LAO
60 YEARS OF SERVICE

Tax Agency Consolidation: Remittance and Return Processing

LEGISLATIVE ANALYST'S OFFICE

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Introduction

Chapter 569, Statutes of 2003 (AB 986, Horton), directs the Legislative Analyst's Office (LAO) to prepare a report that addresses issues related to the partial consolidation of the state's three principal tax agencies—the Franchise Tax Board (FTB), the Board of Equalization (BOE), and the Employment Development Department (EDD). The legislation mandates that the LAO report to the Legislature regarding the possible consolidation of payment and document processing of these three agencies. Specifically, based on information provided by the tax agencies, the LAO is required to determine if it would be beneficial to consolidate the management and control of these operations.

This report presents our major findings and recommendations regarding the consolidation of these functions. The report is divided in the following sections:

- Discussion of previous examinations of the consolidation of the tax agencies.
- Description and overview of payment and documentation processing of tax agencies in general.
- Description and examination of payment and documentation processing of FTB, BOE, and EDD.
- Fiscal and budgetary analysis of the possible consolidation of payment and documentation processing functions of FTB, BOE, and EDD.
- Fiscal and budgetary analysis associated with improvement of electronic transmission and processing of tax returns and payments, as well as other technological capabilities (such as data storage).
- Conclusions.

Summary of Findings. Consolidation of the tax agencies' payment and documentation processing activities could in the medium to long term generate some annual cost savings and interest earnings through elimination of duplicative functions and increased efficiencies. The state, however, would have to incur significant net costs in the short term to achieve these savings. In addition, such benefits are likely to be less than benefits from increasing electronic processing. We therefore recommend that low priority be given to consolidation of payment and document processing functions in favor of steps to increase electronic processing.

Past Proposals for Consolidation

California's three main tax collection and administration agencies are responsible for different taxes and provide somewhat different services, but share many similarities with respect to particular tasks and activities. Because of these similarities—and the potential for eliminating duplication and benefiting from economies of scale—these agencies frequently have been the subject of studies regarding the budgetary and effi-

ciency impacts of consolidation. Numerous statutory proposals directed towards various types of consolidation also have been introduced in the Legislature.

Past Analyses Are Numerous. Previous studies of the agencies have ranged from relatively minor analyses concerning the coordination of taxpayer outreach and information efforts, all the way to full consolidation of all three tax agencies into a unified department of revenue. Reports and studies regarding some type of tax agency consolidation began to appear in the 1930s, shortly after the establishment of the state sales tax and the personal income tax—both of which occurred in 1933—and have continued to appear regularly up to the current day.

Some significant studies and analyses regarding tax agency consolidation occurred in the relatively recent past. Figure 1 indicates the subject or focus of major reports that have been produced in the last 20 years, along with the findings or results (if any) of such analyses.

Restructuring Legislation Has Previously Been Proposed. The tax agencies have also been the focus of a substantial number of legislative proposals. Recent legislative sessions have included proposals to:

- Abolish FTB and BOE and establish a unified department of revenue under the executive branch.
- Abolish FTB and BOE and establish a unified department of revenue as a separate independent entity.
- Combine the three tax agencies—FTB, BOE, and EDD—under a restructured BOE.
- Combine all three agencies while separating the administration of the tax system from its adjudicatory responsibilities.

In the recently completed 2003-04 legislative session, several pieces of legislation were introduced that relate to the administrative processes at the agencies, including two bills which would have consolidated FTB's operation within BOE's existing administrative structure. While the many past studies and legislative proposals met with a variety of responses, none of them resulted in any fundamental alterations in the administrative structure of the tax agencies or how they relate to one another.

Figure 1

Tax Agency Restructuring—Recent Major Reports

Date	Reporting Entity	Report Title	Report Focus	Findings/Results
1986	Commission on California State Government Organization and Economy (Little Hoover Commission)	"Review of the Organization and Operation of the State of California's Major Revenue and Tax Collection Functions and Cash Management Activities"	Various administrative activities of FTB, BOE, EDD, State Controller, State Treasurer, Department of Finance, and Commission on State Finance.	Significant duplication of various administrative functions.
1987	State Auditor General (Bureau of State Audits)	"A Study of Consolidating the Cashiering Operations of the State's Three Largest Tax Collection Agencies"	Possible consolidation of cashiering operations of FTB, BOE, and EDD.	Consolidation is not justified based on savings.
1996	Governor's Executive Office	"Competitive Government" and "Consolidation: A Plan to Streamline California's Tax System"	Agency streamlining, elimination of duplicative functions, increasing administrative efficiencies.	Consideration of various consolidation issues. No final action.
1996	Franchise Tax Board and Board of Equalization	"Creating a Department of Revenue: Benefits, Concerns, Issues"	Analysis of a fully consolidated tax agency combining FTB and BOE.	No action.
2004	California Performance Review Commission	Chapter Title "Consolidate and Upgrade Cashiering in State Taxing Agencies"	Consolidate mail, cashiering, remittance processing, data capture, and image management of FTB, BOE, and EDD.	Pending.
2004	California Performance Review Commission	Chapter Title: “The California Tax Commission”	Establish new commission combining FTB, EDD, and certain components of the Department of Motor Vehicles.	Pending.

