

# Projections of Returns to be Filed in Calendar Years 1995-2001

by Andre Palmer

**T**otal tax returns filed with the Internal Revenue Service (IRS) are estimated to reach 207.1 million in Calendar Year (CY) 1995. The average annual growth in total return volumes between 1995-2001 is expected to be around 1.3 percent, reaching 223.7 million returns by CY 2001. These return projections by IRS Compliance Research staff provide a foundation for IRS budget submissions and service center resource allocation decisions [1]. Calendar year projections reflect the year in which the returns are processed, rather than the tax year covered by the information reported on the return.

## Shortfall in Filings for Calendar Year 1993

Compared to prior projections, there was a shortfall in Calendar Year (CY) 1993 return filings across all major return categories. As shown in Figure A, the lower than projected number of returns filed included shortfalls in individual, corporation, and employment tax returns, as well as in "supplemental documents" [2]. These shortfalls occurred as a result of factors, such as administrative actions, subtle changes in relationships between economic performance and return filings, and an over-estimation of the impact of law changes arising from the Omnibus Budget Reconciliation Act of 1993.

Of particular note was the Form 1040 individual series (i.e., "paper" and electronically-filed Forms 1040, 1040A, 1040EZ, and 1040PC). Overall U.S. economic conditions during Tax Year 1992 (particularly civilian employment) improved over the prior year, which normally would have led to growth in the individual return filings in 1993. However, the individual return series actually fell nearly 0.8 percent in 1993--the first such decline since 1976. Research suggests that three factors contributed to this modest decline. First, the IRS Reduce Unnecessary Filings (RUF) Program, implemented in 1993, resulted in a reduction in the number of returns filed by taxpayers who did not meet the filing requirement and were not due a refund. Second, historically low interest rates in 1992 caused the income of certain individuals to fall below the filing threshold. Third, the March 1992 change in withholding rates, which reduced the taxes withheld from employees' salaries, left some individuals with an unanticipated balance due. As a result, some may have been unable to pay and elected not to file.

*Andre F. Palmer is an economist with the Office of Compliance Planning and Finance, Compliance Research. This article was prepared under the direction of Russell Geiman, Chief, Projections and Forecasting Group.*

In response to the CY 1993 filing experience and refinements to the forecasting models, the revised projections are substantially lower than those previously reported. For example, the revised CY 1995 projection of the U.S. totals for the individual return series is 116.3 million returns--a reduction of 3.1 percent from the previous estimates. Other 1995 return projections that were lowered include corporations (from 4.9 million to 4.7 million); employment tax (from 30.2 million to 28.7 million); and supplemental documents (from 13.1 million to 10.7 million returns).

## Earned Income Tax Credit Expansion

The Omnibus Budget Reconciliation Act of 1993 (OBRA 93) greatly expands both the amount of, and the pool of taxpayers eligible for, the earned income tax credit (EITC), beginning with Tax Year 1994 (Calendar Year 1995 filings). Approximately 6.0 million new EITC filers are anticipated as a result of the tax law change, of which 5.3 million will be single filers without a qualifying child. The new provisions of OBRA 93 are expected to increase the number of CY 1995 individual refund returns above the normal growth level and also increase the average dollar size of a refund.

The larger refund volumes and dollar amounts, in turn, are expected to increase the incentive for, and thus the volumes of, electronically-filed (ELF) returns. Electronic filing volumes (excluding those filed by telephone or as Forms 1040PC) should grow 960,000 above the normal baseline trend in CY 1995. This is because taxpayers who claim the EITC have a higher electronic-filing participation rate than other taxpayers.

## Alternative Ways of Filing Individual Returns

In 1994, the growing trend to file tax returns through non-conventional methods continued to increase, as 18.2 million individual income return filers chose to file using one of the alternative or non-conventional methods. In Figure B, a stacked-bar graph is used to illustrate the trend away from filing "paper" (Forms 1040, 1040A, and 1040EZ) returns towards alternative ways of filing. Non-conventional methods include TeleFile (defined below), standard electronically-filed (ELF) returns, and Form 1040PC. Returns filed under these methods are estimated to increase to 21.6 million in 1995. The specific trend for each method is discussed further in the Projections Highlights section of this article.

## Amended U.S. Individual Income Tax Returns

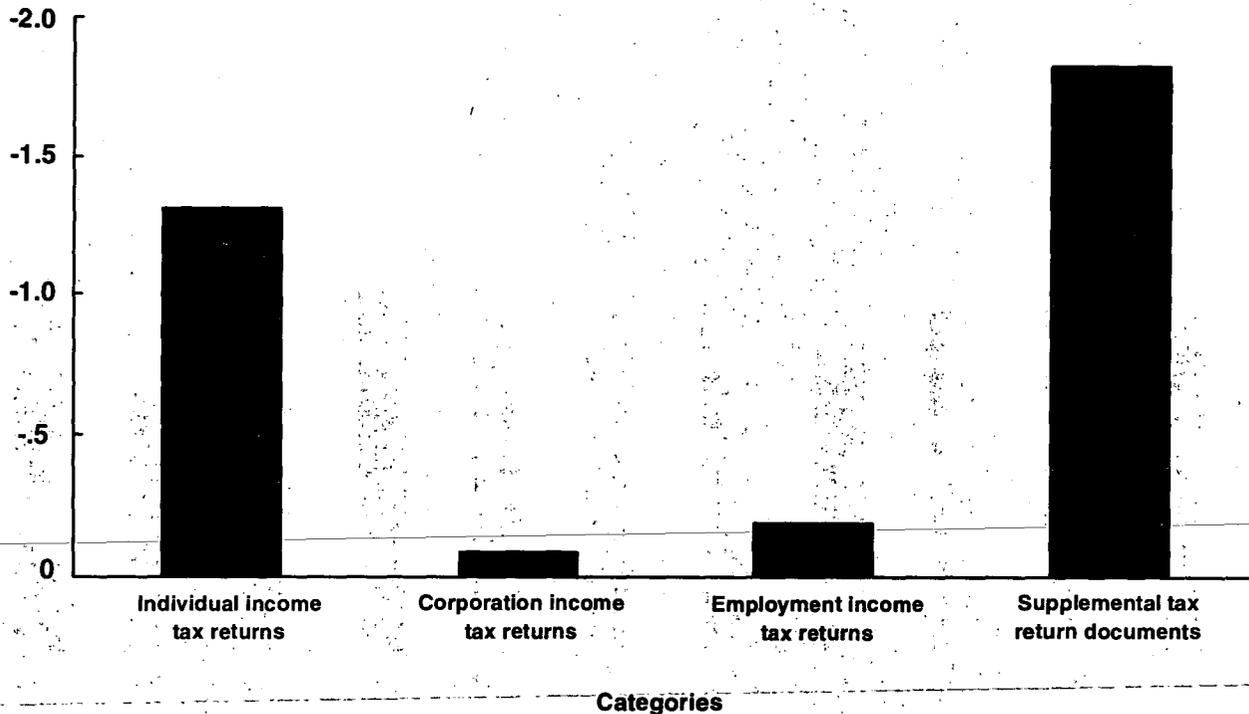
The Form 1040X, *Amended U.S. Individual Income Tax Return*, is used to correct or change a previously-filed

