a solution to create 2D barcodes at the time of printing.

Stakeholder Burden

2D barcodes require forms designers and/or end user application (i.e., return preparation software) designers to add IRS-specific capabilities to their software products to enable end users to print the desired 2D barcodes on the return. Barcode-based options must address the difficult issue of form layout if the 2D barcode is to be placed directly on the form. Even if a separate barcode page is used, there is the issue of additional processing costs associated with an increased number of pages to be imaged. Additionally, gaining the benefits of 2D barcodes requires implementation of a system to read the barcode and export the data. There also must be a certification process established by the organization receiving 2D barcoded forms to validate that forms comply with specifications[632]. Regarding the burden on the taxpayer, if the barcode is not integrated into the form (i.e., it is appended as an additional page), the filer must remember to include the page with the barcode along with the return. In addition, if the filer makes handwritten changes to the return after it is printed, those changes will not be captured in the barcode. Only returns with barcodes can be processed by a barcode scanning solution; all others must be manually transcribed or processed through CR.

---

[629] Breithaupt, M. (2001) *The Value of OCR Voting;* Forrester Research (2006) *ICR/OCR: It's Time To Vote*
[630] Forrester Research (2006) *ICR/OCR: It's Time To Vote* p. 3
[631] Forrester Research (2006) *ICR/OCR: It's Time To Vote* p. 6
[632] See barcode standards for tax processing from Federation of Tax Administrators (2007) *Tax Forms Processing: 2-D Bar Coding Standards, Revision 2007v2*

2D barcoding requires specialized technology for processing.

Capture Technologies Required

Unlike standard 1D barcodes used for simple item identification, 2D barcodes cannot be read by a traditional laser scanner. Rather, they must be scanned by a camera capture device or advanced handheld optical scanner. Handheld scanners that are passed over the barcode by an operator may be employed. Typically, however, high-speed bulk photo-scanners are used to image the entire document for large volume operations such as those at the IRS. Most imaging solutions can be configured to recognize the existence of 2D barcodes, read them, decode them, and output the results. It is not necessary to image the entire page or return to extract data from a 2D barcode.

14.4.2 Paper Option 2: Character Recognition

Character Recognition precludes the mixed signal of endorsing e-file *while providing a seemingly government-acceptable option to paper file as long as a 2D barcode is used.*

Paper Option 2 involves the use of CR as the primary means of processing paper returns. CR requires that the IRS implement a document imaging capability but does not place any additional burden on filers. The IRS plans to use CR as the primary approach for its Msp project (Msp also supports 2D barcodes), which is described in Section 14.2.3.

14.4.2.1 Targeted Population/Potential *E-file* Contribution

Because filing machine-friendly paper returns is not considered *e-filing*, Paper Option 2 does not directly contribute to the 80% *e-file* goal. However, as noted above, there are significant cost savings and efficiency benefits from the imaging and CR of tax returns.

Because Paper Option 2 is unencumbered by a requirement for forms designers and tax preparation software vendors to incorporate 2D barcodes for V-Coders, the adoption of this option is not limited by the absence of 2D barcodes on returns (i.e., CR can process all paper forms rather than the less than 100% of paper forms with 2D barcodes). The nature of a CR option lends itself to a potential use on all paper returns. If only capable of recognizing computer-printed and typewritten information, CR would be able to process about 74% of all paper returns, including 100% of V-Coded returns. If, as is the case with most modern CR systems, handwriting recognition is possible, the entirety of paper returns could be automatically processed.

14.4.2.2 Considerations

Because Character Recognition can be applied to all paper returns, not just V-Coded ones as is the case with 2D barcodes, its potential benefit is much greater.

Similar to Option 1, there are a number of considerations regarding the implementation of the CR option:

- The relative accuracy of CR compared with 2D barcodes.
- The relative stakeholder burden imposed by CR compared with 2D barcodes.
- The technology required for CR compared with 2D barcodes.

In addition, this Section considers the Msp effort currently in advanced planning stages at the IRS, which would apply CR to paper returns but also recognize barcodes.

Accuracy

For more information about accuracy and the comparison between CR and 2D barcodes, see Section 10.4.1.2.

As noted above, CR provides accuracy rates in the 90s, and voting algorithms provide greater accuracy in results. Whereas 2D barcodes constitute an all-or-nothing option, CR provides an extract of all imaged information, using a computed confidence to characterize the relative accuracy of the recognition of any given imaged word or character. Therefore, in the case of a damaged (e.g., creased, crumpled, stained, marked up) return, CR provides an extract, even at low confidence, whereas 2D barcodes provide nothing. In this case, the tradeoff is whether one wants something with less-than-perfect accuracy or nothing at all.

Stakeholder Burden

Character Recognition imposes a significantly lower stakeholder burden compared with 2D barcodes.

CR imposes no burden on the taxpayer because all the processing required for automated extraction of data is on the IRS side and does not require the taxpayer or preparer to do anything differently. Advances in CR — such as the ability of CR to recognize zones and objects on the form that it must perform specific actions on or treat differently, use relative versus absolute locations, and to identify similar but not identical items — mitigate the level of consistency and specificity previously required in forms design to ensure good CR results, because these advanced CR capabilities can account for a range of variation.

Some perceive the availability of 2D barcodes as undermining *e-filing* (e.g., because 2D barcodes are visually prominent and signal that the government is endorsing a solution other than *e-filing*, even as the government markets *e-filing*. However, CR is discreet in that the filer does not have any basis for knowing that the technology is being used and thus will not be conflicted or de-motivated regarding *e-file*. However, if filers can be encouraged to submit high-quality machine-printed returns, CR operations will greatly benefit. Compared with CR, which requires only a sufficiently capable processing solution to obtain desired benefits, 2D barcoding has a greater stakeholder burden: it requires not only a processing solution but also design and point-of-creation solutions.

Technology Required

CR requires that the entire document be converted into an electronic image. However, as with the use of barcodes, CR can identify specific portions of a return to process. A large additional benefit of imaging the entire return is the ability to eliminate paper handling from downstream processes. By designating the electronic image as the return-of-record, original paper submissions may be destroyed, further reducing costly file management operations and facilitating easier search and retrieval from archives.

IRS Plans Regarding Msp

The IRS is in the planning stages of its Msp project, which will recognize 2D barcodes as well as apply Character Recognition to paper returns, and has made this project a top modernization priority.

The IRS has selected CR as its preferred paper return processing option, and the Msp project was ranked by IRS senior executives as the number one new modernization priority. Msp meets the need to eliminate transcription as a primary data capture method, provides 2D barcode scanning as needed, reduces system cost by retiring legacy systems, reduces cost by eliminating paper file management, unifies paper and *e-file* data management processes, and increases the availability of return data for customer service and compliance operations.

As currently planned, Msp will begin implementation with a proof-of-concept pilot focusing on 1040EZ forms at a single processing center. Upon successful completion of the pilot, the full 1040 family of forms will be developed. Msp is planned for release at a later date, followed by deployment in two additional processing systems. Upon completion of each of these phases, planned retirement of the legacy submission processing systems will be enabled.

According to the IRS, Msp benefits include the following (note that all project cost estimation was performed for Msp as part of the IRS Modernization Vision & Strategy [MV&S] technology portfolio management process and was not validated for the purposes of this study):

- Elimination of primary transcription for all machine- and hand-printed paper 1040 family returns[633].
- The ability to also process 2D barcodes[634].
- Conversion of all paper returns into electronic “official record” images, allowing elimination of paper processing, filing, and archiving[635].
- The ability to work in tandem with MeF[636].
- Integration of paper return data into the MTRDB[637].
- Facilitation of the retirement of legacy Submission Processing and GMF systems[638].
- Improvement in customer service and compliance operations by providing increased access to return data[639].
- Retirement of legacy paper processing systems[640].
- An estimated $67 million per year saved in transcription, paper handling/filing, and system maintenance costs[641].
- Recovery of the entire capital investment for system development in approximately 1 year of full operation[642].

The IRS has identified the following costs and challenges associated with Msp:

- Msp requires a new capital investment for system development and acquisition. IRS staffing costs must also be considered.[643]
- Obtaining Business Systems Modernization (BSM) funds for paper return processing has been difficult in recent years.
- Implementing Msp will require significant reengineering of campus business processes, which may result in labor contract renegotiation.
- Commercial off-the-shelf (COTS)–based solutions could have difficulty handling 1040 return volume.

---

633 IRS (2008) *Modernized Submission Processing (Msp): Submission Processing Executive Steering Committee* p. 5
634 IRS (2008) *Modernized Submission Processing (Msp) - Solution Concept Definition - Domain: Submission Processing* p. 40
635 IRS (2008) *Modernized Submission Processing (Msp): Submission Processing Executive Steering Committee* p. 5
636 IRS (2008) *Modernized Submission Processing (Msp) - Solution Concept Definition - Domain: Submission Processing* pp. 44,45,68
637 IRS (2008) *Modernized Submission Processing (Msp) - Solution Concept Definition - Domain: Submission Processing* p. 40
638 IRS (2008) *Modernized Submission Processing (Msp) - Solution Concept Definition - Domain: Submission Processing* p. 14
639 IRS (2008) *Modernized Submission Processing (Msp) - Solution Concept Definition - Domain: Submission Processing* p. 18
640 IRS (2008) *Modernized Submission Processing (Msp) - Solution Concept Definition - Domain: Submission Processing* p. 14
641 IRS (2008) *Modernized Submission Processing (Msp): Submission Processing Executive Steering Committee* p. 5
642 IRS (2008) *Modernized Submission Processing (Msp): Submission Processing Executive Steering Committee* p. 5
643 IRS (2008) *Modernized Submission Processing (Msp): Submission Processing Executive Steering Committee* p. 5

- Establishing electronic return images as official records requires the consent of the IRS Records Officer and Chief Counsel, a policy change the IRS is pursuing.

Breakeven Analysis: Additional Research Needed

Further research is needed to define and analyze the breakeven point between electronic filing and transcription costs and benefits.

In its 2007 Filing Season Report, the GAO recommended that the IRS consider a barcode strategy, among other options, but made additional recommendations that would facilitate the planning of such an effort and would provide overall guidance as to the costs and benefits of *e-filing*. The GAO also recommended a breakeven analysis in which the IRS would do the following:

> Determine the benefits, in terms of processing costs and improved enforcement, of having all returns filed electronically [and] Determine how much electronic filing would have to increase, either through electronic filing mandates or bar coding, for the benefits of transcribing all remaining paper returns to exceed the costs.[644]

Other considerations in such an analysis could include determining how much data from the 1040 forms and schedules exists and is actually transcribed, determining the business needs for additional data, and evaluating the cost/benefits of obtaining a complete data set. Such a detailed breakeven analysis is outside the scope of this report, however, the output from this analysis will not only benefit the paper-based options, but all options for advancing *e-file.* Additional research is needed to address the breakeven analysis.

---

[644] Government Accountability Office (2007) *Tax Administration: 2007 Filing Season Continues Trend of Improvement, but Opportunities to Reduce Costs and Increase Tax Compliance Should be Evaluated* p. 35

15. Other Options and Research Opportunities

Contents of Chapter 15:

There is room for innovation and creativity in developing new options to help the IRS reach the 80% e-file *goal.*

Many of these options focus on developing new benefits, as illustrated in Incentive Option 5.

Looking forward to the next phases of the IRS effort to advance *e-file*, this Chapter reviews possible options for consideration (aside from those discussed in this report) and areas of study in which additional research may be desirable or necessary. After identifying these additional possible options, organized by provider (IRS or a third party), the Chapter lists opportunities for future research. These research opportunities are categorized to address the following: obtaining a better understanding of filer motivators and concerns, refining target populations for each option, learning from State and international experiences, and evaluating detailed option-specific considerations. Themes identified in this Chapter include the following:

- There are numerous options, or combinations of options, in addition to those described in Chapters 10 through 14, and research and analysis are required to better understand and evaluate these.
- Prioritizing future research is one of many steps the IRS may need to take as it moves into subsequent phases of its effort to achieve the 80% *e-file* goal.

15.1 Other Options for Future Consideration

While the scope of this report was limited by design to those options analyzed in Chapters 10 through 14, research and discussion with stakeholders identified a number of other potential options or variations of options worth mentioning. The phased design of this report precludes any significant analysis of the potential options at this time; however, these options are described here briefly to acknowledge their existence and potential merit for further study. For the purposes of this report, no inquiry was made into the state of research on these topics — whether a significant body of information already exists or new, original research is required. These options are provided in two categories: new government-provided incentives and third party–provided incentives/products.

15.1.1 Government-Provided Options

The following potential new options could be provided by the IRS or the Federal government to entice *e-file* holdouts to switch to electronic filing. With the exception of the last, which focuses more on technology, additional examples of incentives were suggested by stakeholders during research for this report and are a subset of Incentive Option 5: Develop New Benefits. These options have not been prioritized or validated for applicability within the IRS environment. To be seriously considered, additional research is needed for any of the following options.

For more information about Increased Marketing for Free File, see Section 10.4.3, and for more information about Expand the Free File Program, see Section 10.4.4.