TAX AGENCY ACTIVITIES

General Overview

California’s three major tax agencies engage in very similar “front end” activities with respect to payment and document processing. In brief:

- They receive tax reporting forms and remittances (that is, payments) in either physical or electronic form.

- They process and deposit payments and allocate revenues to appropriate funds.

- They conduct data capture, which allows them to link payments to taxpayers' files and update their departments' basic databases.

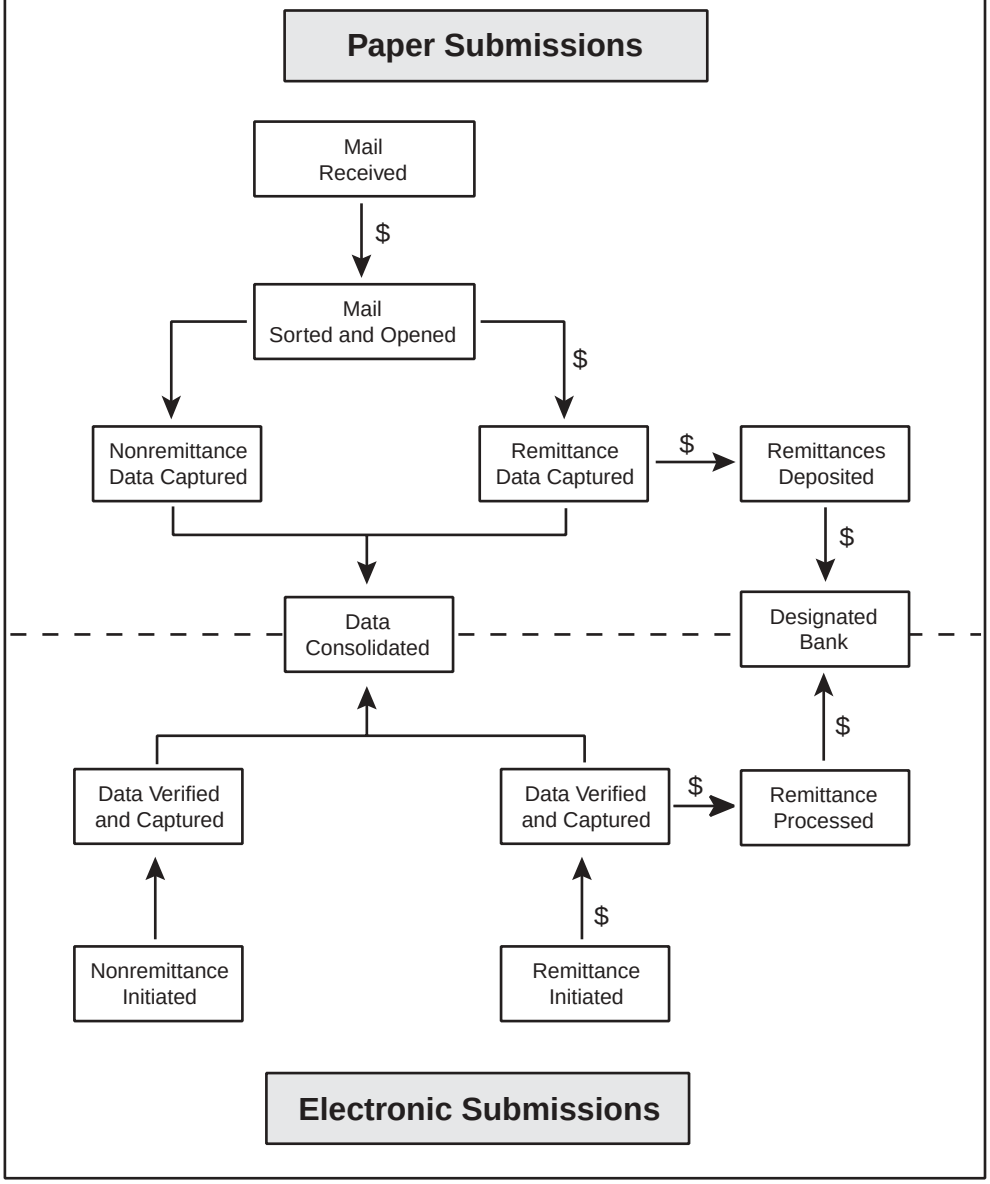
Past Reports Have Limited Relevance. The first and second of these steps—payment and document processing—are together often referred to as "cashiering," and in past analyses of consolidation these steps have been the primary focus of efforts to achieve savings. However, over the years the data capture component has become an increasingly integral component of the payment and document processing functions. In fact, data capture at some level is inextricably tied to cashiering functions—as payment processing is impossible without some data capture and the recording of certain return information as part of the cashiering process. For this reason, we have addressed the data capture dimension in this report.