# Projections of Returns to be Filed in Calendar Years 1995-2001

Figure A

## Calendar Year 1993 Return Estimated Shortfall

Millions



individual return. One legislative change and one administrative change are expected to increase the volumes of Form 1040X returns filed in 1995. First, some increases will be due to retroactive provisions of OBRA 93 that affect self-employed taxpayers with deductions for health insurance and other taxpayers who receive certain employer-provided educational assistance. Additionally, projected increases were also made to account for IRS Revenue Procedure 94-27 that allows some home buyers to deduct seller-paid points in connection with mortgages on prior home sales. Due to these provisions, it is estimated that approximately 1.9 million taxpayers will submit amended returns in CY 1995.

### Social Security Domestic Employment Reform Act of 1994

Passage of the Social Security Domestic Employment Reform Act of 1994 eliminates the filing of Forms 942 and 942PR, *Employer's Quarterly Tax Return for Household Employees*, beginning in 1995. Forms 942 and 942PR increased sharply in 1993, most likely as a result of media attention surrounding certain public figures who failed to file these returns for their household workers.

The CY 1995 projections reflect the expected filings covering the last quarter of Tax Year 1994 (i.e., October through December 1994). In the future, Form 942 filing requirements will be replaced by a schedule to be filed with the Form 1040 individual income tax return.

### Projection Methodology

Regression techniques, time series analysis, and growth rates were the basic methods used to project tax return filings for CY 1995-2001.

### Regression Analysis

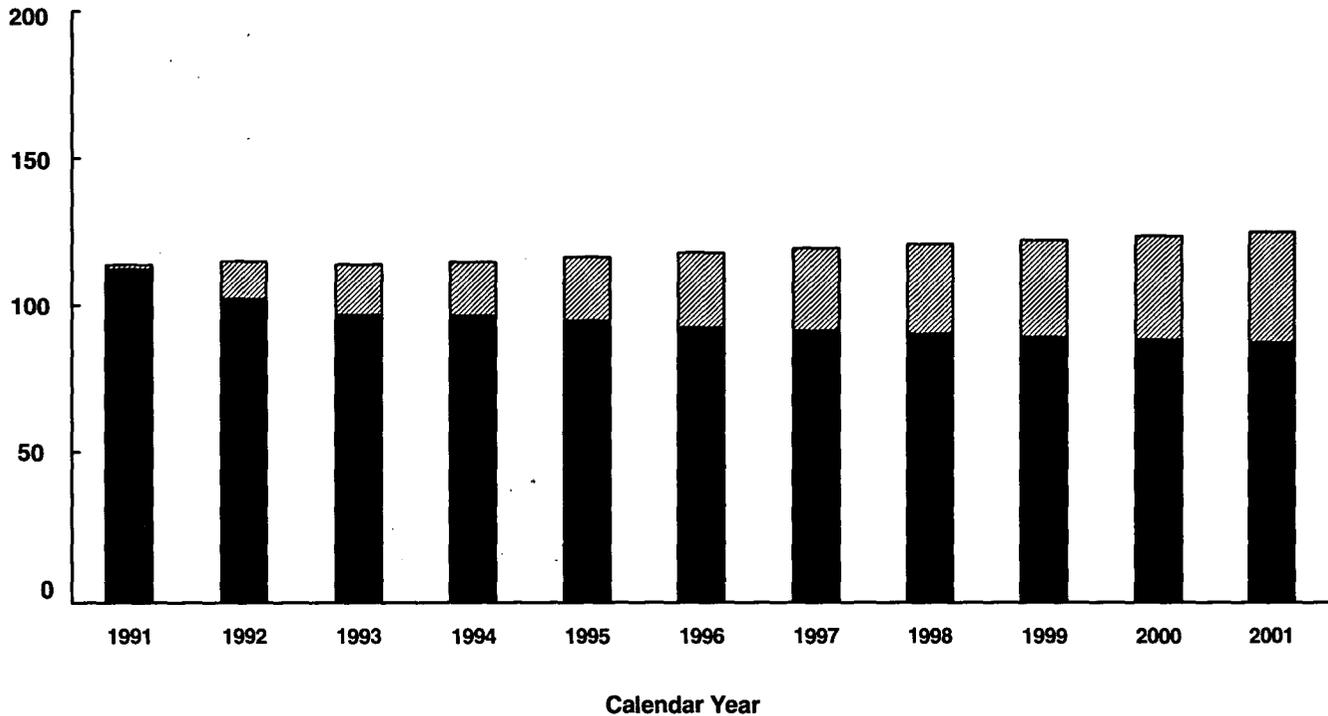
Regression techniques were selected when statistically-sound relationships existed between tax return filings and independent economic or demographic indicators. Key economic and demographic variables which significantly affect return filings include personal income, Gross Domestic Product (GDP), civilian employment, and total population [3]. These variables were used selectively in regression models to project individual, employment, fiduciary, and various corporation returns. In most instances, these economic or demographic variables were lagged by 1 year to correspond more directly with the tax