15.1.1.1 Mandate Free *E-file* for All Taxpayers

Similar to Incentive Option 3 (Increased Marketing for Free File) and Incentive Option 4 (Expand the Free File Program), this option appeals to cost as a perceived barrier to *e-filing.* As part of this option, governmental authority would be used to prohibit third parties from charging taxpayers to *e-file* (separately or bundled in the cost of preparation), essentially requiring that third parties absorb costs related to operating *e-file*. Different from Incentive Options 3 and 4, this free option would benefit all taxpayers, not just those who meet eligibility criteria.

For more information about current acknowledgments (or acknowledgment as a motivating factor), see Section 10.2.2.4.

15.1.1.2 Expand Current Acknowledgment

This incentive provides *e-filers* with additional information about their tax situations along with traditional acknowledgment that their returns have been received by the IRS. For example, upon receipt of an individual return, the IRS could send acknowledgment of receipt of the file (as is currently done) along with other available information (e.g., whether part or all of the refund would be held to pay for outstanding debts to other Federal agencies, possible audit flags). The timing and type of information to be provided are among the many factors to be considered.

15.1.1.3 Make E-signatures Easier to Obtain

The focus of this incentive is to make e-signatures easier to obtain (e.g., remote signature capability). The current signature process for returns prepared by preparers can require a second visit to the preparer from the taxpayer. While paper return signatures can be handled by mail — taxpayers simply sign their returns and mail them in — *e-file* requires taxpayers to review the return and sign a Form 8879 or enter a PIN into the computer. In 2006, GAO referred to a proposal to expand eServices by creating a "secured electronic mailbox where tax preparers could send in a return, the taxpayer could return and sign it, then submit it to the IRS electronically or return it to the preparer for additional work and subsequent electronic filing to IRS"[645]. This option looks at possibilities for making the e-signature process more convenient for taxpayers.

During its first 5 years, the Singapore electronic filing program encouraged uptake through a lottery offering a $50,000 prize.

15.1.1.4 Offer a Lottery for *E-filers* as a Monetary Incentive

During the first 5 years of its electronic filing program, the Singapore Ministry of Finance encouraged electronic filing with a lottery offering one prize of $50,000 and 2,000 prizes of $50 each, open to all who filed electronically, either by Internet or phone. To persuade people to file early, more chances to win were awarded to early filers. Extra lottery chances were also given to those electronic filers who in turn convinced paper filers to file via the Internet. After 5 years of successfully increasing acceptance of electronic filing, the lottery was suspended[646].

15.1.1.5 Contact Lapsed *E-filers* to Suggest Using It Again

A variation on Incentive Option 2 (Targeted Marketing of *E-file*), this option specifically refers to contacting lapsed *e-filer*s to suggest using new electronic channels.

---

[645] Government Accountability Office (2006) *Tax Administration: Most Filing Season Services Continue to Improve, but Opportunities Exist for Additional Savings* p. 13

[646] Carter, P. (2006) *Review of HMRC Online Services* p. 33

15.1.1.6 Allow Preparers to Defer Corrections to *E-filed* Returns Until After Tax Deadline

For more information about extending the return deadline, see Section 10.4.5.

Similar to the example provided under Incentive Option 5: Develop New Benefits to extend the return deadline for *e-filers*, this option allows preparers to defer corrections until after the tax deadline.

15.1.1.7 Expand IRS Walk-in Centers

While many existing IRS walk-in centers allow individuals to *e-file,* this option specifically refers to offering and promoting *e-file* assistance at walk-in centers, along with kiosks and other methods of making on-the-spot *e-filing* convenient and attractive to *e-file* holdouts who use the walk-in centers.

15.1.1.8 Use New Technologies

Similar to Phone Option 1: Rethink Phone-Based *E-filing*, this option broadly addresses exploiting new and emerging technologies for the purposes of *e-filing*. One example of such an option is to embed Web 2.0 widgets on popular social networking sites.

15.1.1.9 No Longer Accept V-Coded Returns

Based on the approach used in the United Kingdom, the IRS, through a change in Federal law, would no longer accept V-Coded paper returns (barring specific exceptions). This approach is designed to force those who prepare their return on a computer to file it electronically or manually transcribe the final results to a paper form; computer-printed returns would no longer be accepted.

15.1.2 Third Party–Provided Options

Third party organizations can offer products or services that provide direct or indirect incentives to e-file*.*

Similar to the provision of bank products such as RALs and RACs, this option explores the possibility of looking to third party organizations to continue to provide innovative products or services to persuade taxpayers to *e-file*. While these options are not necessarily under the control of the Federal government, they are mentioned below to acknowledge their potential to increase *e-filing*.

15.1.2.1 Encourage Commercial Businesses to Provide *E-filing* Products for Free as an Incentive for Doing Business with Them

Commercial businesses sometimes provide *e-file* products for free to entice new or retain existing customers. For example, as an incentive to open a new account, banks may provide free tax preparation software or other tax-related products to customers.

15.1.2.2 Encourage Employers to Provide *E-filing* Products for Free as an Employment Benefit

Employers sometimes provide tax assistance as a benefit to their employees. This includes setting up tax clinics with local tax preparation firms, providing direct assistance to employees, and even establishing a temporary, dedicated area with computers for completing taxes.

15.2 Research Opportunities

The remainder of this Chapter addresses opportunities for additional study and, in some cases, original research, that were noted during the course of preparing this report. These research opportunities are based on noted gaps in current literature and/or logical next steps to better understand a particular topic. Addressing these opportunities would provide a more complete picture of *e-file* and would be beneficial — and in a number of cases, necessary — to developing a detailed strategy for achieving the 80% *e-file* goal.

Each of the opportunities for additional study is categorized below. The first speaks to general taxpayer and preparer motivations and concerns, while the remaining three opportunities speak research on refining the target populations/estimated contributions to the 80% *e-file* goal, related State/international experiences, and option-specific considerations.

As noted in the introduction to this report, the detailed, option-specific analysis of cost and benefit, risks, and implementation/technology considerations will be addressed separately. Therefore, the research opportunities described in this Chapter do not include these areas of future analysis, though such in-depth feasibility/cost analysis (and other efforts) will likely be a part of future IRS efforts to advance *e-file*.

15.2.1 Research Opportunities for Taxpayer and Preparer Motivators

One of this report's key themes is that meeting the 80% *e-file* goal requires a more complete and ongoing understanding of taxpayer and preparer motivators and concerns. This is particularly important for convincing late adopters in the technology adoption curve. The opportunities for research identified in Table 15-1 address the additional research that may be needed to further that understanding.

Table 15-1 Research Opportunities for Taxpayer and Preparer Motivators

ID#	Reference	Research Opportunity	Description
1.1	Chapter 4	Updated data on taxpayer and preparer perceptions	More current surveys and interviews of taxpayers and preparers — particularly *e-file* holdouts — should yield a better understanding of what would convince them to *e-file* and how to remove barriers to this change.
1.2	Chapter 4	Obtain data on taxpayer and preparer behaviors	Directly observing taxpayer and preparer behavior (as opposed to relying on self-reported data) should yield real-world information about *e-filing* motivators and concerns that can be correlated with perceptions.
1.3	Chapters 5 and 6	Awareness, understanding, and acceptance	More research is needed to assess to what extent filers understand *e-file* (not just whether they are aware of it) and how this affects acceptance.
1.4	Chapter 5	Fear of audit	More research is needed on both the perception and reality of potentially increased audit risk from *e-filing*.
1.5	Chapters 5 and 10	Acknowledgments as a benefit	More research is needed on the awareness about and importance of acknowledgments as an *e-file* benefit.
1.6	Chapters 5, 6, and 10	Holdouts' perceptions of marketed *e-file* benefits	IRS identifies and markets benefits associated with *e-file* to taxpayers and preparers. More research is needed about the perception and effect of these benefits on *e-file* holdouts and about other potential messages that may better resonate with holdouts.
1.7	Chapter 6	Business cost of *e-filing*	More research is needed on the business models that enable preparers to *e-file* at the ideal balance point between quality and cost efficiency.

15.2.2 Research Opportunities for Refining Target Populations for Options

Subsequent phases of the advancing *e-file* effort will require research to refine the target population for any given option. For many of the options, this report provides narrative-based formulas for identifying their target populations; to the fullest extent possible in the next phase, these formulas will need to be used to calculate the options' estimated numerical contributions toward the 80% *e-file* goal. These calculations have not been performed to date, because additional research is needed to identify the necessary data. Table 15-2 identifies opportunities for research that could facilitate better understanding of a particular option's contribution to the 80% *e-file* goal.

Table 15-2 Research Opportunities for Refining Target Populations for Options

ID#	Reference	Research Opportunity	Description
2.1	Chapter 10	Effectiveness of marketing *e-file* and incentives	More research is needed to determine the correlation between marketing and uptake of *e-file* and which messages are most effective.
2.2	Chapter 10	Target population for Free File program	To reach the population eligible for the Free File program the IRS will need to better understand the motivations behind filing for free and/or specifically using (or not using) the Free File program.
2.3	Chapter 11	Threshold calculation for Federal *e-file* mandates	To calculate how many returns would be affected by a particular preparer mandate threshold, updated data on preparer segmentations is needed (the most recent complete data set is 2005).
2.4	Chapter 12	Contribution of Internet-based *e-file* options	More research is required to calculate the potential contribution of the three Internet Options: understanding preparers who do not file because of unavailability of forms; V-Coders; filers concerned with cost (for preparing and/or transmitting); filers concerned with third party involvement; filers who prefer forms and/or use downloadable PDFs; and filers who prefer interview-based tax software.
2.5	Chapter 13	Effect of paper-based filing options on an advancing *e-file* strategy	Discussions with stakeholders suggest the perception that paper-based filing options may detract from advancing toward the 80% *e-file* goal. Whether this would actually have a negative effect on *e-filing* volumes is unclear and more research is needed.
2.6	Chapter 14	Effect of phone-based *e-file* options	The target population for this option depends on how the scope and eligibility of such a program is defined. Additional research is required to evaluate the best approach for exploiting phone-based technology to increase *e-filing* and for reaching target populations.

15.2.3 Research Opportunities for State and International Experiences

For each of the options, State and international experiences were considered in this phase of the report. In subsequent phases, these experiences and their relevance to the Federal arena may need to be considered in greater depth. Table 15-3 identifies opportunities for further study in the State and international areas.

Table 15-3 Research Opportunities for State and International Experiences

ID#	Reference	Research Opportunity	Description
3.1	Chapter 7	Updated State information	More research is needed to obtain updated and validated information on State *e-filing* practices, statistics, and plans
3.2	Chapter 8	Detail behind international summary table	Table 8-1 provides a snapshot of information from more than 20 countries. To the extent that there is interest in more detail about any of these countries, additional research is required.
3.3	Chapter 8	Comparison of United States, United Kingdom, Canada, and Australia	To the extent that there is interest in additional comparisons among the United States, United Kingdom, Canada, and Australia (e.g., other features, role of third parties, future direction of filing system), additional research is required.
3.4	Chapter 10	Incentives employed at the State level	With the exception of a few examples (e.g., South Carolina has a deadline extension for electronic filers), no research on State experiences with incentives was found; more research is required.
3.5	Chapter 11	Federal/State relationship concerning mandates	More information is needed to determine how various thresholds for a Federal *e-file* mandate on preparers may affect State electronic filing programs or provide an opportunity for threshold consistency.
3.6	Chapter 12	State experiences with I-File	The GAO surveyed 8 States with I-File. For information on other States with I-File, research is needed.
3.7	Chapter 13	Character Recognition and 2D barcodes	There is limited information available concerning State usage of character recognition for automating paper return processing as well as long-term plans for use of 2D barcodes. Further research is needed.
3.8	Chapter 14	State experiences with Telefile	There is limited information available concerning usage of or factors contributing to the success or failure of State-run Telefile programs.

15.2.4 Research Opportunities for Option-Specific Considerations

Table 15-4 outlines other pertinent research on option-specific considerations beyond the thorough cost/benefit and systems engineering analyses that would be performed for each option.

Table 15-4 Research Opportunities for Option-Specific Considerations

ID#	Reference	Potential Area for Future Study	Research Opportunity
4.1	Chapter 10	Offering e-services to draw new users to *e-file*	More research is needed to determine how other e-services influence filers' behavior (i.e., through making them comfortable with online transactions).
4.2	Chapter 10	Historical direct monetary incentives	Research turned up little information about the historical proposals to provide direct monetary incentives. More research is needed should the cost/benefit of these options justify further consideration.
4.3	Chapter 11	Need for and impact of standards and certifications	Further research is needed on the scope and effect of potential standards to professionally certify preparers and EROs.
4.4	Chapter 12	Establish an analog to what IRS would face for customer service/support should it offer direct filing or preparation solutions	More research is needed on the nature and degree of customer interaction that may be expected, such as: · Total customer contact volume during tax season or year by channel (e.g., phone, e-mail, chat, web) · Cost per contact by channel · Time/effort per contact by channel · Disposition (was contact topic IRS-appropriate or IRS-inappropriate [i.e., redirectable to software vendor or paid preparer]) · Other (e.g., how customer contact data is used for product development) Foreign countries, States, and tax preparation software vendors may be able to provide this information.
4.5	Chapter 13	Breakeven analysis	Additional research is needed to define and analyze the breakeven point between *e-filing* and transcription of all return data.
4.6	Chapter 13	2D Barcodes in Fill-and-Print Forms	Data is needed on the proportion of IRS fill-and-print PDFs (versus software-generated forms) among paper returns flagged as computer-generated.
4.7	Chapter 14	Phone-based *e-filing* options	Significant research is required to explore ways to use phone technologies such as SMS or features of mobile devices to *e-file* taxes.
4.8	Chapter 15	Other Options	More research is needed if other options are to be considered.