Past reports also have tended to focus almost exclusively on issues related to processing of *paper* documentation (such was also the case regarding the *California Performance Review*). This exclusive emphasis is no longer warranted. This is because the use of *electronic* returns and payments has expanded rapidly (although at varying rates) at all three tax agencies. This expansion of electronic activities poses important considerations for the remittance and document processing functions of all three agencies. Furthermore, the rate of its future expansion has a significant impact on the magnitude of cost savings achievable through any physical consolidation. Thus, we have included the development of electronic processing as an integral component of our analysis, and expressly considered the savings potential of this approach.

The general processing functions that we examine in this report are: mail receiving, payment and document processing, and data capture for both physical and electronic dimensions. We describe, in a simplified manner, the general activities included in these functions below and in Figure 2. Note that these descriptions provide only a general guide to activities, and that exact tasks—as well as the ordering of those tasks—vary by agency.

Figure 2

General Workflow for Tax Agencies



General Processing Steps—Paper Submissions. These steps can be described as follows:

- ***Mail Received.*** Remittances and documents are delivered to or picked-up by the agency.

- ***Mail Sorted and Opened.*** Standard mail (in agency-sanctioned envelopes) in scannable envelopes is automatically sorted, opened, and its contents are removed. Irregular mail is manually opened and sorted.

- ***Contents Extracted and Sorted.*** Payments, partial payments, and documents with no payments are separated from each other. Payments and documents from the same tax program are accumulated and batch numbers are assigned.

- ***Data Captured.*** Returns and check amounts are totaled, balanced, and separated. Identification numbers are stamped onto both the return and the check. Additional data are collected from the return and sent to the agency for further processing.

- ***Payments Deposited.*** Checks are encoded, endorsed, sorted by bank, and deposited.

- ***Data Consolidated.*** Data compiled from payments and other documents are downloaded and entered into the tax agency's database.

General Processing Steps—Electronic Submissions. The steps here involve:

- ***Payments Initiated.*** Electronic payments are initiated by taxpayers through electronic funds transfer (EFT), credit card transactions, or other means.

- ***Returns Initiated.*** Electronic return filing is carried-out through computer-based electronic data interchange using modems, through Internet filing, or by means of magnetic tape delivered to the tax agency.

- ***Data Verified.*** Return information from various types of electronic submission is validated using tax agency programs and existing taxpayer information.

- ***Data Captured.*** Payment information is electronically fed to the tax agency's communications server and its database, and merged with electronically filed returns or with paper documentation submitted separately.

- ***Payments Processed.*** The EFT is processed by automated clearinghouse and payments are credited by the state's designated bank. Credit card transactions are processed by the tax agency's credit card processing vendor with payments credited by the state's designated bank.

- ***Data Consolidated.*** Captured information from remittances and nonremittances is downloaded and entered into the taxpayer's database.

The figure above provides a generally representative workflow profile of California's three tax agencies. There are, however, considerable differences in the ways the agencies perform these functions. In particular, they serve different taxpayer populations, employ different types of filing forms, make use of different filing methods, and

use different processing technologies. Thus, in order to compare the differences and similarities in the agencies' payment and document processing functions and address how consolidation might work, we provide added detail below on each of the tax agencies.

Franchise Tax Board

The FTB's primary responsibility is to administer California's personal income tax (PIT) and corporation tax (CT). The FTB also administers the Homeowners' and Renters' Assistance Programs, the Political Reform Audit Program, and the Household and Dependent Care Expense Credit. In addition, the department administers several nontax programs, including the collection of child support payments and other court-ordered payment programs.

For tax year 2002, the department processed more than 14 million PIT returns with tax liabilities in excess of $30 billion. During the same period, CT returns totaled more than one-half million and generated tax liabilities in excess of $5 billion. In addition to processing tax returns, the agency receives quarterly tax prepayments and remittances, and processes various other payments and documents throughout the year.

The FTB is governed by a three-member board, consisting of the Director of the Department of Finance, the Chair of the Board of Equalization, and the State Controller. The board retains an executive director for the purpose of administering the agency. The annual cost of the department's tax collection activities is about $440 million and is borne largely by the General Fund.