# Projections of Returns to be Filed in Calendar Years 1995-2001

Figure B

## Number of Individual Income Tax Returns by Method of Filing, Calendar Years 1991-2001

Millions of returns



■ Paper return filings    ▨ Alternative methods of filing

year in question. Also, “dummy variables” (i.e., specially-constructed variables with values of “0” or “1”) were occasionally used to account for the effects of legislative changes, return count aberrations, and other unusual conditions not reflected by the economic or demographic variables.

The regression models incorporated the actual 1993 return counts into the base period. Some also included 1994 estimates (actual data for 1994 were incomplete); in such instances, 6-month return counts were typically used to estimate the 1994 total for the year, based on the proportion of returns filed in 1994 relative to the same period in 1993.

### Time Series Analysis

When there is no statistically-sound relationship with economic or demographic variables, some return counts were projected using time series analysis techniques.

These include finite moving averages, exponential smoothing, and autoregressive integrated moving average (ARIMA) techniques. For example, forecasts of excise tax returns were based on a moving average, while projections of certain employment tax returns were based on an exponential smoothing model.

### Growth Rates

Where return series have very short or even no historical base periods, simple growth rates were used for forecasting. This method generally assumes that a prior growth pattern for a limited set of years for a given form will continue in the future, or that a new return type will grow at a rate similar to a related return with an established pattern. For example, the projected growth for the new Form 945, *Annual Return of Federal Withheld Income Tax*, was tied to the overall expected growth in employment tax returns.

# Projections of Returns to be Filed in Calendar Years 1995-2001

## Off-Model Adjustments

"Off-model adjustments" (i.e., adjustments to the initial forecasts based on the above techniques) are sometimes necessary when return filings are directly impacted by legislative or administrative changes, which the techniques described above cannot take into account. The IRS projections typically reflect the impact of legislative and administrative changes to the extent that laws or administrative initiatives have been enacted or IRS programs officially approved. Examples include the adjustment to the electronically-filed returns projections due to the new EITC rules under OBRA 93 and changes to the Form 1040X individual amended return forecasts due to the new revenue procedure on seller-paid home-mortgage points.

## Projections Highlights

### Grand Total Returns, Primary Returns, and Supplemental Documents

The "grand total" is the sum of the "primary returns, total" and "supplemental documents, total" (Figure C)[4]. "Primary returns," particularly individual, corporation, and employment tax returns, account for most of the total filings and generate the majority of IRS document processing workload. "Supplemental documents" are mainly amended returns and requests for filing extensions from individuals and corporations [5].

The grand total is projected to increase approximately 1.3 percent on average, annually, in 1995 through 2001 (Figure C). Over this period, primary returns and supplemental documents are expected to experience annual average increases of 1.3 percent and 1.6 percent, respectively. In CY 1995, about 207.1 million returns are projected to be filed, 196.4 million primary returns and the remaining 10.7 million, supplemental documents (Figure D). The complete set of projections for 1995 through 2001 by form type is presented in Table 1.

### Individual Income Tax Returns

Approximately 116.7 million individual income tax returns are expected to be filed in 1995, with an average annual growth rate of 1.3 percent anticipated through CY 2001. Total individual returns include the individual return series of electronically-filed and paper Forms 1040, 1040A, 1040EZ, and 1040PC, plus Form 1040NR, *U.S. Non-Resident Alien Income Tax Return*; Form 1040PR, *U.S. Self-Employment Tax Return - Puerto Rico*; and Form 1040SS, *U.S. Self-Employment Tax Return - Virgin Islands, Guam, and American Samoa*.

### Forms 1040, 1040A, 1040EZ, and 1040PC

In 1995, a total of 116.3 million Forms 1040, 1040A, 1040EZ, and 1040PC returns are projected to be filed,

a 1.6 percent increase over the estimated 1994 volume (Figure D). The individual return series includes both returns on paper and electronically-filed returns. The volumes are expected to grow annually at an average rate of 1.3 percent and to reach 125.2 million in CY 2001 (Table 1).

### Total Paper Returns

"Paper" individual return filings, as a percentage of total Forms 1040, 1040A, 1040EZ, and 1040PC volumes, will decrease from 87.8 percent in CY 1994 to 86.0 percent in CY 1995 and even further to 77.1 percent in CY 2001, based on extrapolations of existing trends. The long-term decrease in the percentage of paper returns is in line with IRS strategies to increase the level of electronic filing. IRS goals envision even higher levels of electronic filings with a number of strategies being developed to move beyond the existing trends reflected in these forecasts.

### Paper Form 1040

Historically, the "long" Form 1040 represents the lion's share of total paper returns and this is expected to continue. While paper Form 1040 is still expected to dominate total paper return volumes, its historical trend for recent years is projected to drop by 1.6 percent in 1995 and decline at an average annual rate of 1.2 percent through CY 2001. The estimated decline stems from the growth in the volume of electronically-filed returns along with the expected increased use of the Form 1040PC (defined below).