Appendix A. Contributors

A.1. Outreach

MITRE would like to thank the staff of the following States and organizations for participating in the outreach meetings and/or contributing to the report:

States

- California Franchise Tax Board
- Connecticut Department of Revenue Services
- Massachusetts Department of Revenue
- New York Department of Taxation and Finance
- Oklahoma Tax Commission

Organizations

- American Institute of Certified Public Accountants (AICPA)
- Council for Electronic Revenue Communication Advancement (CERCA)
- Electronic Tax Administration Advisory Committee (ETAAC)
- Free File Alliance (FFA)
- Federation of Tax Administrators (FTA)
- IRS Oversight Board
- National Taxpayer Advocate (NTA)
- Taxpayer Assistance Blueprint (TAB)
- UK All Party Parliamentary Taxation Group

A.2. Acknowledgements

MITRE extends special thanks to Dave Williams and the ETA team for their contributions, leadership, and support: Laurie Barrett, Lisa Burch, Grace Davis, Tracey Davis, Alison Doone, Phyllis Gattos, Jim Kurdziel, Paul Mamo, Crystal Philcox, Karen Taylor, and Theresa Washington. In addition, this report would not have been possible without the advice or assistance of the following: Eric Baltas, Diane Bonciolini, Susan Carroll, Michelle Chu, Joyce Colbert, Cassandra Daniels, Andrew LeBold, Cynthia Lee, Blase Mozdzen, Katherine Prager, Mary Rekus, Shenorva Richie, Pete Stipek, Keith Wallace, Derrick Wilson, and George Yu.

MITRE recognizes with appreciation the work of project co-leads Ted Sienknecht and Meredith McCullough, program manager Peter DeCastro, deputy program manager Ren Resch, and lead writer Melissa Hardin. MITRE also extends heartfelt thanks to Paul Devlin, international lead; Rich Dodson, research lead; Chuck Lewis, internet lead; Frank Maginnis, phone lead; Andy Taylor, paper lead; Melony Katz, motivators lead; Harvey West, Joe Hawley, and Roger Firestone, contributors; Susan Gogos, Deanna West, Josephine Cavallo, and Mary Przewlocki, researchers; Raye Anne Harris, Eric Etter, and Rene Young, fact checkers/copyeditors; Beth Rosenfeld, editor; Gina Lofaro, illustrator; and Charles Hone, Vance Kauzlarich, and Jim Cook, executive reviewers.

THIS PAGE INTENTIONALLY LEFT BLANK.

Acronyms

Acronym	Expansion
1D	One-Dimensional [as in 1D barcode]
2D	Two-Dimensional [as in 2D barcode]
A2A	Application-to-Application
AGI	Adjusted Gross Income
AICPA	American Institute of Certified Public Accountants
AIIM	Association for Information and Image Management
AJCA	American Jobs Creation Act of 2004
AMT	Alternative Minimum Tax
ASP	Accountancy Service Provider
ATO	Australian Taxation Office
AUR	Automated Underreporter
BMF	Business Master File
BSM	Business Systems Modernization
CADE	Customer Account Data Engine
CalFile	[California electronic filing system for individual taxpayers]
CEM	Center for Enterprise Modernization
CERCA	Council for Electronic Revenue Communication Advancement
COTS	Commercial Off-the-Shelf
CPA	Certified Public Accountant
CR	Character Recognition
CRA	Canada Revenue Agency
CY	Calendar Year
DA	Disclosure Authorization
e-file	Electronic File [IRS]
EFILE	Electronic File [Canada]
EAR	Electronic Account Resolution
ECM	Enterprise Content Management
EFT	Electronic Funds Transfer
EFTPS	Electronic Federal Tax Payment System
EGTRRA	Economic Growth and Tax Relief Reconciliation Act of 2001
EIC	Earned Income Credit [synonym of EITC]
EITC	Earned Income Tax Credit
ELF	Electronically Filed Return
ELS	Electronic Lodgement System
EMS	Electronic Management System
ERO	Electronic Return Originator

Acronym	Expansion
ETA	Electronic Tax Administration
ETAAC	Electronic Tax Administration Advisory Committee
ETARC	Electronic Tax Administration and Refundable Credits [formerly ETA]
FAQ	Frequently Asked Question
FBI	Filing by Internet
Fed/State	Federal/State [electronic filing] Program
FFA	Free File Alliance
FFRDC	Federally Funded Research and Development Center
FMS	Financial Management Service
FTA	Federation of Tax Administrators
FTD	Federal Tax Deposit
FY	Fiscal Year
GAO	Government Accountability Office
GDP	Gross Domestic Product
GOL	Government On-Line [Canada]
GMF	Generalized Mainline Framework
GST	Goods and Services Tax
HM	Her Majesty
HMRC	Her Majesty's Revenue & Customs
HST	Harmonized Sales Tax
HWR	Handwritten Character Recognition
I-File	Internet Filing
ICAS	Internet Customer Account Services
ICR	Intelligent Character Recognition
ID	Identification
IFA	Internet Filing Application
IRP	Information Return Processing
IRS	Internal Revenue Service
ISRP	Integrated Submission and Remittance Processing
IT	Information Technology
JCWA	Job Creation and Worker Assistance Act of 2002
JGTRRA	Jobs and Growth Tax Relief Reconciliation Act of 2003
LITC	Low Income Taxpayer Clinic
MeF	Modernized e-File
MICR	Magnetic Ink Character Recognition
MITS	Modernization Information and Technology Services
MP3	Modernized Paper Pipeline Processing
Msp	Modernized Submission Processing

Acronym	Expansion
MTRDB	Modernized Tax Return Database
MV&S	Modernization Vision & Strategy
NACTP	National Association for Computerized Tax Processors
NAEA	National Association of Enrolled Agents
NATP	National Association of Tax Professionals
NETFILE	[Canada's internet electronic filing program Canada]
NPL	National Public Liaison
NTA	National Taxpayer Advocate
OECD	Organisation for Economic Co-operation and Development
OCR	Optical Character Recognition
OMB	Office of Management and Budget
PAYE	Pay As You Earn
PAYG	Pay as you go
PBI	Practitioner Business Impact
PC	Personal Computer
PDA	Personal Digital Assistant
PDF	Portable Document Format
PIN	Personal Identification Number
PIT	Personal Income Tax
PKI	Public Key Infrastructure
PSA	Public Service Announcement
PY	Processing Year
RAC	Refund Anticipation Check
RAL	Refund Anticipation Loan
RRA98	[Internal Revenue Service] Restructuring and Reform Act of 1998
RRSP	Registered Retirement Savings Plan
SA	Self-Assessment
SCRIPS	Service Center Recognition/Image Processing System
SIN	Social Insurance Number
SL	Stakeholder Liaison
SMS	Short Message Service
SP	Submission Processing
SP ESC	Submission Processing Executive Steering Committee
SPEC	Stakeholder, Partnerships, Education, and Communication
SSN	Social Security Number
T1	Income Tax and Benefit Return [Canada]
TAB	Taxpayer Assistance Blueprint
TAC	Taxpayer Assistance Center

Acronym	Expansion
TCE	Tax Counseling for the Elderly
TDS	Transcript Delivery System
TEC	Taxpayer Education and Communication
TFOP	Tax Forms and Outlet Program
TIGTA	Treasury Inspector General for Tax Administration
TIN	Taxpayer Identification Number
TIPRA	Tax Increase Prevention and Reconciliation Act of 2005
TIRNO	Treasury Internal Revenue National Office [a contract identifier]
TY	Tax Year
UPC	Universal Product Code
VAT	Value Added Tax
V-Code	[Tax returns prepared on computer but printed and filed on paper]
VITA	Volunteer Income Tax Assistance
WFTRA	Working Families Tax Relief Act of 2004
XML	eXtensible Markup Language

Glossary

Term	Definition
1D Barcode	A machine-readable unique identifier encoded in a one-dimensional black and white bar pattern of varying width.
2D Barcode	A machine-readable representation of information encoded in a pattern of two dimensions (in contrast with e.g., a UPC product barcode consisting of parallel lines encoding the SKU in one dimension).
2D Barcode Programs	State programs that allow computer-produced returns that are filed on paper by either individuals or practitioners where the return data is also captured and printed in a 2-dimensional barcode capable of being read by either hand-held or high-speed scanners.
80% *e-file* Goal	A goal established in the Internal Revenue Service Restructuring and Reform Act of 1998. Paperless filing should be the preferred and most convenient means of filing Federal tax and information returns, [and] it should be the goal of the Internal Revenue Service to have at least 80% of all such returns filed electronically by the year 2007
Advanced Filing	A transaction between the IRS and a taxpayer/ preparer in which the information is exchanged digitally or in a machine-readable form
American Institute of Certified Public Accountants (AICPA)	Professional organization for all Certified Public Accountants which provides resources, information, and leadership to members to enable them to provide valuable services in the highest professional manner to benefit the public as well as employers and clients.
Calendar Year	A year ending December 31; e.g., CY2008 ends December 31, 2008.
Cash Incentive	A government-provided direct monetary payment for taxpayers to electronically file their tax returns.
Character Recognition (CR)	The application of specialized algorithms to recognize the shapes and correlate them with letters and words. Involves digitally photographing (or scanning) original documents into an equivalent electronic image. Once converted, the CR solution analyzes (reads) the electronic image and translate the many shapes (letters) on the page into their equivalent characters.
Circular 230	The set of Treasury Department regulations governing the practice of attorneys, certified public accountants, enrolled agents, enrolled actuaries, and appraisers before the IRS.
Commercial Preparer	An individual who is paid by a taxpayer to prepare (and file) their return but is not a practitioner. Like practitioners they may be members of corporations or partnerships, or self-employed individuals. Preparers are not Electronic Return Originators (EROs) but may be a member of an ERO firm.
Commercial Tax Return Software	A software application used to prepare Federal and State income tax returns. Some applications offer filing solutions as well as online preparation assistance.
Community-based Preparer	An individual that provides free tax preparation (and filing) services to taxpayers at designated support locations through IRS sponsored programs such as Volunteer Income Tax Assistance (VITA), Tax Counseling for the Elderly (TCE), Tax Forms and Outlet Program (TFOP), and Low Income Taxpayer Clinics (LITC).

Term	Definition
Congress (Senate and House of Representatives)	National legislative body consisting of the Senate and House of Representatives that has the lawmaking power of the United States.
Council for Electronic Revenue Communication Advancement (CERCA)	Trade association representing a broad cross-section of the electronic tax filing, IRS systems modernization, and State electronic revenue communities.
Department of the Treasury	Executive branch agency which serves the American people and strengthens national security by managing the Federal government's finances effectively, promoting economic growth and stability, and ensuring the safety, soundness, and security of the US and international financial systems.
Direct Filing	An Internet-based *e-filing* transaction from the source computer to the tax agency (e.g., IRS).
Direct Filing using Free Tax ATO Software (e-Tax) (Australia)	A tax program where the taxpayer can download the e-Tax software for free from the ATO web site.
Direct Internet Filing Programs	State programs that allow individual taxpayers to file State income tax returns directly with the State through a State-developed and administered web site.
e-file	(also *e-filing*, *e-filed*) Refers specifically to the IRS-branded electronic filing program.
e-file Holdouts	Individuals or preparers who have yet to adopt electronic filing. They are generally unconvinced of the marketed and/or studied benefits of *e-file*.
E-Form	An electronic form. Examples include web-based forms, forms based on Adobe's PDF standard, smart forms, and proprietary electronic forms.
Early Adopters	A user segment that consists of approximately 13.5% of the population. These users tend to be educated opinion leaders.
Early Majority	A user segment that consists of approximately 34% of the population. These users are careful consumers who tend to avoid risk.
EFILE (Canada)	EFILE On-Line allows a tax agent to transmit their clients' returns individually over the Internet. Acknowledgment of receipt of the electronic return is immediate.
EFILE Plus (Canada)	EFILE On-Line Plus allows an agent to transmit from 1 to 60 of their clients' returns at one time over the Internet. Acknowledgment of a batch transmission takes a few hours.
Electronic filing	The process of submitting a tax return from a filer to a tax-collecting entity in which the return information is transmitted digitally (also: electronic filing).
Electronic Return Originator	These entities initiate the electronic submission of income tax returns to the IRS. An ERO may originate the electronic submission of income tax returns that are either prepared by the ERO firm, or collected from a taxpayer. EROs may also apply to be transmitters and transmit return data themselves or they may contract with registered transmitters who will transmit the data for them.