Workload Profile

The department processes and maintains data on a diverse array of programs. However, the great majority of its workload is in the tax area, which can be broadly divided between processing tax payments (remittances) and various other tax documents. Remittances include various payment documents (for example, quarterly estimated payments) and checks, taxpayer returns and checks, and other remittances. Other items relate to the department's tax documentation activities, such as tax returns and quarterly filings.

Tax-related documentation can be submitted either through physical delivery (that is, paper) or by electronic delivery. Paper documentation comprises 90 percent of submissions. Only about 10 percent of documentation is electronically filed. The collection of revenues, however, is more skewed towards electronic processing—either EFT or through some form of Internet-based or credit card payment. For example, of the total tax revenues collected by FTB in 2003-04, over $9 billion was collected through electronic means, representing over one-third of the total revenue received.

Workload Activities

The processing procedures at FTB consist of a variety of different activities that can vary substantially depending upon how the documentation is submitted as well as the content of the documentation. Despite these differences, most of the work is carried out using the same equipment and is based on similar tasks.

Figure 3

Franchise Tax Board Paper Workflow

Activity	Tasks
Mail received	Mail received from Post Office and delivered from district offices.
Mail screened/opened	Mail screened and sorted by machine according to zip code and extension. Standard mail opened by machine. Irregular mail opened manually.
Contents extracted	Contents are extracted by staff and sorted by workload and by scannable and nonscannable returns and remittances. Further subsorts also occur for nontax documentation, date stamping, or special handing (for example, correspondence).
Data captured	Staff manually key in data for nonscannable remittances and returns. Other documents are scanned, and remittances are identified with coupons and returns. This information is edited and either automatically or manually validated.
Payments reconciled/balanced	Payments and returns are balanced and a balanced register is completed and scanned into the system.
Payments encoded	Payments are endorsed and encoded. Checks are sorted according to contract bank or clearinghouse bank.
Remittances deposited	Deposit is prepared and picked up by bank courier at 1:30 pm.

A narrative chart of the flow of paper documentation for FTB is shown in Figure 3. As noted in the figure, the major activities for remittances and nonremittances—up to the point of payment processing—are virtually the same. All mail must be opened, contents extracted and sorted by various criteria, and data captured and validated. After this point however, the work becomes more differentiated.

Unlike the processing of paper documentation, the workflow associated with electronic processing of returns and remittances is quite simple. This method reduces or even eliminates many of the steps shown in Figure 3. No sorting or screening is required. Information and data are entered directly into electronic form, eliminating the need for scanning, imaging, or keying in of information. In addition, payments go directly from the taxpayer to the contract bank through EFT or other electronic means.

Workload Volumes and Resources

Of the over 20 million tax and other documents processed by FTB in 2003-04, almost 95 percent constituted remittance returns and payment documents from individual and business taxpayers. The remainder of the volume was nontax debt payments (such as child support) and contract payments (such as those to the Public Utilities Commission).

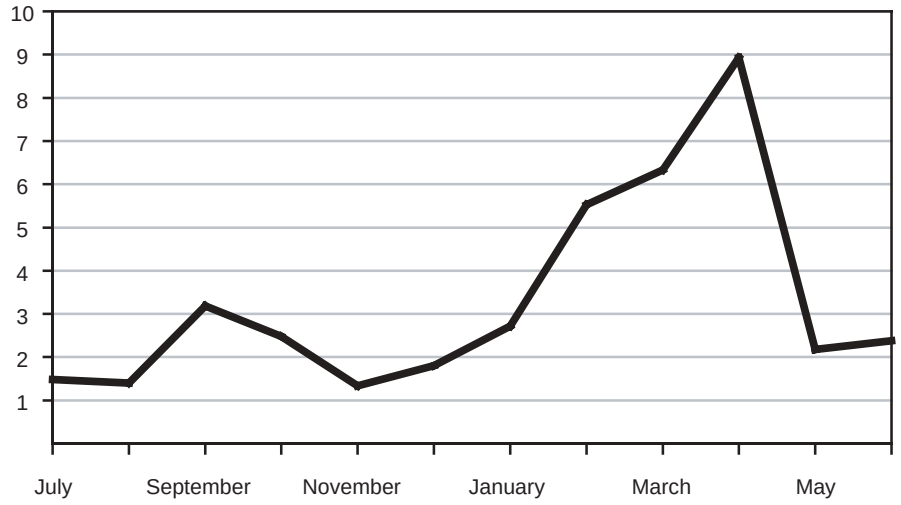
Work activity at FTB has a strong seasonal component, with a principal peak in the spring and smaller peaks during other quarterly intervals. This pattern holds true in terms of the number of documents processed as well as the number of hours required for such processing. This seasonal pattern is similar for both paper and electronic pro-

cessing and for remittance and nonremittance documents. Figure 4 shows paper and electronic remittances and nonremittances over a one-year period in terms of the actual number of document packages submitted.