### Paper Form 1040A

Form 1040A paper returns are projected to decline 3.8 percent to 18.2 million in 1995. This drop and subsequent decreasing trend in paper Forms 1040A (1.6 percent annual average over the projection period CY 1995-2001) reflect the effects of increased filings of electronic and Form 1040PC returns.

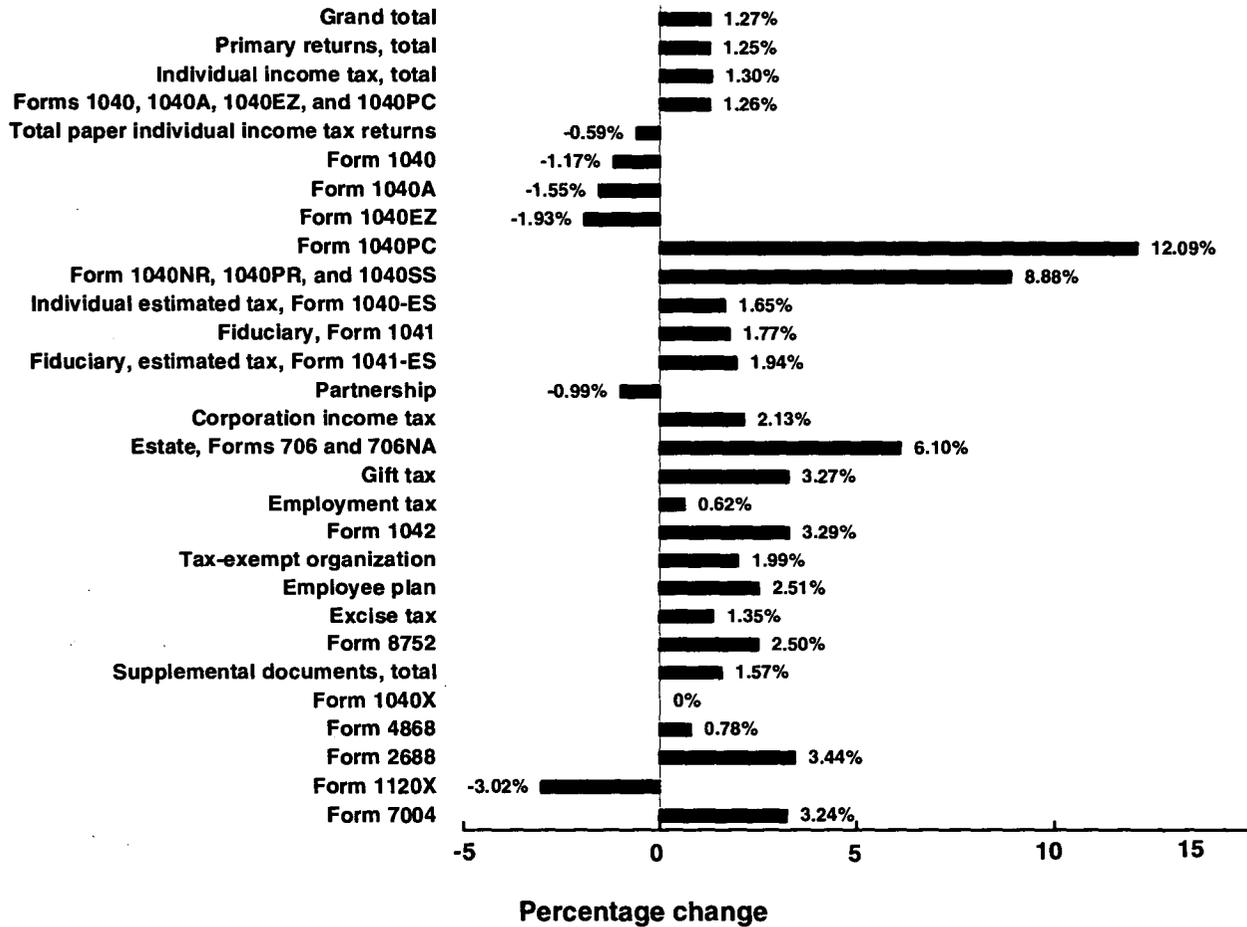
### Paper Form 1040EZ

The paper Form 1040EZ trend will be volatile in the future, decreasing an estimated 0.05 percent in 1995, and another 9.8 percent in 1996. The downward trend is expected to continue over the forecast horizon at an average annual rate of 1.9 percent. The volatility is largely the net result of IRS-administrative changes. For example, in CY 1994, paper 1040EZ volumes increased largely in response to the form change allowing certain married taxpayers to use this form. The estimated sharp decline in 1996

# Projections of Returns to be Filed in Calendar Years 1995-2001

Figure C

**Projected Average Annual Percentage Change in the Number of Returns Filed by Type of Return, Calendar Years 1995-2001**



and the overall decline through CY 2001, in turn, largely reflect the impact of nationwide implementation of, and future growth in, TeleFile, described below.

■ **Paper Form 1040PC**

Form 1040PC represents paper tax returns filed by taxpayers or paid preparers using an IRS-approved computer software-generated format rather than a specific type of tax form. It allows taxpayers to file a computer-generated return on one or two sheets of paper, regardless of the number of schedules normally attached. In 1995, an expected 5.4 million Forms 1040PC will be filed, an increase of 29.7 percent over 1994. Form 1040PC has been available

nationwide as an alternative to filing the traditional paper Form 1040, 1040A, and 1040EZ returns, since 1992. The annual growth projections average around 12.1 percent through CY 2001. The traditional paper return projections by form type have been adjusted to reflect the expected increase of Form 1040PC.

■ **Forms 1040NR, 1040PR, and 1040SS**

The total of Form 1040NR, Form 1040PR, and Form 1040SS, each defined above, is increasing at an average projected rate of 8.9 percent per year. Approximately 85 percent of this total reflects the Form 1040NR. Typically, Forms 1040NR are filed by nonresident aliens who have invested in U.S. limited partnerships.