Term	Definition
Electronic Tax Administration Advisory Council (ETAAC)	Council authorized under public law providing input into the development and implementation of the IRS' strategy for electronic tax administration.
Extend Filing Period	A later tax deadline for electronic filers.
Federation of Tax Administrators (FTA)	Organization to improve the quality of State tax administration by providing services to State tax authorities and administrators.
Free File Alliance (FFA)	A group of tax software companies who provide free commercial online tax preparation and electronic filing services for the IRS.
Filer	Any person or entity that prepares and files tax returns (on their own behalf or for someone else). If a taxpayer prepares and files their own return, they are a filer. If they delegate the filing to a preparer, the preparer is the filer on their behalf.
Fillable Form	An electronic form that allows the user to enter, using the computer, the required and optional information directly into the form fields shown on the screen, and allows for transmission of the completed return to the intended party electronically or by printing the form as completed by the user.
Filing by Phone (Australia)	The phone file service is an option for those individuals who use the short version of the individual tax return in Australia.
Filing through a Registered Tax Agent (Australia)	An Australian taxpayer can file a return through a registered tax agent for a tax-deductible fee. To check that a tax agent is registered, a taxpayer can visit the Tax Agents' Board web site or inquire by phone.
Fiscal Year	An accounting period year ending on a date other than December 31. For example, the Federal government fiscal year begins October 1 and ends on September 30.
Generational Segments	Part of the taxpayer segmentation framework that includes Millennial taxpayers, Generation X taxpayers, Baby Boomer taxpayers, and Senior taxpayers.
Government Accountability Office (GAO)	Independent, nonpartisan agency that supports the Congress in meeting its constitutional responsibilities and helps improve the performance and ensure accountability of the federal government.
Hardship Exceptions	These exceptions are intended for preparers who are not able to convert to electronic filing in the time prescribed by a mandate. This is a temporary exemption that allows for gradual implementation and acknowledges the potential hardship that smaller preparers may face in transitioning to *e-file* (computer costs, learning how to use new tax preparation software, business process changes, etc.).
High Opportunity Preparers	Preparers who do not currently *e-file* or who *e-file* under 50% of their returns or who *e-file* over 50% of their returns.
High Opportunity Taxpayers	Taxpayers who were offered *e-file* by their preparers but did not choose it.
Income Segments	Part of the taxpayer segmentation framework that includes low income taxpayers, moderate income taxpayers, moderate high income taxpayers, and high income taxpayers.

Term	Definition
Information Return	Reports used to transmit information to the tax collector about income, receipts, or other matters that may affect tax liabilities. Information returns do not compute the tax liability. Examples include W-2 (wages and withholding), 1099-INT (non-wage interest income), 1099-DIV (non-wage dividend income), and 1098 (mortgage interest).
Innovators	A user segment that consists of approximately 2.5% of the population. These users are well informed risk-takers who are willing to try an unproven product.
Intermediate Service Provider	These entities receive tax return information from EROs or from taxpayers who file electronically from home using their personal computers, either online or by using commercial tax preparation software. Intermediate Service Providers process the tax return information and either forward the information to a transmitter or send the information back to the EROs or taxpayers.
Internal Revenue Service (IRS)	Agency within the Department of Treasury serving America's taxpayers by helping them understand and meet their tax responsibilities and by applying the tax law with integrity and fairness to all.
IRS Oversight Board	Independent body charged to oversee the IRS in its administration, management, conduct, direction, and supervision of the execution and application of the internal revenue laws.
Late Majority	A user segment that consists of approximately 34% of the population. These users are somewhat skeptical consumers who acquire a product after it has become commonplace.
Laggards	A user segment that consists of approximately 16% of the population. These users are those who avoid change and may not adopt a new product until traditional alternatives no longer are available.
Mandates	Federal and State programs in which certain types of taxpayers and/or preparers are required to file the returns they prepare electronically.
National Association for Computerized Tax Processors (NACTP)	Nonprofit association that represents tax processing software and hardware developers, electronic filing processors, tax form publishers, and tax processing service bureaus.
National Association of Enrolled Agents (NAEA)	Association of independent, licensed tax professionals called enrolled agents dedicated to helping its members maintain the highest level of knowledge, skills and professionalism in all areas of taxation.
National Association of Tax Professionals (NATP)	Nonprofit professional association serving professionals who work in all areas of tax practice, including individual practitioners, enrolled agents, accountants, CPAs, attorneys, and financial planners.
National Taxpayer Advocate Service	Independent organization within the IRS to assist taxpayers who are experiencing economic harm, who are seeking help in resolving tax problems, or who believe that an IRS system/procedure is not working as it should.
NETFILE (Canada)	Electronic filing service designed for individual taxpayers only, for filing their own personal income tax and benefit returns with the CRA.
Office of Management and Budget (OMB)	Office within of the Executive Office of the President which oversees preparation of the federal budget and supervises its administration in Executive Branch agencies.
Online Account Access	The ability to view and/or edit tax information through a government web site.

Term	Definition
Online Banking	The use of the Internet as a delivery channel for banking services such as balance inquiry, statement printing, funds transfer, and bill payment through that institution (versus, for example, directly with the biller).
Online Bill Pay	The use of the Internet that expands online banking service to include bill payment not only with one's banking institution, but also with billers (via their web site) and through bill payment portals.
Online Filing Programs	Program for electronic filing of returns by individual taxpayers using PCs and approved commercial tax return software routed through transmitters.
Opt-Out Provisions	These exceptions are intended to provide an option for individual taxpayers who, for whatever reason, do not want their preparers to file electronically on their behalf. Unless otherwise indicated by an opt-out mechanism, mandated preparers must file the return electronically. Such mechanisms include using specially designed forms, the signed paper return, or other methods defined by the State.
Paid Preparer	A subset of Preparer that excludes community-based preparers. Includes paid practitioners and commercial preparers.
Paper Filing Using the TaxPack	Taxpayers can file returns through the mail by using TaxPack 2007. Most tax refunds or debts are issued within six weeks. TaxPack 2007 is available from newsagents or can be ordered online or by phone.
Phishing	In computing, phishing is an attempt to criminally and fraudulently acquire sensitive information, such as usernames, passwords and credit card details, by masquerading as a trustworthy entity in an electronic communication.
Phone-Based Filing	A program where the individual taxpayer enters return information using a touch-tone telephone.
Practitioner	An individual who is paid by a taxpayer to prepare (and file) their return, is governed by Circular 230, and is authorized to represent taxpayers legally before the IRS. Practitioners include attorneys, certified public accountants, enrolled agents, and enrolled actuaries. (Also called Paid Practitioner)
Pre-Filling (begins 2007-2008 income year) (Australia)	A form used by the ATO for pre-fill returns with salary, wages, allowances and other information.
Pre-Filled Form	A form used by a preparer or practitioner who prepares taxpayers returns on their behalf using available data then provides the form to the taxpayer to correct or accept it as is.
Preparer	Any third party that helps complete a return. Includes practitioners, commercial preparers, and community-based partners.
Processing Year (PY)	The calendar year in which a return is filed and processed. In the case of individual returns, PY2008 will mostly include returns for TY2007 processed in CY2008. Other returns such as late filed returns for other tax years (also known as prior year returns) and amended returns will also be processed in PY2008. A good rule of thumb is the relationship between PY and TY is TY = PY – 1. For example, in PY2008, TY2007 returns will be processed.
Refund Anticipation Check (RACs)	A service in which a financial institution sets up a temporary account for a taxpayer to which the IRS can direct deposit refund money.

Term	Definition
Refund Anticipation Loans (RALs)	A very short-term loan offered by banks and preparers that are secured by Federal and/or State refunds.
Return	Any tax or information return, declaration of estimated tax, or claim for refund required by, or provided for or permitted under, the provisions of U.S. Code Title 26 which is filed with the Treasury Secretary by, on behalf of, or with respect to any person, and any amendment or supplement thereto, including supporting schedules, attachments, or lists which are supplemental to, or part of, the return so filed.
Return Preparation Software Vendor	An organization that sells self-assisted software products for tax preparation, for individuals and often commercial preparers. They also may provide similar products to certain taxpayer segments for little or no cost.
Stakeholders	A person, group, organization, or system that effects or can be affected by an organization's actions. Stakeholders include professional, commercial, and government entities that interact with the IRS and play an important role in the IRS' delivery of quality services such as *e-filing*.
Smart Form	An electronic fillable form that includes features such as embedded hyperlinks to relevant instructions and publications, automated calculations, and some level of validation or error checking. At its core, the interface is still largely similar to the relevant tax form.
Software	Includes tax preparation applications as well as fillable and "smart" (i.e., those that automate calculations) e-forms.
Tax Preparation Software	A browser- or client-based computer application that guides the user through a series of questions with the goal of simplifying the process of creating their tax return.
Tax Return	A formal tax statement on the required official form, filed with the appropriate tax collection agency, that reports taxable income, allowed deductions, exemptions, the computed tax that is due (the tax liability), and tax payments (including withholding). The term "tax return," while it encompasses "information returns," is colloquially used to refer to income tax returns. Examples include Forms 1040, 1040A, and 1040EZ (individual income tax returns), Form 1065 (partnership income tax return), and Form 1120 (corporation income tax return).
Tax Year	Also known as the tax period of the return. For individual returns — almost always filed for a calendar year tax period — tax year is displayed as TYYYYY (e.g., TY2007). A good rule of thumb is the relationship between TY and CY is TY = CY – 1. For example, in CY2008, individuals file their TY2007 return, which covers CY2007 tax period (1 January 2007 to 31 December 2007).
Taxpayer	The individual or head of household responsible for meeting their tax filing obligations through preparing and filing an individual tax return as required.
Tech Followers	A group of users (25% of taxpayers) that is fairly comfortable with technology, but not the first to try new technology, and generally are not comfortable putting financial information on a computer.
Tech Laggards	A group of users (32% of taxpayers) that is the least comfortable with technology, sometimes scared of computers, and would definitely not put financial information on a computer.

Term	Definition
Tech Leaders	A group of users (44% of taxpayers) that is the most comfortable with using technology. They tend to be the first to try new technology, to trust technology, and wish they could do more of their dealings by computer.
TELEFILE (Canada)	TELEFILE is an interactive computer program that allows a taxpayer, if eligible, to electronically file their tax return for free using a touch-tone telephone. Using the service requires a touch-tone telephone.
Telefile Programs	Federal and State programs where the individual taxpayer enters return information using a touch-tone telephone.
Third Party	An entity external to the taxpayer — IRS relationship that helps the taxpayer prepare, file, and/or transmit their return. Includes preparers, return preparation software vendors, and transmitters.
Transmitter	An entity that sends the income tax data to the IRS once the return is prepared. Transmitters must have software and hardware that allow them to directly connect with IRS computers.
Treasury Inspector General for Tax Administration (TIGTA)	Organization established by RRA98 to provide independent oversight of IRS activities.
V-Coder	A filer who had their return prepared on a computer but filed it on paper.

THIS PAGE INTENTIONALLY LEFT BLANK.

References

Department of the Treasury, Internal Revenue Service, 26 CFR Parts 1 and 301: Returns Required on Magnetic Media, U.S.C. 6011(e), Retrieved 30 March 2008 from http://edocket.access.gpo.gov/2005/05-649.htm

Internal Revenue Service Restructuring and Reform Act of 1998 (RRA98), Public Law No: 105-206, 105th Congress, (22 July 1998); Retrieved 24 March 2008 from http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=105_cong_public_laws&docid=f:publ206.105

Taxpayer Protection and IRS Accountability Act of 2003, 108th Congress, Retrieved 24 March 2008 from http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=108_cong_bills&docid=f:h1528eas.txt.pdf

U.S. Congress. Senate. Report 109-336 - To accompany Telephone Excise Tax Repeal And Taxpayer Protection And Assistance Act of 2006, (15 September 2007); Retrieved 6 June 2008 from http://thomas.loc.gov/cgi-bin/cpquery/T?&report=sr336&dbname=109&

Accenture (2004). “eGovernment Leadership: High Performance, Maximum Value.” May 2004.

Accenture (2006). “High Performance in Government - Leadership in Customer Service: Building the Trust.” 2006.

AccountingWeb (2007). “PAYE: HMRC Allow Filing Extension And Agree Penalty Mitigation.” [Online]. Updated 16 May 2007, Retrieved 4 June 2008 from http://www.accountingweb.co.uk/cgi-bin/item.cgi?id=168235&d=1025&h=1023&f=1026&dateformat=%25o%20%25B%20%25Y.

AccountingWeb (2007). “UK Now Has Longest Tax Code in the World.” [Online]. Updated 24 April 2007, Retrieved 21 April 2008 from http://www.accountingweb.co.uk/cgi-bin/item.cgi?id=167517.

AccountingWeb (2008). “UK Self Assessment Tax System Recovers from Crash, Extra Day Given to Filers.” [Online]. Updated 1 February 2008, Retrieved 19 May 2008 from http://www.accountingweb.com/cgi-bin/item.cgi?id=104572&d=883&h=884&f=882&dateformat=%25o%20%25B%20%25Y.