Figure 4

Franchise Tax Board's Workload Peaks in the Spring

Documents Processed in 2003-04
(In Millions)



For different types of submissions, however, the timing is varied. The peak times for electronic remittances fall in the December-through-April period. For electronic nonremittances, the peak is February through April. Paper remittances peak during September, January, and the March-April period, while paper nonremittances tend to be somewhat more erratic, but generally cluster in quarterly groupings in October, February, April, and June.

Direct staff hours that are required to process various types of documentation differ substantially. Staff required for processing manually keyed paper documentation constitutes over 37 percent of available resources, somewhat more than its share of total volume. Electronic submissions, on the other hand, accounted for a tiny share of staff resources—under 1 percent of the total—despite constituting almost 7 percent of all submissions. The number of hours associated with these different modes of submission differs dramatically, but the overall pattern of processing shows seasonal peaks and valleys similar to that based on document workload.

Important Aspects of FTB's Processing

There are two particularly important aspects of FTB's processing activities: electronic filing and processing cost differentials.

- ***Electronic Filing.*** The department has moved increasingly to electronic filing and remittance processing for both individuals and businesses. It has begun to broaden Internet accessibility for filing purposes as well as to

other activities. It also has begun to require electronic filing for certain tax practitioners. As this movement towards increased electronic administration continues, it is likely to have a significant effect on the FTB's processing and administrative activities.

- ***Processing Cost Differential***. There is a wide processing cost differential between paper and electronic documentation. For example, in 2003-04, the FTB processed almost 1.3 million electronic remittances and used 265 direct staff hours for such processing—or about 4,800 remittances per direct staff hour. By comparison, the agency processed almost 19 million paper remittances using over 300,000 hours of direct staff time—or about 62 remittances per direct staff hour.

Board of Equalization

The BOE's major responsibilities are to: (1) collect state and local sales and use taxes (SUT); (2) collect a variety of business and excise taxes and fees, including those levied on gasoline, diesel fuel, cigarettes, and hazardous waste; (3) allocate certain tax proceeds—mainly SUT revenues—to the appropriate funds; (4) oversee the administration of the property tax by county assessors; and (5) assess certain unitary property for utilities and railroads.

In addition to its administrative role, the BOE also adjudicates tax disputes and appeals. The BOE board serves as the final administrative appellate body for personal income and corporation taxes administered by the FTB, as well as for the SUT and property taxes. The BOE is governed by a constitutionally established independent board—consisting of four members elected by district and the State Controller.

The BOE collected in excess of $40 billion in revenues from taxes and fees during the most recent fiscal year, including over $35 billion from the levying of state and local SUTs. Taxes collected by BOE account for about one-third of total state-level revenues. The board's largest program from an administrative and revenue standpoint is the SUT, which registers more than one million sellers. The General Fund is responsible for about 60 percent of BOE's 2004-05 budget of $327 million, with special funds paying for the remainder.

Workload Profile

Of the state's three tax agencies, the BOE has the most varied payment and document processing workload, consisting of remittances and filings for more than 20 different tax and fee programs. These programs have various annual, quarterly, monthly, and weekly reporting and filing requirements. In addition, the agency is responsible for attributing these filings and remittances to various funds—including the General Fund, state special funds, and local jurisdictions.

The department processes payments and other documentation and maintains data on a diverse array of tax and fee programs. The great majority of its workload, howev-

er, is associated with the tax area and, in particular, the state and local SUT. The workload associated with this tax program involves processing remittances and filings from sellers, crediting the taxpayers' accounts appropriately, and allocating the resulting revenue to the appropriate fund. It is also responsible for mailing returns directly to taxpayers for their completion.

The payment method consists of both paper documents and electronic submission—the latter mainly through EFT. About 60 percent of revenues received by BOE are from EFT, with the remainder submitted by check or other paper form. However, based on the actual *number* of remittances, the proportion remitted electronically represents a relatively small share of the total.

In contrast to FTB and EDD, where electronic filing is either well established or expanding rapidly, electronic filing at BOE represents a very small proportion of the total filing. In addition, filings by taxpayers that may be imaged and the essential data from the return captured electronically also represent a very small percentage of the total.

Workload Activities

The actual payment and document processing functions at BOE are quite disparate, varying by the type of tax and the type of remittance or document submitted. Work activities at BOE continue to be largely paper driven, and remittances and returns essentially go through the same process. Figure 5 indicates the work activity flow associated with paper remittances and returns.

A number of factors can serve to slow the processing pace at BOE. For example:

- Mail is x-rayed for foreign substances prior to being sorted. This occurs at a slower rate than the sorting machines are capable of processing the mail.