# Projections of Returns to be Filed in Calendar Years 1995-2001

**Figure D**

## Projections for Calendar Year 1995

(Number of returns is in thousands)

Type of return	1995 Projections	Percentage change from 1994 <sup>1</sup> (estimated)
<b>Grand total</b> .....	<b>207,069</b>	<b>1.10</b>
<b>Primary returns, total</b> .....	<b>196,372</b>	<b>1.20</b>
Individual income tax, total.....	116,720	1.58
Forms 1040, 1040A, 1040EZ, and 1040PC .....	116,320	1.55
Total paper returns.....	100,079	-0.44
Paper Form 1040.....	59,329	-1.58
Paper Form 1040A.....	18,195	-3.77
Paper Form 1040EZ.....	17,189	-0.05
Paper Form 1040PC.....	5,366	29.69
Total electronic returns.....	16,241	15.88
Standard electronic filing.....	15,514	14.95
TeleFile.....	727	40.07
Forms 1040NR, 1040PR, 1040SS..	399	8.27
Individual estimated tax.....	38,020	2.40
Fiduciary income tax.....	3,049	1.68
Fiduciary estimated tax.....	667	2.88
Partnership.....	1,510	-2.51
Corporation income tax.....	4,684	3.11
Estate tax.....	85	6.25
Gift tax.....	232	3.21
Employment tax.....	28,701	-2.00
Form 1042.....	25	3.75
Tax-exempt organization.....	564	2.47
Employee plan.....	1,240	2.96
Excise tax.....	817	-2.95
Form 8752 <sup>2</sup> .....	72	3.00
Supplemental Documents <sup>2</sup> .....	10,698	-0.70
Form 1040X.....	1,870	-11.66
Form 4868.....	4,813	1.01
Form 2688.....	1,759	3.90
Form 1120X.....	25	-2.76
Form 7004.....	2,230	2.65

<sup>1</sup> Percentage changes for 1994 were based on estimated final counts of returns because complete information was unavailable at the time this table was compiled.

<sup>2</sup> For an explanation of form numbers, see footnotes to Table 1, at the end of this article.

NOTE: Detail may not add to totals because of rounding.

### ■ Total Individual Electronic Returns

The most recent projections of total electronically-filed (ELF) individual income tax returns call for 16.2 million to be transmitted to the IRS in CY 1995 and 19.6 million in CY 1996. These figures include 726,700 TeleFile returns (see below) in CY 1995 and 2.7 million in CY 1996, assuming nationwide TeleFile implementation for Tax Year 1995. About 28.7 million returns are projected to be filed electronically by 2001, with approximately 81.5 percent (23.4 million) expected to be "standard," i.e., non-Telefile, electronic filings. As the volume of electronically-filed returns increases, the volume of traditional filings (paper returns) decreases. Figure E presents insights into the return characteristics of those electronic filings. Of the 16.2 million returns projected to be filed in 1995, about 20.9 percent or 3.4 million would otherwise have been filed on a paper Form 1040; 58.3 percent or 9.5 million, on a paper Form 1040A; and the remaining 20.7 percent or 3.4 million, on a paper Form 1040EZ.

### ■ Standard Electronic Returns

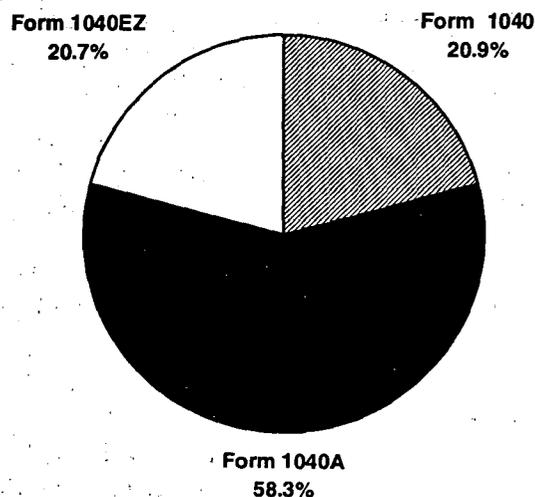
Standard electronic returns are non-TeleFile returns transmitted through an authorized third party, typically a third-party paid preparer. In 1995, about 15.5 million of these individual income tax returns are estimated to be filed. In general, these projections were based on time-series techniques that extrapolated the growth in participation rates (i.e., the proportion of standard ELF returns to total individual-series returns) at the IRS district office level. These baseline forecasts were then increased to account for an estimated additional 960,000 "standard" ELF returns beginning in CY 1995, as a result of the expansion of the EITC under OBRA 93.

### ■ TeleFile

TeleFile gives certain taxpayers filing Form 1040EZ the option to file their returns using touch-tone telephones. During the CY 1994 filing season, over 518,800 taxpayers in selected areas of the country participated in the third year of TeleFile testing. In CY 1995, over 726,000 TeleFile returns are expected in an expansion of the test, culminating in nationwide availability in CY 1996. An estimated 2.7 million TeleFile returns are expected in CY 1996, growing to 5.2 million by CY 2001. In general, these projections

**Figure E**

## Electronically-Filed Individual Income Tax Returns by Type of Form, Calendar Year 1995



## Projections of Returns to be Filed in Calendar Years 1995-2001

were based on anticipated participation rates drawn from the test experience through 1994 and the total number of taxpayers eligible to use the Form 1040EZ [6].