Agenzia Entrate (2007). “The Costs and Benefits of ‘Il fisco telematico’.” *eGEP 2nd Workshop “Toward a European eGovernment Measurement Framework and Economic Model”*, Brussels. 1 July 2005.

All Party Parliamentary Taxation Group (2008). *The Future of Income Tax Administration in the UK.* May 2008.

American Institute of Certified Public Accountants (2008). “The American Institute of Certified Public Accountants.” [Online] Retrieved 25 March 2008 from http://www.aicpa.org/.

Anderson, C. (2008). “Free! Why $0.00 Is the Future of Business.” [Online] *Wired Magazine* Retrieved 21 April 2008 from http://www.wired.com/techbiz/it/magazine/16-03/ff_free?currentPage=all.

Anderson, T., Fox, M., & Schwartz, B.N. (2005). “History and Trends in E-filing: A Survey of CPA Practitioners.” *The CPA Journal* **October 2005**.

Annino, J. (2008). Interview of Electronic Filing Coordinator, Electronic Commerce Unit, Connecticut Department of Revenue Services 20 March 2008.

Association for Information and Image Management (2006). “ECM Certificate Program: Concepts Module 5: Preserve.” AIIM The ECM Association

Australia (2007). *Pocket Guide to the Australian Tax System.* 10 May 2007.

Australia (2008). “Appendix G: Australia's Tax System - Australia's Tax System Compared with the OECD.” [Online] Retrieved 21 April 2008 from http://www.ato.gov.au/budget/2007-08/bp1/html/bp1_bst5-10.htm.

Australian Bureau of Statistics (2008). “3101.0 - Australian Demographic Statistics, Sep 2007.” [Online]. Updated 19 March 2008, Retrieved 9 May 2008 from http://144.53.252.30/AUSSTATS/abs@.nsf/allprimarymainfeatures/6949409DC8B8FB92CA256BC60001B3D1?opendocument.

Australian Government (2008). “Budget Paper No. 2, Part 2: Expense Measures: Treasury: Australia Post — Continuation of Funding for Competition Regulation.” [Online] Retrieved 19 May 2008 from http://www.ato.gov.au/budget/2007-08/bp2/html/expense-29.htm.

Australian Government: Information Management Office (2008). “E-government Benefits Agency Case Studies - Australian Taxation Office.” [Online] Retrieved 4 June 2008 from http://www.agimo.gov.au/archive/publications_noie/2003/05/e-govt_case_studies/ato.

Australian Government: Inspector-General of Taxation (2008). “Appendix C - Overview of the Tax Administration System.” [Online] Retrieved 21 April 2008 from http://www.igt.gov.au/content/Issues_Papers/Issues_Paper_1_Appendix_C.asp.

Australian Government: Tax Agents' Board (2008). “About the Board.” [Online] Retrieved 4 June 2008 from http://www.tabd.gov.au/pathway.asp?pc=001/124/001/001&m=40149#001/124/001/001.

Australian Taxation Office (2007). *Commissioner of Taxation Annual Report 2006–07.*

Australian Taxation Office (2007). *Community Perceptions Survey 2007.* Our Ref: 700256. Prepared by Research International.

Australian Taxation Office (2007). *Essential Info for Employees: It's Tax Time: What You Need to Know.* NAT 7043-07.2007. July 2007.

Australian Taxation Office (2007). “It's All About People: Australia's Tax and Superannuation Systems: Speech by Michael D’Ascenzo, Commissioner of Taxation, Taxpayers Australia & Superannuation Australia, Annual Conference, Melbourne." [Online]. Updated 9 November 2007,from http://www.ato.gov.au/corporate/content.asp?doc=/content/00109143.htm.

Australian Taxation Office (2007). *It's Tax Time: What You Need to Know.* NAT 7043-07.2007.

Australian Taxation Office (2007). "A Long-Term Commitment to the Profession: Commissioner D'Ascenzo's Speech to the Chartered Institute of Management Accountants, Canberra." [Online]. Updated 17 August 2007, Retrieved 19 May 2008 from http://www.ato.gov.au/corporate/content.asp?doc=/content/00105919.htm.

Australian Taxation Office (2007). *Taxpayer Charter: Who Can Help with Your Tax Affairs.* NAT 2555-01.2007. January 2007.

Australian Taxation Office (2008). "2006 Tax Agent Portal and Technology Survey." [Online] Retrieved 19 May 2008 from http://ato.gov.au/taxprofessionals/content.asp?doc=/content/80992.htm&page=5&H5.

Australian Taxation Office (2008). ""Delivering for the community: making tax and superannuation easier, cheaper and more personalised" speech by Michael D'Ascenzo, Commissioner of Taxation to the Australasian Tax Teachers' Association Conference." [Online]. Updated January 2008, Retrieved 4 June 2008 from http://www.ato.gov.au/corporate/content.asp?doc=/content/00119306.htm&page=1#P45_11027.

Australian Taxation Office (2008). "Do I Need to Lodge a Tax Return?" [Online] Retrieved 9 May 2008 from http://calculators.ato.gov.au/scripts/axos/axos.asp?CONTEXT=&KBS=Lodge.XR4&go=ok.

Australian Taxation Office (2008). "E-Tax Essentials: E-Tax 2008." [Online] Retrieved 19 May 2008 from http://www.ato.gov.au/individuals/content.asp?doc=/content/39979.htm.

Australian Taxation Office (2008). "Entering the Tax System 2007-08: Phone Lodgement." [Online] Retrieved 19 May 2008 from http://www.ato.gov.au/print.asp?doc=/content/76764.htm.

Australian Taxation Office (2008). "Latest Taxation Statistics Released." [Online]. Updated 18 March 2008, Retrieved 19 May 2008 from http://www.ato.gov.au/corporate/content.asp?doc=/content/00129011.htm

Australian Taxation Office (2008). "PAYG withholding (PAYGW) essentials." [Online] Retrieved 19 May 2008 from http://www.ato.gov.au/businesses/pathway.asp?pc=001/003/024&mfp=001/003&mnu=9898#001_003_024.

Australian Taxation Office (2008). *Personal Tax [Taxation Statistics 2005-06].*

Australian Taxation Office (2008). "Taxation Statistics." [Online] Retrieved 4 June 2008 from http://www.ato.gov.au/default.asp?menu=9791.

Australian Taxation Office (2008). “Welcome to the Tax Agent Portal.” [Online] Retrieved 19 May 2008 from https://tap.ato.gov.au/.

Australian Taxation Office (2008). “Where's My Refund?” [Online] Retrieved 7 April 2008 from http://www.ato.gov.au/individuals/content.asp?doc=/content/1440.htm&mnu=1223&mfp=001/002

Banyard, S. (2008). “"Advice for Agents" Podcast: Paul Hartigan Interviews Stephen Banyard of HMRC.” April 2008

Beach, C. (2008). Interview of Director, Filing Methods Bureau, California Franchise Tax Board. 13 February 2008.

Belden, K. (2003). “The Future Direction of Electronic Tax Administration.” Testimony of Electronic Tax Administration Advisory Committee to IRS Oversight Board. 27 January 2003.

Belgium (2008). “Belgium Tax-on-web.” [Online] Retrieved 3 June 2008 from http://ccff02.minfin.fgov.be/taxonweb/app/citizen/public/common/changeLanguage.do.

Binder, M. (2007). “Canada’s Challenge: The Network Economy and The Wireless Revolution.” *Sixth International Conference on Mobile Business*. 9 July 2007.

Bohlen, J.M., & Beal, G.M. (1957). “The Diffusion Process (Special Report No. 18).” *Agriculture Extension Service, Iowa State College*. **1**: 56-77.

Booz Allen Hamilton (2005). *Beyond e-Government: The World's Most Successful Technology Enabled Transformations*.

Brazilian Government - Ministério da Fazenda (2008). “Centro Virtual de Atendimento ao Contribuinte – e-CAC.” [Online] Retrieved 4 June 2008 from http://translate.google.com/translate?hl=en&sl=pt&u=http://www.receita.fazenda.gov.br/&sa=X&oi=translate&resnum=1&ct=result&prev=/search%3Fq%3Dreceita.fazenda.gov.br%26hl%3Den%26sa%3DG.

Breithaupt, M. (2001). “The Value of OCR Voting.” [Online]. Updated June 2001, Retrieved 7 April 2008 from http://findarticles.com/p/articles/mi_qa3947/is_200106/ai_n8997482.

Cabinet Office (2008). “Modernising Government.” [Online] Retrieved 9 May 2008 from http://archive.cabinetoffice.gov.uk/moderngov/index.htm.

California (2004). *Proposed Process: Implement New 2D Barcode Format for Scannable Returns.*

Canada (2006). *Government On-Line 2006.*

Canada (2007). *Service Canada – A New Paradigm in Government Service Delivery.*

Canada Customs and Revenue Agency (2002). *CCRA Annual Report to Parliament 2001-2002.*

Canada Customs and Revenue Agency (2003). *CCRA Annual Report to Parliament 2002-2003.*

Canada Customs and Revenue Agency (2004). *CCRA Annual Report to Parliament 2003-2004.*

Canada Customs and Revenue Agency (2005). *CCRA Annual Report to Parliament 2004-2005.*

Canada Revenue Agency (2006). *CRA Annual Report to Parliament 2005-2006.*

Canada Revenue Agency (2007). "About the TELEFILE service." [Online]. Updated 11 January 2007, Retrieved 19 March 2008 from http://www.cra-arc.gc.ca/eservices/tax/individuals/telefile/about-e.html.

Canada Revenue Agency (2007). *CRA Annual Report to Parliament 2006-2007.*

Canada Revenue Agency (2008). "Certified Software for the 2008 NETFILE Program." [Online] Retrieved 4 June 2008 from http://www.netfile.gc.ca/software-e.html.

Canada Revenue Agency (2008). "Certified Software for the 2008 NETFILE Program (2007 Tax Return)." [Online] Retrieved 21 April 2008 from http://www.netfile.gc.ca/software-e.html.

Canada Revenue Agency (2008). "EFILE for Electronic Filers." [Online] Retrieved 4 June 2008 from http://www.cra-arc.gc.ca/eservices/tax/business/efile/menu-e.html.

Canada Revenue Agency (2008). "EFILE New Registration." [Online] Retrieved 19 May 2008 from http://www.efile.cra.gc.ca/eol-register-e.html.

Canada Revenue Agency (2008). "Electronic Filing for Tax Preparers." [Online] Retrieved 9 May 2008 from http://www.efile.cra.gc.ca/vc-electfile-e.html.

Canada Revenue Agency (2008). "Forms Available Only in Paper Format." [Online]. Updated 15 January 2008, Retrieved 3 June 2008 from http://www.cra-arc.gc.ca/formspubs/forms/paper_only-e.html.

Canada Revenue Agency (2008). "Information for Discounters." [Online] Retrieved 4 June 2008 from http://www.cra-arc.gc.ca/eservices/tax/business/discounters/menu-e.html.

Canada Revenue Agency (2008). "My Account for Individuals." [Online] Retrieved 4 June 2008 from http://www.cra-arc.gc.ca/eservices/tax/individuals/myaccount/menu-e.html.

Canada Revenue Agency (2008). "Sending a Tax Return." [Online] Retrieved 7 April 2008 from http://www.cra-arc.gc.ca/tax/individuals/topics/income-tax/return/sending/menu-e.html.

Canada Revenue Agency (2008). "What Are The Income Tax Rates In Canada For 2008?" [Online] Retrieved 4 June 2008 from http://www.cra-arc.gc.ca/tax/individuals/faq/taxrates-e.html.

Caplan, R. (2008). "IRS Announces New Release Date for 1040 Modernized E-File Program." [Online] *The Tax Adviser,*. Updated January 2008, Retrieved 12 April 2008 from http://www.cpa2biz.com/Content/media/PRODUCER_CONTENT/Newsletters/Articles_2008/CPA/Jan/eFile.jsp.

Carter, P. (2001). *Review of Payroll Services.*

Carter, P. (2006). *Review of HMRC Online Services.*

CBCNews.ca (2007). "E-filing Running Ahead of Last Year, Tax Department Says." [Online]. Updated 29 April 2007, Retrieved 19 March 2008 from http://www.cbc.ca/money/story/2007/04/27/tax.html.

Cellular Telecommunications and Internet Association (2008). "Wireless Quick Facts: Year End Figures." [Online] Retrieved 13 April 2008 from http://www.ctia.org/advocacy/research/index.cfm/AID/10323.

Census (2003). *Computer and Internet Use in the United States: 2003.* P23-208.

Census (2008). *Statistical Abstract of the United States 2008: Section 25: Banking, Finance, and Insurance.*

Census (2008). *Table 2: Annual Estimates of the Population by Selected Age Groups and Sex for the United States: April 1, 2000 to July 1, 2006.* NC-EST2006-02.

Colorado (2008). "Colorado Department of Revenue: Telefile." [Online] Retrieved 7 April 2008 from http://www.revenue.state.co.us/TPS_Dir/wrap.asp?incl=telefile.

Cosgrove, S., & Hegarty, C. (2006). "Revenue On-Line Service (ROS), Ireland's e-Government Success Story." *2nd International Conference on e-Government*, Dublin, Ireland. October 2006.