- The sorters are used for both incoming and outgoing mail. Thus, at peak processing times only 30 percent to 40 percent of the incoming mail may be processed in this manner. The remainder must be manually sorted.

- The BOE mails returns to taxpayers with BOE-provided return envelopes. If these envelopes are not used, the return mail must be manually sorted. Non-standard items can number in the 500 to 1,000 range on a normal day and about 5,000 during a peak period.

Workload Volumes and Resources

In the most recent processing year—2003-04—the department processed over 3.5 million tax returns and other documents. Of this total, about 2.4 million were associated with the state and local SUT. The remainder consisted of tax returns and other documents associated with the department's collection and processing of excise taxes, hazardous waste fees, and other miscellaneous revenue programs.

Figure 5

Board of Equalization Paper Workflow

Activity	Tasks
Mail received	Mail received from Post Office and delivered from district offices.
Mail x-rayed/sorted/opened	Mail screened for foreign materials. Standard mail (BOE envelope) is sorted by tax program and within tax program and slit by cutting equipment. Nonstandard mail (non-BOE envelope) is opened manually to determine the appropriate destination.
Contents extracted	Contents are extracted by staff and remittances compared to returns. Returns are noted as to whether no, partial, or full payment has been made. Late remittances and returns are examined manually and date stamped.
Deposit prepared	Completed batches are sent to deposit group. Checks and returns are keyed with identifying numbers, and separated. Document totals are added manually. Checks are encoded and deposit amounts balanced with document total. Checks are sorted by bank, and deposits are made.
Data entered	Returns are sorted by tax program and forwarded to key entry operators. Data is manually keyed into a software template and double keyed to ensure accuracy. Keyed information is edited for errors and mistakes.
Verification, analysis, allocation	All SUT return documentation undergoes further review and verification of computer-identified errors. Further analysis corrects more complex errors and allocation for various SUT funds is made.
Data downloaded	Clean documentation is downloaded to BOE database. Further reference to documentation will be made online without reference to paper documentation. Taxpayer records unit receives updated information.

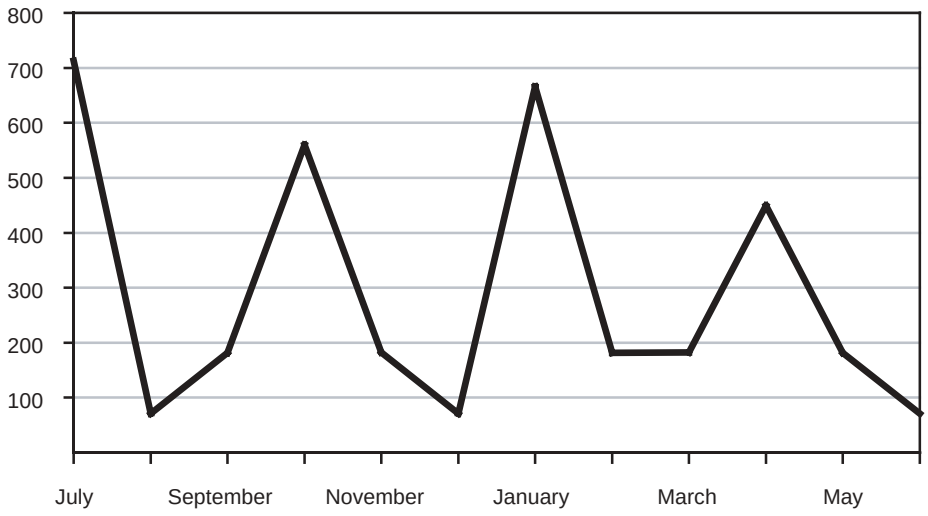
The work activity at BOE is more evenly distributed than at FTB, although there is still a strong seasonal component. The reason for the more spread-out nature of the work is due both to the number of different taxes and programs it administers as well as the various return frequency requirements that exist under the largest of these tax programs—the SUT. The daily volume of payments is in the 3,000 to 10,000 range during a normal day, with a peak volume of 30,000 to 70,000 checks. On average, 90 percent of checks are deposited on the day received, although delays may occur during peak periods. The annual pattern of activity is shown in Figure 6.

As indicated, the peak processing periods are July and January—corresponding to the beginning of the fiscal and calendar years, respectively. April and October, coinciding with the completion of the first and third calendar quarters, represent secondary peaks of activity. The department was unable to provide information regarding the number of hours required for various documentation processes to enable us to calculate direct and indirect resources used for payment and document processing activities over the year. In general, however, hours appear to be closely correlated to document volume.