### Partnership Returns

Form 1065, *U.S. Partnership Return of Income*, is used to report income, deductions, credits, and losses from the operation of a partnership. The purpose of this return is to show each partner's distributive share, to be reported on the individual (or other) income tax return. Partnership projections are expected to decline by 1.0 percent overall through 2001, in part because of the residual effect of the Tax Reform Act of 1986 in curbing tax shelters. This decline started in Calendar Year 1987 and has continued, as indicated by the partial 1994 (January 1-September 30, 1994) return counts. These forecasts, based on a time trend model, capture this trend.

### Corporation Income Tax Returns

Corporation income tax returns are the aggregate of *U.S. Corporation Income Tax Return* (Form 1120), *U.S. Short-Form Corporation Income Tax Return* (Form 1120A), *U.S. Income Tax Return for an S Corporation* (Form 1120S), and various other forms filed by such entities as real estate investment trusts, insurance and investment companies, and homeowners associations. In 1995, approximately 4.7 million returns are projected to be filed. The projected average annual percentage change in the number of returns through 2001 is 2.1 percent, which reflects a combination of econometric regression models using GDP and time series techniques based on past filing experiences. In 1995, Form 1120, Form 1120S, and Form 1120A are projected to be 45.2 percent, 44.5 percent, and 7.2 percent of the total corporation returns filed, respectively.

### Estate Tax Returns

*U.S. Estate Tax Return* (Form 706) is filed to report transfers of property at death. Presently, those estates whose gross assets exceed \$600,000 are required to file Form 706. Estate tax returns are expected to grow at an average annual rate of 6.1 percent between CY 1995 and CY 2001. Total estate forecasts are based on the summation of forecasts for three gross asset size classes: under \$1 million; between \$1 million and \$5 million; and over \$5 million. Forecasting models were based on regression, exponential smoothing, and stepwise autoregression techniques.

### Gift Tax Returns

*United States Gift Tax Return* (Form 709) is required for the gratuitous transfer of real or personal property which

exceeds a certain dollar amount. Generally, the individual making the gift (the donor) must file Form 709 to pay the tax. The projected average annual growth rate in gift tax return filings between 1995 and 2001 is 3.3 percent. These projections are based on regression techniques.

### Employment Tax Returns

Total employment tax return forecasts are based on a summation of seven forms: *Employer's Annual Federal Unemployment (FUTA) Tax Return* (Forms 940 and 940EZ); *Employer's Quarterly Federal Tax Return* (Form 941, including Form 941PR for employees in Puerto Rico; Form 941SS for employees in the U.S. Virgin Islands, Guam, and American Samoa; and Form 941E for State and local Government employees); *Employer's Quarterly Tax Return for Household Employees* (Forms 942 and 942PR); *Employer's Annual Tax Return for Agricultural Employees* (Forms 943 and 943PR); *Annual Return of Federal Withheld Income Tax* (Form 945); and *Employer's Annual Railroad Tax Return* (Form CT-1). Form 945 was introduced for Tax Year 1994 (returns filed in Calendar Year 1995), and is discussed below. Also, Forms 942 and 942PR will be eliminated in CY 1995 to reflect provisions in the Social Security Domestic Employment Reform Act of 1994.

Current projections for total employment tax returns to be filed in 1995 and 1996 are 28.7 million and 28.6 million, respectively, with an average annual growth rate of 0.62 percent from 1995 to 2001. Form 941 makes up over 75 percent of total employment tax return filings, with 22.3 million returns expected in CY 1995. Projections for various employment tax forms used regression, weighted moving average, exponential smoothing, and growth rate techniques.

Form 945 will be filed for the first time in 1995, with just over 300,000 returns expected. This form will be used to report non-payroll items, such as "backup withholding" on interest and dividends (see Table 1), as well as tax withholding on pensions, annuities, and gambling winnings.

### Excise Tax Returns

Total excise tax returns are the sum of the following four categories: *Special Tax Return and Application for Registry-Wagering* (Form 11C); *Quarterly Federal Excise Tax Return* (Form 720); *Tax on Wagering* (Form 730); and *Heavy Vehicle Use Tax Return* (Form 2290). Forms 720 and 2290, together, represent about 91 percent of the total excise tax returns. The passage of OBRA 93 repealed the luxury excise tax imposed on boats, aircraft, jewelry, and furs, but, with some modifications, allows taxes on "high-end" automobiles to remain. The Act also

## Projections of Returns to be Filed in Calendar Years 1995-2001

changed the point of taxation of diesel fuel. It provides that the diesel fuel excise tax is to be collected at the point of its removal from a terminal. These provisions are expected to reduce the volume of Form 720 returns by approximately 80,000 returns in the long run. Given the erratic filing history of Form 720, constant growth was estimated by a moving average. Form 730, Form 11C, and Form 2290 were regressed on time trends. The overall average annual growth rate from 1995 to 2001 is 1.4 percent.

### Supplemental Documents

"Supplemental documents" are comprised primarily of amended returns and requests for filing extensions. Projections made in 1993 estimated sharp increases in CY 1993 and CY 1994 (attributed to an expected increase in Form 1040X, amended individual income tax returns, as a result of an OBRA 93 provision concerning self-employed taxpayers with health insurance deductions and employer-provided educational assistance), but the increases were, and continue to be, less than anticipated. Therefore, the forecast was revised. In CY 1995 and 1996, about 10.7 million and 10.9 million supplemental documents are expected to be filed, respectively.

### Projection Accuracy

The historical accuracy of the past projections must be considered when evaluating future forecasts. Using the actual return counts in Calendar Years 1991 through 1993, two key measures of accuracy have been calculated, the "mean absolute error" (MAE) and the "mean absolute percentage error" (MAPE). The MAE is the average of the relevant "projection errors," regardless of whether the forecasts were over-projected or under-projected. The projection error is simply the actual result minus the projected volume. The MAPE is a similar measure, but based on percentages. The MAE and MAPE values are

grouped by time horizons. The time horizon is determined by when the forecast was made and for what future year. For example, a forecast for CY 1990 made in 1987 would be part of the "3 years ahead" time horizon. At each time horizon, the number of observations is held constant at three (i.e., forecasts made for CY 1991, CY 1992, and CY 1993) [7].