Council for Electronic Revenue Communication Advancement (2003). "Response to Request For Comments on the Proposal to Extend the Tax Filing and Payment Deadline for Individuals Who E-File Their Returns." Testimony of Council for Electronic Revenue Communication Advancement Chairman Anthony T. Tullo to U.S. Congress House of Representatives Committee on Ways and Means. 25 March 2003.

Council for Electronic Revenue Communication Advancement (2008). "Council for Electronic Revenue Communication Advancement." [Online] Retrieved 25 March 2008 from http://www.cerca.org/.

Cross, M. (2006). "Online Tax Gets Positive Return." *guardian.co.uk*.

Danish Inland Revenue (2008). "SKAT." [Online] Retrieved 4 June 2008 from http://www.skat.dk/.

Deloitte (2008). *E-filing in the Netherlands*.

Department of the Treasury (2003). *Report to The Congress on Return-Free Tax Systems: Tax Simplification Is a Prerequisite.* December 2003.

Department of the Treasury (2005). *General Explanations of the Administration's Fiscal Year 2006 Revenue Proposals.* February 2005.

Department of the Treasury (2008). "U.S. Department of Treasury." [Online] Retrieved 21 April 2008 from http://www.ustreas.gov/.

Digman, B. (2008). Interview of Chief Information Officer, Enterprise Services Division, New York State Department of Taxation & Finance. 13 February 2008.

Duncan, H.T. (2006). "Preparing Your Taxes: How Costly Is It?" Testimony of Federation of Tax Administrators Executive Director Harley T. Duncan to U.S. Congress Senate Committee on Finance. 4 April 2006.

Duncan, H.T. (2008). “State Electronic Filing: Recent Performance.” *Council for Electronic Revenue Communication Advancement*, Washington, D.C. 1 May 2008.

Ebersole, N. (2002). *Federal/State Telefile.*

Edwards, C. (2007). “The Federal Tax Gap.” Testimony of Cato Institute Director of Tax Policy Studies Chris Edwards to U.S. Congress House of Representatives Budget Committee. 16 February 2007.

Electronic Tax Administration Advisory Committee (2007). *Annual Report to Congress.* Publication 3415 (Rev. 6-2007), Catalog # 28110R.

epractice.eu (2004). “ES: Spanish Taxpayers Embrace E-tax Filing.” [Online]. Updated 2 August 2004, Retrieved 4 June 2008 from http://www.epractice.eu/document/1387.

epractice.eu (2007). “On-line Submission of Tax Declarations Reaches New High in UK.” [Online]. Updated 12 February 2007, Retrieved 19 March 2008 from http://www.epractice.eu/document/157.

epractice.eu (2008). “eGovernment Factsheet - Belgium - History.” [Online]. Updated 6 March 2008, Retrieved 3 June 2008 from http://www.epractice.eu/document/3282.

epractice.eu (2008). *eGovernment in the Netherlands*. January 2008.

epractice.eu (2008). “IE: Growing Returns for eTaxes.” [Online]. Updated 23 November 2007, Retrieved 4 June 2008 from http://www.epractice.eu/document/4140.

epractice.eu (2008). “PT: E-tax Service Increasingly Popular With Portuguese Taxpayers.” [Online]. Updated 28 June 2005, Retrieved 4 June 2008 from http://www.epractice.eu/document/840.

European Commission Directorate-General for Informatics (2008). “Interoperable Delivery of European eGovernment Services to Public Administrations, Business and Citizens (IDABC).” [Online]. Updated 2008, Retrieved 5 June 2008 from http://europa.eu.int/idabc/.

European Committee for Standardization (2004). *Towards an Electronic ID for the European Citizen, A Strategic Vision* 31 December 2004.

European Public Administration Network (2008). *EUPAN Learning Team Administrative Burden For Citizens - Report On National Approaches*. April 2008.

Federal University of Brasília *Impacts of Internet Use on Public Administration: A Case Study of the Brazilian Tax Administration*.

Federation of Tax Administrators (2005). “Electronic Filing Mandates: Lessons Learned.” Federation of Tax Administrators

Federation of Tax Administrators (2005). *FTA Briefing Paper: 2005 Electronic Filing Season Results: A Review of State and Federal Data*. December 2005.

Federation of Tax Administrators (2007). “2-D Barcode Frequently Asked Questions.” Federation of Tax Administrators. 19 June 2007

Federation of Tax Administrators (2007). "State Electronic Filing Programs For Individual Income Tax." [Online]. Updated January 2007, Retrieved 9 May 2008 from http://www.taxadmin.org/FTA/edi/PIT_snaps.html.

Federation of Tax Administrators (2007). "Tax Forms Processing: 2-D Bar Coding Standards, Revision 2007v2." Federation of Tax Administrators. 31 October 2007

Federation of Tax Administrators (2008). "Federation of Tax Administrators." [Online] Retrieved 25 March 2008 from http://www.taxadmin.org/.

Federation of Tax Administrators (2008). "State Electronic Commerce Programs: State EC Snapshots Updated March 13, 2008." [Online]. Updated 13 March 2008, Retrieved 25 March 2008 from http://www.taxadmin.org/fta/edi/ecsnaps.html.

Finland Ministry of Transport and Communications (2008). "Finland Ministry of Transport and Communications,." [Online] Retrieved 5 June 2008 from http://mintc.fi/scripts/cgiip.exe/WService=lvm/cm/pub/showdoc.p?docid=2186&menuid=242&channelitemid=11970&channelid=78.

Finnish Tax Administration (2007). "The Long and Winding Road to a Tax Return Free World: Experiences from the Finnish Tax Administrations' Pre-completed No-touch Return System." *FTA Technology Conference*, Kansas City. 5-8 August 2007.

Forrester Research (2006). *ICR/OCR: It's Time To Vote*. 10 April 2006.

Forrester Research (2007). *EBPP Forecast: 2006 To 2011*. 17 May 2007.

Forrester Research (2007). *Online Bill Pay 2007: Understanding The Mindset Of Holdouts, Fence-Sitters, And Quitters*. 27 December 2007.

Forrester Research (2007). *The State Of Consumers And Technology: Benchmark 2007*. 7 September 2007.

Forrester Research (2007). *US Online Banking: Five-Year Forecast*. 2 April 2007.

Fox, J.A., Wu, C.C., Mierzwinski, E., & Montezemolo, S. (2006). *Letter to the Honorable Charles Grassley, Chairman and The Honorable Max Baucus, Ranking Member of Senate Finance Committee.* 10 May 2006.

Free File Alliance (2008). "Free File Alliance." [Online] Retrieved 25 March 2008 from http://freefilealliance.org/dcs/.

Free File Alliance and IRS (2002). *Free On-Line Electronic Tax Filing Agreement.* 30 October 2002.

Free File Alliance and IRS (2005). *Free On-Line Electronic Tax Filing Agreement Amendment.* 29 October 2005.

Free File Alliance and IRS (2008). *Third Memorandum of Understanding on Service Standards and Disputes.* 2 January 2008.

Gallant, L.M., Culnan, M.J., & McLoughlin, P. (2007). "Why People e-File (or Don't e-File) Their Income Taxes." *Proceedings of the 40th Hawaii International Conference on System Sciences*.

George, J.R. (2006). “2006 Tax Return Filing Season And The 2007 Budget Proposal For The Internal Revenue Service.” Testimony of Treasury Inspector General for Tax Administration J. Russell George to U.S. Congress House of Representatives Committee on Ways and Means Subcommittee on Oversight. 6 April 2006.

Government Accountability Office (2006). *Tax Administration: Most Filing Season Services Continue to Improve, but Opportunities Exist for Additional Savings.* GAO-07-27.

Government Accountability Office (2007). *Tax Administration: 2007 Filing Season Continues Trend of Improvement, but Opportunities to Reduce Costs and Increase Tax Compliance Should be Evaluated.* GAO-08-38.

Government Accountability Office (2007). *Taxpayer Service: State Experiences Indicate IRS Would Face Challenges Developing an Internet Filing System with Net Benefits.* GAO-07-570.

Government Accountability Office (2008). “U.S. Government Accountability Office.” [Online] Retrieved 25 March 2008 from http://www.gao.gov/.

Government of India Directorate of Income Tax (2008). “Individual Income Tax.” [Online] Retrieved 4 June 2008 from https://incometaxindiaefiling.gov.in/portal/index.do.

Government of Portugal *Building Bridges Towards Better Administration - State Modernization in Portugal.* Ministério das Finanças e da Administração Pública and the Office of the Secretary of State for Administrative Modernisation,.

Guirong Mao (2004). “Building e-Government in Japan.” *International Academic Symposium on Public Management in 21st Century: Opportunities and Challenges*

H&R Block (2008). “H&R Block.” [Online] Retrieved 28 March 2008 from http://www.hrblock.com/.

Hansford, A., Lymer, A., & Pilkington, C. (2004). “IT Adoption Strategies and their Application to E-Filing Self-Assessment Tax Returns: The Case of the UK.” *eJournal of Tax Research,*. **4**(1): 80-96.

HM Government (2007). *Service Transformation Agreement.* PU367. October 2007.

HM Revenue & Customs (2004). *SR 2004 - Departmental Investment Strategy 2005-06 to 2007-08.*

HM Revenue & Customs (2006). *Annual Report 2005-06 and Autumn Performance Report 2006.* Cm6983.

HM Revenue & Customs (2006). *Information Management Solutions (IMS): Information Systems Strategy.* 8 October 2007.

HM Revenue & Customs (2007). “About Us.” [Online] Retrieved 21 April 2008 from http://www.hmrc.gov.uk/menus/aboutmenu.htm.

HM Revenue & Customs (2007). *Departmental Autumn Performance Report 2007.* Cm7251. December 2007.

HM Revenue & Customs (2008). “Introduction to Self Assessment.” [Online] Retrieved 9 May 2008 from http://www.hmrc.gov.uk/sa/introduction.htm.

HM Revenue & Customs (2008). “Self Assessment: the Tax Return 2007/08.” [Online] Retrieved 9 May 2008 from http://www.hmrc.gov.uk/sa/forms/net-07-08.htm.

HM Revenue & Customs (2008). “Software You Can Use For Your Tax Return.” [Online] Retrieved 4 June 2008 from http://www.hmrc.gov.uk/sa/software.htm.

Holden, S.H. (2006). “A Model for Increasing Innovation Adoption: Lessons Learned from the IRS e-file Program.” IBM Center for the Business of Government

House of Commons Committee of Public Accounts (2006). *Filing of Income Tax Self Assessment Returns: Twenty-third Report of Session 2005–06.* HC 681. 7 February 2006.

IBM (2008). “Case Studies: Web Services - Dutch Tax Authorities.” [Online] Retrieved 4 June 2008 from http://www-306.ibm.com/software/ebusiness/jstart/casestudies/dta.shtml.

Inland Revenue (2000). *Information Age Government: Benchmarking Electronic Service Delivery.*

Inland Revenue (2003). *Annual Report for the Year Ending 31st March 2003.* Cm6050.

Inland Revenue (2004). *Autumn Performance Report 2004.* Cm6437.

Institute of Chartered Accountants of Alberta and Institute of Chartered Accountants of Saskatchewan (2006). “Income Tax Questions.” *Member Advisory*. **March 2006**.

Internet World Stats (2008). “Internet World Stats Usage and Population Statistics.” [Online] Retrieved 21 April 2008 from http://www.internetworldstats.com/.

Intuit (2008). “Intuit.” [Online] Retrieved 28 March 2008 from http://www.intuit.com.

Irish Tax and Customs (2008). “Revenue's On-Line Service Wins Award.” [Online] Retrieved 4 June 2008 from http://www.revenue.ie/index.htm?/press/pr_0130ros.htm.

IRS (1997). *Tax Year 1997 Taxpayer Usage Study.*

IRS (1998). *Tax Year 1998 Taxpayer Usage Study.*

IRS (1999). *Tax Year 1999 Taxpayer Usage Study.*

IRS (2000). *Tax Year 2000 Taxpayer Usage Study.*

IRS (2001). *Proposal to Change the Due Date For Electronically Filed Form 1040 Returns to April 30.* December 2001.

IRS (2001). *Tax Year 2001 Taxpayer Usage Study.*

IRS (2002). *Tax Year 2002 Taxpayer Usage Study.*

IRS (2003). *Findings From One-On-One e-file Research Among Taxpayers & Preparers.* Publication 4350 (6-2004), Catalog # 38678E. Prepared by Russell Research.

IRS (2003). *Findings From The 2003 e-file Practitioner Attitudinal Tracking Study.* Publication 4351 (6-2004), Catalog # 38679P. Prepared by Russell Research.

IRS (2003). *Findings From The 2003 Wave Of The e-file Taxpayer Attitudinal Tracking Study.* Publication 4209 (6-2003), Catalog # 36966V. Prepared by Russell Research.

IRS (2003). "IRS Details Free File Initiative; Millions Eligible for Free Online Preparation and E-Filing." [Online]. Updated January 2003, Retrieved 9 April 2008 from http://www.irs.gov/newsroom/article/0,,id=105845,00.html.