Figure 6

Board of Equalization Has Quarterly Processing Peaks

Documents Processed in 2003-04
(In Thousands)



Important Aspects of BOE Processing

There are two particularly important aspects of BOE's processing activities: administrative complexity and its labor intensive nature.

- ***Administrative Complexity.*** The complexity of some of the agency's responsibilities can lead to delays in processing performance. For example, returns may be full of exceptions (with no, partial, or late remittance), which would necessitate additional follow-up work. In addition, processing at BOE requires accurate attribution of the SUT to one of several funds. Finally, SUT tax returns must go through additional verification steps in order to correct taxpayer errors, with complex issues referred to a return analysis section.

- ***Labor Intensiveness.*** Primarily as a result of BOE's varied workload, the agency has the biggest challenge (and has made the least progress) among the three tax agencies in terms of electronic and technological advances. There has been little development of electronic or imaging processing used in the BOE document processing workload—except for the EFT remittances noted above. Data entry unit activities involve hand keying of essential return information, with most returns "double-keyed" to verify accuracy.

Employment Development Department

The EDD is responsible for administering programs dealing with employment-related services, unemployment insurance (UI), and disability insurance (DI). The department collects UI contributions and employment training taxes from employers and collects DI contributions for the DI program. The department is also the agency responsible for collecting PIT withholding on wages and salaries. The department collects taxes and processes returns for approximately 20 million employees and from one million employers.

Prior to 1991, EDD conducted its mail and remittance operations in a labor-intensive fashion. One primary reporting form was used for the collection of all the various taxes administered by the department. Initial manual checks were made of both the form and the deposit to make sure they were in agreement. The check was then deposited and amounts distributed to the various funds. Substantial delays in the deposit of funds often occurred, leading to losses of interest earnings for the state.

In the late 1990s, EDD engaged in a technology project to upgrade and improve its remittance processing and cashiering operations. The upgrade program resulted in several new technologies for the processing of remittances and other mail, including: automated mail opening, imaging and workflow, remittance processing, data capture, electronic data interchange, and telefile. As a result of this program, the payment process was automated, and imaging, data capture, and payment processing were consolidated within the department.

Workload Profile

The workload at EDD consists of payments and tax documentation processing. Much of the processing of this workload occurs using the same equipment and is done simultaneously.

With respect to payment processing, over 40 percent of actual remittances are still processed by paper document, with another 25 percent of remittances made through the submission of magnetic media. Either of these methods requires that EDD play a direct role in the crediting of the funds to the correct financial institution. The remaining payments (about one-third) are made directly by the employer to the financial institution through EFT. By comparison, the collection of revenues is heavily weighted towards EFT. In 2003-04, 70 percent of revenues collected were received through EFT, with the remaining revenue received through paper means.

The department's tax and other documentation workload consists of numerous reporting forms for monthly wage and withholding, quarterly wage and withholding, annual reconciliation of withholding, new hire reports, independent contractor reports, and other miscellaneous reports.

The method of filing of reports and returns has remained largely in physical form. In 2003-04, less than 1 percent of returns were submitted electronically (Internet, telefile, and other means). However, well over 40 percent of filings were made through magnetic media, bringing the level of electronically filed returns reports to almost half. Theremainder consisted of paper returns and reports.

Figure 7

Employment Development Department Paper Workflow

	Tasks
Mail received	Mail received twice per day (nonpeak) or three times per day (peak).
Mail sorted	Sorted by Post Office box and by physical characteristics—irregular and regular. Regular mail to machine sort. Irregular mail to hand sort.
Mail opened	Regular mail opened by automatic machines or by semiautomatic process. Irregular mail opened manually.
Contents sorted	Contents sorted by single remittance, multiple remittance, nonremittance, and misdirected mail. Also sorted by approved EDD forms, other forms, and by how data will be captured—optical read or keyed.
Data imaged	Checks and documents sent to imaging and encoding. Nonremittances sent to scanning. Misdirected mail is forwarded or returned. Forms are scanned or imaged for data capture, data purification, data and check amount verification, encoding, and balancing. Forms which cannot be imaged are hand-keyed.
Documents batched	Remittances are batched and allocated to various funds. Checks are bundled by banks.
Remittances deposited	Deposit is prepared and picked up by bank courier at 1:30 pm.

Workload Activities

The department's general workflow pattern for paper is described in Figure 7. As with filings made to FTB, the use of electronic filing and payment methods—including telefile, EFT, magnetic media, electronic data exchange, and Internet filing—eliminates, or can significantly shorten, many of the steps outlined. For example, the use of EFT for remittances allows the deposit to go directly from the employer to the bank. The department is notified of the deposit electronically and credits the appropriate amounts to various funds.