As shown in Figure F, for the grand total and the primary total return categories, the MAPE's are generally in the 1 to 2 percent range for shorter term forecasts, and 2 to 7 percent for longer term projections. For total individual income tax returns, the corresponding MAPE's are generally around 1 percent, regardless of the time horizon. In general, forecast error increases with the time horizon, i.e., 1-year MAPE's are lower than 2-year MAPE's, which, in turn, are lower than 3-year MAPE's, and so forth. Also, forecast errors arise from both statistical modeling reasons and from unforeseen program or law changes.

### Notes and References

- [1] All statistics are for the year in which the tax returns were processed by the Internal Revenue Service, stated on a calendar year basis unless otherwise noted. The main calendar year projections discussed in this article are presented in Table 1 and are based on preliminary figures produced by the IRS Compliance Research staff; see *Calendar Year Return Projections for the United States and Service Centers: 1995-2001*, Document 6186 (Revision 12-94). Final actual counts for all of Calendar Year 1994 were incomplete at the time this article was written. Final CY 1993 counts, unavailable in projections published in the *Statistics of Income Bulletin*, Winter 1993-1994, Volume 13, Number 3, are reflected in all statistics. (For complete fiscal year counts, see U.S. Department of Treasury, Internal Revenue Service, *Internal Revenue Service Annual Report, Fiscal Year*

Figure F

### Mean Absolute Error (MAE) and Mean Absolute Percentage Error (MAPE) Accuracy of U.S. Level Projections Based on Actual Return Counts for Calendar Years 1991 through 1993

Type of return	Mean absolute error (number of returns)				Mean absolute percentage error			
	1 year ahead	2 years ahead	3 years ahead	4 years ahead	1 year ahead	2 years ahead	3 years ahead	4 years ahead
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Grand total.....	2,603,726	2,226,453	7,464,560	13,902,860	1.28	1.08	3.66	6.81
Selected primary returns, total.....	3,493,563	3,803,563	4,177,263	10,229,463	1.81	1.97	2.16	5.28
Individual income tax.....	1,227,976	1,314,576	1,127,476	1,939,254	1.07	1.15	0.98	1.70
Partnership.....	94,941	180,641	533,708	599,108	5.97	11.08	33.30	37.37
Corporation income tax.....	65,745	232,979	438,945	355,679	1.48	5.23	9.77	7.92
Employment tax.....	403,369	781,274	726,069	1,523,336	1.41	2.72	2.54	5.31
Supplemental documents.....	1,133,848	5,511,870	3,287,330	4,363,430	10.87	52.13	31.11	41.40

NOTE: Number of returns is based on three observations at each horizon and is not additive.

## Projections of Returns to be Filed in Calendar Years 1995-2001

1994, in preparation when this article was written.)

- [2] Supplemental documents include Forms 1040X, individual amended return; 4868, individual request for automatic filing extension; 2688; individual request for additional filing extension; 1120X, corporation amended return; and 7004, application for automatic extension of time to file corporation income tax return.
- [3] Economic and demographic variables were estimated by Data Resources, Incorporated, June 1994.
- [4] The number of returns filed (as used in this article) represents returns processed at IRS service centers and recorded in the IRS Master File system during a calendar year. The Master File system includes the Individual Master File (IMF), the Business Master File (BMF), and the Employee Plans Master File (EPMF). These figures do not include the 1.1 billion information and withholding documents processed by the IRS, such as interest and dividend statements on Forms 1099 and Forms W-2, *Wage and Tax Statement*. Information and withholding documents provide data for use in the IRS "information matching" programs (comparing amounts reported on information returns from payers with the amounts actually reported by taxpayers on their income tax returns). They are not considered to be tax returns. Most information documents are received on mag-

netic tape and processed at the IRS Martinsburg (West Virginia) Computing Center. For additional information, see Internal Revenue Service, Compliance Research, *Calendar Year Projections of Information and Withholding Documents for the United States and Service Centers: 1994-2001*, Document 6961 (Revision 4-94).

- [5] See U.S. Department of the Treasury, Internal Revenue Service, Compliance Research, *Calendar Year Return Projections for the United States, Regions, and Service Centers: 1994-2001*, Document 6186 (Revision 12-94) for further explanation of return types.
- [6] U.S. Department of the Treasury, Internal Revenue Service, Compliance Research, *Calendar Year Projections of Individual Returns by Major Processing Categories*, Document 6187 (Revision 9-94).
- [7] For further discussion of the issue of projection accuracy, see U.S. Department of the Treasury, Internal Revenue Service, Compliance Research, *Calendar Year Projections of Individual Returns by Major Processing Categories*, Document 6187 (Revision 9-94) and Geiman, Russell R., Nichols, Bonnie L., De Wilde, Carolyn D. "How Are We Doing? An Analysis of Projection Accuracy," *The IRS Research Bulletin* (9-91), Internal Revenue Service, U.S. Department of the Treasury.