IRS (2003). *Proposal to Change the Electronic Filing Due Date; Briefing for ETA Policy Counsel.* 13 May 2003.

IRS (2003). *Submission Processing Visioning: TeleFile.*

IRS (2003). *Tax Year 2003 Taxpayer Usage Study.*

IRS (2003). *TeleFile Survey Report.*

IRS (2004). "e-file Electronic Tax Filing: a History." [Online] Retrieved 17 March 2008 from http://www.irs.gov/efile/article/0,,id=120353,00.html.

IRS (2004). *Final Report Practitioner Business Impact Study: Committed e-file Users vs. Committed V-Coders.* Publication 4431, Catalog # 39458U. Prepared by FCB & Russell Research.

IRS (2004). *Final Report, Practitioner Business Impact Study: Committed e-file Users vs. Committed V-Coders.* Publication 4431, Catalog # 39458U. Prepared by FCB & Russell Research.

IRS (2004). "IRS Details 2004 Free File Initiative." [Online]. Updated January 2004, Retrieved 9 April 2008 from http://www.irs.gov/newsroom/article/0,,id=119855,00.html.

IRS (2004). *IRS Strategic Plan 2005-2009.*

IRS (2004). *Tax Year 2004 Taxpayer Usage Study.*

IRS (2005). "Corporate e-File." [Online]. Updated 5 March 2005, Retrieved 12 April 2008 from http://www.irs.gov/efile/article/0,,id=146364,00.html.

IRS (2005). *Findings From Practitioner Business Impact Research PBI-2 and PBI-3.* Publication 4488 (07/05), Catalog # 47388J. Prepared by FCB & Russell Research.

IRS (2005). *Findings From The 2004-05 Practitioner Communications Tracking Study.* Publication 4489 (07/05), Catalog # 47389U. Prepared by FCB & Russell Research.

IRS (2005). *Findings From The 2004-05 Taxpayer Communications Tracking Study.* Publication 4486 (7/05), Catalog # 47387Y. Prepared by FCB & Russell Research.

IRS (2005). *Findings From The 2005 Taxpayer Satisfaction Study.* Publication 4241 (07/05), Catalog # 37303Q. Prepared by FCB & Russell Research.

IRS (2005). *Findings From The Pre-Wave Of The 2004-05 Taxpayer Communications Tracking Study.* Publication 4451 (01/05), Catalog # 39734N. Prepared by FCB & Russell Research.

IRS (2005). *Handbook for Authorized IRS E-File Providers of Individual Income Tax Returns.* Publication 1345.

IRS (2005). "Internal Revenue Bulletin: 2005-17: Announcement 2005-26: IRS to Discontinue TeleFile." [Online]. Updated 25 April 2005, Retrieved 20 March 2008 from http://www.irs.gov/irb/2005-17_IRB/ar13.html.

IRS (2005). “IRS e-file Now Available; Free File Opens Third Year.” [Online]. Updated 18 January 2005, Retrieved 9 April 2008 from http://www.irs.gov/newsroom/article/0,,id=134320,00.html.

IRS (2005). *IRS e-Strategy for Growth: Expanding e-Government for Taxpayers and Their Representatives.* Publication 3187 (Rev. 1-2005).

IRS (2005). *Recordkeeping for Individuals.* Publication 552 (Rev. April 2005) Catalog # 15100V.

IRS (2005). *Summary for Weighted Averages of the Paper Form 1040, 1040A, 1040 EZ and e-File Form 1040, 1040A, & 1040 EZ for Submissions Processing Costs Labor costs (FY 2005 IRM 3.30.10).*

IRS (2005). *Tax Year 2003 IRS E-File Research.* Publication 4210 (9-2005), Catalog # 36967G.

IRS (2005). *Tax Year 2005 Taxpayer Usage Study.*

IRS (2006). “2006 IRS e-file.” [Online]. Updated January 2006, Retrieved 9 April 2008 from http://www.irs.gov/newsroom/article/0,,id=152048,00.html.

IRS (2006). *The 2006 Taxpayer Assistance Blueprint, Phase 1.*

IRS (2006). *IRS.gov Download Statistics Report: April 2006.*

IRS (2006). *IRS.gov Download Statistics Report: February 2006.*

IRS (2006). *IRS.gov Download Statistics Report: January 2006.*

IRS (2006). *IRS.gov Download Statistics Report: March 2006.*

IRS (2006). “RALs Removed on Free File; 93 Million Eligible for Program.” [Online]. Updated 5 December 2006, Retrieved 9 April 2008 from http://www.irs.gov/newsroom/article/0,,id=164711,00.html.

IRS (2006). *Report to Congress on Uses of the Debt Indicator Tool — and Whether it Facilitates the Use of Refund Anticipation Loans (RALs) — the Debt Collection Offset Practice, the Use of RALs, and Evaluations of RAL Alternatives, and Use of Debit Cards for Refunds, Iincluding Recommendations on How to Deliver Tax Refunds More Quickly.*

IRS (2006). *SOI Bulletin Historical Table 22: Selected Returns and Forms Filed or To Be Filed by Type During Specified Calendar Years, 1990-2007.* Publication 1136 (Rev. 09-2006).

IRS (2006). *States’ Experience with Tax Return Bar Code Technology.* 29 November 2006.

IRS (2006). *Tax Year 2006 Taxpayer Usage Study.*

IRS (2007). *2007 Filing Season Statistics - Table 13.*

IRS (2007). *2007 Free File Survey Report and Presentation.* Prepared by Russell Research. 17 July 2007.

IRS (2007). *The 2007 Taxpayer Assistance Blueprint, Phase 2.*

IRS (2007). *Bar Coding and e-Filing Mandates.* November 2007.

IRS (2007). "Become an Authorized e-file Provider." [Online]. Updated 19 July 2007, Retrieved 12 May 2008 from http://www.irs.gov/taxpros/providers/article/0,,id=97657,00.html.

IRS (2007). "Become an IRS Partner to Help in Your Community." [Online]. Updated 4 December 2007, Retrieved 21 April 2008 from http://www.irs.gov/individuals/article/0,,id=119374,00.html.

IRS (2007). *Calendar Year Projections of Individual Returns by Major Processing Categories.* Document 6187 (Spring 2007 Update).

IRS (2007). *Calendar Year Projections of Information and Withholding Documents (2007-2015).* Publication 6961.

IRS (2007). *Calendar Year Return Projections for the United States and IRS Campuses CY 2007-2014.* Publication 6186 (revised 12-2007).

IRS (2007). *Electronic Federal Tax Payment System.* Publication 4132 (2-2007) Catalog # 35376B.

IRS (2007). *Electronic Return File Specifications for Individual Income Tax Returns - Tax Year 2007: Part 1, Attachments 1-11.* Publication 1346. 31 August 2007.

IRS (2007). *Electronic Return File Specifications for Individual Income Tax Returns (Tax Year 2007).* Publication 1346 (9-2007) Catalog # 64403B. 31 August 2007.

IRS (2007). *ETA Tax Year 2005 Full Year Database Analysis.*

IRS (2007). "Internal Revenue Bulletin 2007-49: Returns Required on Magnetic Media." [Online]. Updated 3 December 2007, Retrieved 28 May 2008 from http://www.irs.gov/irb/2007-49_IRB/ar09.html.

IRS (2007). "IRS e-file Logo and Marketing Tool Kit " [Online] Retrieved 19 March 2008 from http://www.irs.gov/taxpros/providers/article/0,,id=97538,00.html.

IRS (2007). "IRS Urges Caution about Internet Sites that Resemble the Official IRS Site." [Online]. Updated 13 March 2007, Retrieved 28 March 2008 from http://www.irs.gov/irs/article/0,,id=168574,00.html.

IRS (2007). *Service Center Error Reject Codes Report.* 21 October 2007.

IRS (2007). *State Preparer Mandate Summary Matrix.*

IRS (2007). *Your Federal Income Tax.* Publication 17 Catalog # 10311G.

IRS (2008). *1040 Forms that Cannot be e-filed or Submitted as an Attachment to Form 8453, U.S. Individual Income Tax Transmittal for an IRS e-file Return, for TY 2007.* 30 April 2008.

IRS (2008). *2008 Filing Season Data - Returns/Refunds for Week Ending: 6/21/2008.* 21 June 2008.

IRS (2008). *2008 IRS e-file Refund Cycle Chart.* Publication 2043 EN/SP (Rev.10-07) Catalog # 24452M.

IRS (2008). *Analysis of Findings from e-Signature Shared Secrets Research.*

IRS (2008). “Authorized IRS e-file Providers for Individuals: Is There a Fee for IRS e-file?” [Online]. Updated 1 January 2008, Retrieved 16 April 2008 from http://www.irs.gov/efile/article/0,,id=118449,00.html#Q8.

IRS (2008). “Circular 230 FAQs for e-Services Access.” [Online] Retrieved 19 March 2008 from http://www.irs.gov/taxpros/article/0,,id=174857,00.html.

IRS (2008). “e-file for Charities and Non-Profits.” [Online]. Updated 5 February 2008, Retrieved 28 May 2008 from http://www.irs.gov/efile/article/0,,id=108211,00.html.

IRS (2008). “e-file for Large and Mid-Size Corporations - Frequently Asked Questions (January 2008).” [Online]. Updated January 2008, Retrieved 12 April 2008 from http://www.irs.gov/businesses/article/0,,id=177619,00.html.

IRS (2008). “e-file Made Easy - A Tax Professional's One-Stop e-file & e-Pay Shop ” [Online] Retrieved 19 March 2008 from http://www.irs.gov/efile/article/0,,id=120335,00.html#how.

IRS (2008). “Electronic Excise Tax Returns Are Here - Formerly Known as "ETEC" (Excise Tax e-File & Compliance) Form 2290, 720 and 8849 Join The Ranks of e-file! 2008 2290 e-file Returns May Be Submitted July 1, 2008.” [Online]. Updated 17 May 2008, Retrieved 28 May 2008 from http://www.irs.gov/efile/article/0,,id=170570,00.html.

IRS (2008). “Electronic Tax Administration Advisory Committee Information Sheet.” [Online] Retrieved 25 March 2008 from http://www.irs.gov/newsroom/article/0,,id=179167,00.html.

IRS (2008). *Findings From e-Signature Shared Secrets Research.* Prepared by Russell Research. March 2008.

IRS (2008). *Findings From The Free File Migration Study.* Prepared by Russell Research. 19 March 2008.

IRS (2008). *Form 8888: Direct Deposit of Refund to More Than One Account.* OMB No. 1545-0074.

IRS (2008). “Free File Alliance Online Tax Preparation Companies.” [Online] Retrieved 28 March 2008 from http://www.irs.gov/app/freeFile/jsp/index.jsp.

IRS (2008). “Free File Home - Your Link to Free Federal Online Filing.” [Online] Retrieved 2 April 2008 from http://www.irs.gov/efile/article/0,,id=118986,00.html.

IRS (2008). “Free File: Frequently Asked Questions.” [Online] Retrieved 25 March 2008 from http://www.irs.gov/efile/article/0,,id=118993,00.html.

IRS (2008). *IIRAPHQ Report: Individual Income Received and Processed - Headquarters [returns e-filed as of 25 April 2008].* 25 April 2008.

IRS (2008). *IMF Electronic Filing - ERS Fall-Out: Cumulative Year to Date Information through April 4, 2008.*

IRS (2008). *Incentives to e-file.*

IRS (2008). “Internal Revenue Manual - 3.11.3 Individual Income Tax Returns (Cont. 10): Exhibit 3.11.3-3 Return Processing Codes.” [Online]. Updated 1 January 2008, Retrieved 4 April 2008 from http://www.irs.gov/irm/part3/ch05s11.html.

IRS (2008). “Internal Revenue Manual - 3.42.5 e-file of Individual Income Tax Returns.” [Online]. Updated 1 October 2007, Retrieved 4 April 2008 from http://www.irs.gov/irm/part3/ch22s07.html.

IRS (2008). “Internal Revenue Manual: 3.42.1. Overview of Electronic Tax Administration (ETA) Programs.” [Online] Retrieved 9 May 2008 from http://www.irs.gov/irm/part3/ch22s02.html.

IRS (2008). “Internal Revenue Service.” [Online] Retrieved 25 March 2008 from http://www.irs.gov/.

IRS (2008). *Introduction to ISRP & SCRIPS.*

IRS (2008). “IRS e-file Application - Answers to Frequently Asked Questions.” [Online] Retrieved 21 April 2008 from http://www.irs.gov/efile/article/0,,id=118979,00.html.

IRS (2008). “IRS e-file for Individuals.” [Online]. Updated 26 February 2008, Retrieved 21 April 2008 from http://www.irs.gov/efile/article/0,,id=118508,00.html.

IRS (2008). “IRS e-file Up Sharply in 2008.” [Online]. Updated 28 May 2008, Retrieved 27 June 2008 from http://www.irs.gov/newsroom/article/0,,id=183321,00.html.

IRS (2008). *IRS Master File Data on Total and e-filed Individual Returns CY2007 and Q1 CY2008.* 1 May 2008.