# Projections of Returns to be Filed in Calendar Years 1995-2001

**Table 1.—Number of Returns Filed or to be Filed with the Internal Revenue Service, Calendar Years 1993-2001**

[Numbers of returns are in thousands]

Type of return	Actual 1993	Estimated 1994 <sup>2</sup>	Projected						
			1995	1996	1997	1998	1999	2000	2001
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<b>Grand total<sup>1</sup></b> .....	<b>203,042</b>	<b>204,821</b>	<b>207,069</b>	<b>209,617</b>	<b>212,413</b>	<b>215,236</b>	<b>218,076</b>	<b>220,915</b>	<b>223,744</b>
<b>Primary returns, total</b> .....	<b>192,685</b>	<b>194,048</b>	<b>196,372</b>	<b>198,731</b>	<b>201,304</b>	<b>203,888</b>	<b>206,498</b>	<b>209,115</b>	<b>211,733</b>
Individual income tax, total.....	114,116	114,909	116,720	118,305	119,811	121,299	122,792	124,298	125,824
Forms 1040, 1040A, 1040EZ, and 1040PC.....	113,754	114,540	116,320	117,868	119,334	120,779	122,225	123,682	125,155
Total paper returns.....	101,272	100,525	100,079	98,222	97,805	97,383	97,031	96,724	96,464
Paper Form 1040.....	59,893	60,281	59,329	58,954	58,332	57,605	56,841	56,190	55,509
Paper Form 1040A.....	20,085	18,909	18,195	17,810	17,536	17,337	17,170	17,043	16,938
Paper Form 1040EZ.....	16,520	17,197	17,189	15,510	15,370	15,212	15,098	15,008	14,946
Paper Form 1040PC.....	4,774	4,138	5,366	5,948	6,568	7,228	7,922	8,483	9,070
Total electronic returns.....	12,482	14,016	16,241	19,646	21,529	23,396	25,194	26,958	28,691
Standard electronic filing.....	12,334	13,497	15,514	16,981	18,385	19,708	20,985	22,228	23,448
TeleFile.....	149	519	727	2,665	3,144	3,688	4,209	4,730	5,243
Forms 1040NR, 1040PR, and 1040SS..... <sup>3</sup>	362	369	399	437	477	520	567	616	669
Individual estimated tax.....	37,101	37,129	38,020	38,624	39,227	39,830	40,434	41,037	41,640
Fiduciary income tax.....	2,950	2,999	3,049	3,102	3,158	3,215	3,273	3,331	3,390
Fiduciary estimated tax.....	630	648	667	679	691	703	716	729	741
Partnership..... <sup>4</sup>	1,567	1,549	1,510	1,486	1,467	1,453	1,445	1,442	1,444
Corporation income tax..... <sup>5</sup>	4,516	4,543	4,684	4,809	4,898	4,989	5,082	5,174	5,266
Estate tax.....	73	80	85	90	96	102	108	115	121
Gift tax..... <sup>6</sup>	218	225	232	240	248	256	264	273	281
Employment tax..... <sup>7</sup>	28,869	29,286	28,701	28,637	28,884	29,152	29,436	29,711	29,963
Form 1042 <sup>7</sup> .....	23	24	25	26	27	28	28	29	30
Tax-exempt organization..... <sup>8</sup>	538	550	564	577	589	601	612	622	631
Employee plan..... <sup>9</sup>	1,163	1,205	1,240	1,275	1,309	1,342	1,373	1,403	1,432
Excise tax..... <sup>10</sup>	859	842	817	827	847	868	887	906	923
Form 8752..... <sup>11</sup>	69	70	72	74	75	77	79	81	83
<b>Supplemental documents, total</b> .....	<b>10,357</b>	<b>10,773</b>	<b>10,698</b>	<b>10,887</b>	<b>11,109</b>	<b>11,348</b>	<b>11,579</b>	<b>11,800</b>	<b>12,011</b>
Form 1040X <sup>12</sup> .....	1,783	2,117	1,870	1,882	1,910	1,957	2,004	2,051	2,099
Form 4868 <sup>13</sup> .....	4,727	4,765	4,813	4,854	4,891	4,926	4,961	4,995	5,030
Form 2688 <sup>14</sup> .....	1,783	1,693	1,759	1,824	1,887	1,951	2,015	2,080	2,146
Form 1120X <sup>15</sup> .....	26	25	25	24	23	23	22	21	21
Form 7004 <sup>16</sup> .....	2,038	2,173	2,230	2,304	2,398	2,492	2,577	2,652	2,716

<sup>1</sup> Excluded from all totals are the following "Non-Master File" returns: Form CT-2, 941M, 990BL, and 1120-IC-DISC. Also excluded are withholding and information documents, including Forms such as W-2 and the 1099 series and related forms.

<sup>2</sup> Estimate, including that for some corporations, is based on returns processed through part of 1994. The actual number filed in CY 1994 was unavailable when this table was compiled.

<sup>3</sup> Form 1040X is included under "Supplemental documents," below.

<sup>4</sup> Includes Forms 1041 and 1041S.

<sup>5</sup> Includes Forms 1120, 1120A, 1120F, 1120H, 1120L, 1120POL, 1120S, 1120DF, 1120FSC, 1120PC, 1120REIT, and 1120RIC; Form 1120X is included under "Supplemental documents," below.

<sup>6</sup> Includes Forms 940, 940EZ, 940PR, 941, 941E, 941PR, 941SS, 942, 942PR, 943, 943PR, 945 and CT-1.

<sup>7</sup> Annual Withholding Tax Return for U.S. Source Income of Foreign Persons.

<sup>8</sup> Includes Forms 990, 990EZ, 990C, 990PF, 990T, 4720, and 5227.

<sup>9</sup> Includes Forms 5500, 5500C, 5500EZ, and 5500R.

<sup>10</sup> Includes Forms 11C, 720, 730, and 2290.

<sup>11</sup> Form 8752 is filed by all partnerships and S-Corporations electing either to maintain or establish any taxable year other than the required calendar year.

<sup>12</sup> Individual amended return.

<sup>13</sup> Individual request for automatic filing.

<sup>14</sup> Individual request for additional filing extension.

<sup>15</sup> Corporation amended return.

<sup>16</sup> Application for automatic extension of time to file corporation income tax return.

NOTE: Detail may not add to totals because of rounding.