IRS (2008). *Marketing.*

IRS (2008). *Miscellaneous Monitoring Report for Week of April 4, 2008.*

IRS (2008). “Modernized e-file (MeF) for Partnerships.” [Online]. Updated 15 April 2008, Retrieved 28 May 2008 from http://www.irs.gov/businesses/small/article/0,,id=165162,00.html.

IRS (2008). *Modernized e-File (MeF) Information for Authorized IRS e-file Providers and Large Taxpayers (Corporations, Partnerships and Tax Exempt Organizations) Tax Year 2007.* Publication 4163 (Revision 2; April 2008).

IRS (2008). *Modernized Submission Processing (Msp) - Solution Concept Definition - Domain: Submission Processing.* Version: 2008-01-30 v2.0.

IRS (2008). *Modernized Submission Processing (Msp): Submission Processing Executive Steering Committee.* February 2008.

IRS (2008). “Most Taxpayers Eligible to File Their Taxes Online for Free.” [Online]. Updated 10 January 2008, Retrieved 9 April 2008 from http://www.irs.gov/newsroom/article/0,,id=177380,00.html.

IRS (2008). *Number of Preparers Broken Out by Number of Returns Prepared.* BMF-2008-020.

IRS (2008). *Potential Free File Population Is Much Smaller than the Total Number of Eligible Taxpayers*

IRS (2008). “Receive Your Refund Faster with Direct Deposit.” [Online] Retrieved 9 May 2008 from http://www.irs.gov/newsroom/article/0,,id=105957,00.html.

IRS (2008). *State E-file Analysis.* 21 March 2008.

IRS (2008). *Statement of Methodology: SOI e-file Projections.*

IRS (2008). *Summary e-Services Report.*

IRS (2008). *Summary of State Mandates for Individual Tax Returns.* 8 May 2008.

IRS (2008). "Today's IRS Organization." [Online]. Updated 9 April 2008, Retrieved 21 April 2008 from http://www.irs.gov/irs/article/0,,id=149197,00.html.

IRS (2008). *Total Bar Code Counts for 2008 (K1s).* 1 April 2008.

IRS (2008). "Use of Free File Growing in 2008." [Online]. Updated 20 March 2008, Retrieved 21 April 2008 from http://www.irs.gov/newsroom/article/0,,id=180310,00.html.

IRS Oversight Board (2007). *Electronic Filing 2006: Annual Report to Congress.*

IRS Oversight Board (2008). *Electronic Filing 2007: Annual Report to Congress.*

IRS Oversight Board (2008). "IRS Oversight Board." [Online] Retrieved 25 March 2008 from http://www.treas.gov/irsob/.

Ivatury, G., & Pickens, M. (2006). *Mobile Phone Banking and Low-Income Customers: Evidence from South Africa*.

Joint Committee on Taxation (1998). *General Explanation of Tax Legislation Enacted in 1998.* 52-240, JCS-6-98. 24 November 1998.

Kang, C. (2008). "Three Firms Combine on Cellphone Remittances." *The Washington Post*. 1 April 2008. Page D05.

Kirchler, E. (2007). *The Economic Psychology of Tax Behavior*, Cambridge University Press.

Korchanke, J., & Hulsey, G. (2008). Interview of E-file Coordinator, and 2D Barcode and Software Developer Coordinator and Manager of Imaging, State of Oklahoma Tax Commission. 20 March 2008.

Le Goff, P. (2005). *Individual Income Tax Returns: Taxpayers Pay While The Government Saves.* PRB 05-24E. 22 August 2005.

Litan, R.E., Eisenach, J.A., & Caves, K.W. (2008). *The Benefits and Costs of I-File*. April 2008.

London School of Economics and Political Science ICT Observatory (2004). *ICT Learning And Training: Data, Policies And Practice In Selected EU Countries, Work Package 2 – Synthesis Report*.

Massachusetts (2008). "Massachusetts Department of Revenue: Telefile." [Online] Retrieved 7 April 2008 from http://www.mass.gov/?pageID=dorterminal&L=4&L0=Home&L1=Individuals+and+Families&L2=Personal+Income+Tax&L3=Filing+Options&sid=Ador&b=terminalcontent&f=dor_options_telefile&csid=Ador.

Moneycontrol.com (2007). "The Flip Side of E-filing Tax Returns." *Moneycontrol.com*. 9 July 2007.

Moore, G. (2002). *Crossing the Chasm*, Collins.

National Association of Computerized Tax Processors (2008). "National Association of Computerized Tax Processors." [Online] Retrieved 25 March 2008 from http://www.nactp.org/.

National Association of Enrolled Agents (2008). "National Association of Enrolled Agents." [Online] Retrieved 2 April 2008 from http://www.naea.org/MemberPortal/.

National Association of Tax Professionals (2008). "National Association of Tax Professionals." [Online] Retrieved 2 April 2008 from http://www.natptax.com/.

National Taxpayer Advocate (2004). *2004 Annual Report to Congress, Volume One.*

National Taxpayer Advocate (2007). *2007 Annual Report to Congress, Volume Two.*

National Taxpayer Advocate (2008). "Taxpayer Advocate Service." [Online] Retrieved 25 March 2008 from http://www.irs.gov/advocate/index.html.

New Zealand Inland Revenue (2008). "Individual Income Tax." [Online] Retrieved 4 June 2008 from http://www.ird.govt.nz/income-tax-individual/.

Nordisk eTax (2008). "Nordisk eTax Portal." [Online] Retrieved 4 June 2008 from http://www.nordisketax.net/main.asp?url=/hem.asp&c=nor&l=eng&s=1&w=3&m=00.

Office of Management and Budget (2008). "Office of Management and Budget." [Online] Retrieved 25 March 2008 from http://www.whitehouse.gov/omb/.

Olson, N.E. (2006). "Tax Return Preparation Options for Taxpayers." Testimony of National Taxpayer Advocate Nina E. Olson to U.S. Congress Senate Committee on Finance. 4 April 2006.

Olson, N.E. (2008). "The 2008 Tax Return Filing Season, IRS Operations, FY 2009 Budget Proposals, and The National Taxpayer Advocate's 2007 Annual Report to Congress." Testimony of National Taxpayer Advocate Nina E. Olson to U.S. Congress House of Representatives Committee on Ways and Means Subcommittee on Oversight. 13 March 2008.

Organisation for Economic Co-Operation and Development (2004). *Tax Administration in OECD Countries: Comparative Information Series (2004).* Prepared by Forum on Tax Administration Taxpayer Services Sub-group. October 2004.

Organisation for Economic Co-Operation and Development (2005). *Using 3rd Party Information Reports to Assist Taxpayers Meet their Return Filing Obligations: Country Experiences with the Use of Pre-populated Personal Tax Returns.*

Organisation for Economic Co-Operation and Development (2008). *Third Party Reporting Arrangements and Pre-filled Tax Returns: The Danish and Swedish Approaches.* Prepared by Forum on Tax Administration Taxpayer Services Sub-group. 22 January 2008.

Pew Internet & American Life Project (2006). *Internet Penetration and Impact April 2006*. April 2006.

Pew Internet & American Life Project (2006). *Online Banking 2006: Surfing to the Bank*. 14 June 2006.

Pew Internet & American Life Project (2007). *Home Broadband Adoption 2007*. June 2007.

Pew Internet & American Life Project (2008). *Data Memo: Mobile Access to Data and Information*. March 2008.

Pew Internet & American Life Project (2008). *Data Memo: Wireless Internet Access*. February 2007.

Pew Internet & American Life Project (2008). *Seeding The Cloud: What Mobile Access Means for Usage Patterns and Online Content*. March 2008.

PricewaterhouseCoopers Tax (2007). *Japan Tax Update June 2007, Issue 30*.

Rogers, E.M. (2003). *Diffusion of Innovations, Fifth Edition*, Simon and Schuster.

Smith, B. (2005). "Fiscal 2006 Budget: IRS." Testimony of Intuit Corporation Senior Vice President Consumer Tax Group Brad Smith to U.S. Congress House of Representatives Committee on Ways and Means Subcommittee on Oversight. 13 April 2005.

South African Revenue Service (2008). "SARS Efiling." [Online] Retrieved 4 June 2008 from http://www.efiling.gov.za/StaticMain.aspx.

South Carolina (2008). "Electronic Services-Individual Income." [Online] Retrieved 21 April 2008 from http://www.sctax.org/Electronic+Services/FastFile/default.htm.

Stockholm Challenge (2008). "Stockholm Challenge,." [Online] Retrieved 4 June 2008 from http://www.stockholmchallenge.se/data/elster.

Tax Policy Center (2006). *Summary of Major Enacted Tax Legislation from 1940-2006*.

The Association for Work Process Improvement and Harvey Spencer Associates (2006). *Forms Processing Data Capture Study 2006: An Analysis of Forms Processing, Data Capture and Document Capture Systems, Operations and Trends*. December 2006.

TimesOnline (2008). "Havoc on Deadline: the Great Tax Crash." [Online] *The Times*. Updated 1 February 2008, Retrieved 21 April 2008 from http://www.timesonline.co.uk/tol/news/politics/article3285628.ece.

Treasury Inspector General for Tax Administration (2003). *Opportunities Exist to Expand the TeleFile Program.* 2003-40-092.

Treasury Inspector General for Tax Administration (2007). *Consolidation of Tax Return Processing Sites Is Progressing Effectively, but Improved Project Management Is Needed.* 2007-40-165. 31 August 2007.

Treasury Inspector General for Tax Administration (2007). *Eliminating TeleFile Increased the Cost and Burden of Filing a Tax Return for Many Taxpayers.* Reference # 2007-40-116.

Treasury Inspector General for Tax Administration (2008). "Treasury Inspector General for Tax Administration." [Online] Retrieved 25 March 2008 from http://www.treas.gov/tigta/.

Turner, L., & Apelt, C. (2004). "Globalisation, Innovation and Information Sharing in Tax Systems: The Australian Experience of the Diffusion and Adoption of Electronic Lodgement." *eJournal of Tax Research,*. **2**(2): 241-269.

U.S. House of Representatives (2008). "United States House of Representatives." [Online] Retrieved 25 March 2008 from http://www.house.gov/.

U.S. Senate (2006). "Grassley, Baucus Express Concern Over Continued Tax Free File Program Problems." U.S. Senate Committee on Finance. 2 November 2006

U.S. Senate (2008). "United States Senate." [Online]from http://www.senate.gov/.

United Kingdom (2006). *E-Filing of Personal Tax Returns Survey: Collective Views of the Association of Accounting Technicians, the Association of Chartered Certified Accountants, the Association of Taxation Technicians, the Chartered Institute of Taxation, the Institute of Chartered Accountants in England & Wales, the Institute of Chartered Accountants in Ireland, and the Institute of Chartered Accountants of Scotland.* 20 December 2006.

United Kingdom (2007). *Paper Substitutes for SA Returns.* 19 October 2007.

United Kingdom Parliament House of Commons (2007). *Testimony on UK Tax Returns.*

United Nations (2008). *UN E-Government Survey 2008: From E-Government to Connected Governance.* ST/ESA/PAD/SER.E/112.

Wang, Y.-S. (2002). "The Adoption of Electronic Tax Filing Systems: an Empirical Study." *Government Information Quarterly*. **20**: 333-352.

Weeks, R. (2003). "Speak to Concerns, Not Just to Benefits." [Online] *iMediaConnection*. Updated 20 November 2003, Retrieved 27 March 2008 from http://www.imediaconnection.com/content/2219.asp.

White, J. (2007). "How GAO Assesses Electronic Tax Administration." *Council for Electronic Revenue Communication Advancement*. 2 May 2007.

Winters, M.M., Buschel, S.R., Garris, H.A., Kleyman, A., & Slater, F.L. (2003). "Response to Request For Comments on Proposal to Extend Tax Filing Deadline to April 30 for Individuals Who File Electronically." Testimony of New York State Society of Certified Public Accountants to U.S. Congress Senate Committee on Finance. 17 July 2003.

Wong, C. (2006). "CRA Looks to Have More Than Half of Returns Filed Electronically." [Online] Retrieved 21 April 2008 from http://finance.sympatico.msn.ca/taxes/insight/article.aspx?cp-documentid=987574.

Wongtrakool, B.M. (1998). "Does Paperless Mean Painless? Electronic Tax Return Filing in the New Millennium." [Online] Retrieved 21 April 2008 from http://cyber.law.harvard.edu/fallsem98/final_papers/Wongtrakool.html.

World Bank (2008). *Paying Taxes 2008: The Global Picture.* Prepared by PricewaterhouseCoopers.

World Bank e-Development Thematic Group (2005). "Implementing E-Government at the Subnational Level: Lessons Learned from the Brazilian State of Minas Gerais " [Online]. Updated 19 July 2005, Retrieved 4 June 2008 from http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTINFORMATIONANDCOMMUNICATIONANDTECHNOLOGIES/EXTEDEVELOPMENT/0,,contentMDK:20597242~menuPK:828158~pagePK:64020865~piPK:51164185~theSitePK:559460,00.html.

World Opportunities & Services - UK (2008). ““Important UK Tax Changes for April 2008” ” [Online] Retrieved 4 June 2008 from http://www.obsuk.com/accountingservices/uktaxnews.html.

END OF REPORT.