Similarly, while the use of magnetic media for tax document filings does require the physical delivery of a tape, the electronic formatting involved eliminates many of the sorting and data capture steps required in paper documents. The department also sees the need for further improvements in this area, particularly with increased development of Internet filing approaches, as well as increased electronic adaptations for the account adjustments and corrections process.

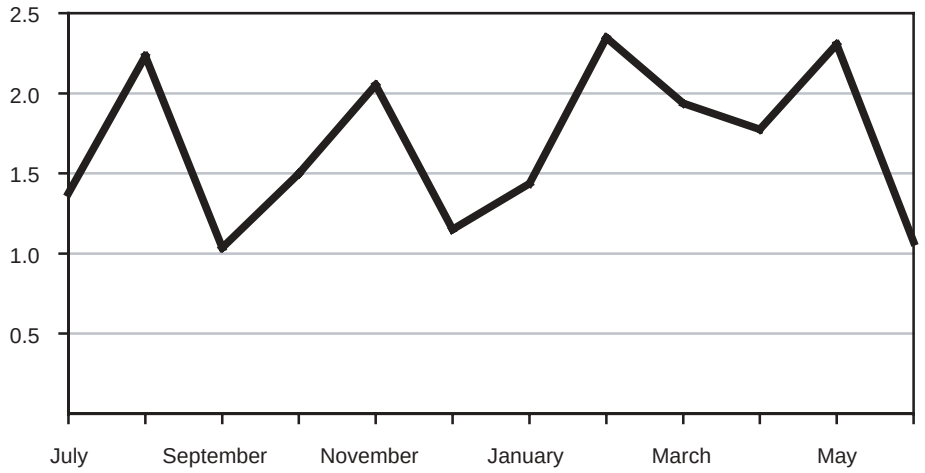
Workload Volumes and Resources

During 2003-04, the most recent full-reported year, EDD processed about 12 million remittances for all of its tax programs (UI, DI, employment training tax, PIT withholding, contingent fund, and benefit recovery). Remittances totaled $35.6 billion, with $26.9 billion for PIT withholding. Deposits for UI and DI totaled about $4.1 billion for each of these funds.

Figure 8

Employment Development Department's Activities Show Seasonal Pattern

Documents Processed in 2003-04
(In Millions)



Work activity at EDD has both a seasonal and weekly pattern. This pattern holds true in terms of the number of documents processed as well as the number of hours required. In addition, this seasonal and weekly pattern is similar for both paper and electronic processing and for payments and other documents. Figure 8 shows aggregate paper and electronic remittances and nonremittances over a one-year period in terms of the actual number of document packages submitted.

The peak times for electronic submissions (remittance and nonremittance) are quite similar—falling in August, November, February, and May. Paper document filings also peak during these months, while paper remittances tend to be somewhat less consistent, but generally occur in the month prior.

In terms of staff time and costs, paper processing remains quite expensive relative to other means of submitting documentation. For example, on the payment side, paper remittances accounted for just over 40 percent of the total volume, but demanded in excess of 80 percent of total staffing and direct hours. Similarly, the filing of paper returns and reports consumes a disproportionate share of the agency's resources. Paper filings constituted a little over 50 percent of total filings, but took up about 85 percent of direct hours and staffing. For example, 141 staff were devoted to 4.3 million paper returns, while 15 staff were devoted to 4.1 million magnetic media filings. In terms of staff hours, about 20 paper returns were processed per direct hour, while 154 magnetic media-filed returns were processed per direct hour.

Important Aspects of EDD Processing

Of particular note for this agency are the following issues:

- ***Data Storage.*** The department's efforts have been structured to reduce the amount of paper in the system. Thus, it has integrated the up-front processing and data capture functions. Hard copies of data are not retained, but rather all data are transferred to and stored in electronic form. In addition, the same equipment used for processing remittances is used for nonremittances, resulting in an integration of the cashiering and data capture processes.

- ***Document Exceptions.*** To the extent that the department receives documents in paper form, the existence of "exceptions"—such as non-EDD forms, irregular envelopes, remittances with nonremittance forms, and the like—adds considerable expense and overhead to the system. The department deals with these exceptions and putting the documentation and data into electronic form as expeditiously as possible.

Consolidating Tax Agency Processing

The above background discussion of the payment and document processing of the three tax agencies reveals that—in a broad sense—they carry out very similar activities in their treatment of remittances and returns. However, it also indicates that there exist very real and important differences in the detailed tasks in which they engage, the level and type of technology that they use, and the diversity of the work that they process. For instance, the tax agencies differ significantly in the following primary areas:

- The means by which documentation is submitted—physical documentation, magnetic tape, or electronic.

- The manner in which data capture is conducted and downloaded into electronic form—electronically processed, imaged, scanned, or key-entered by hand.

- The timing of data capture and archiving—complete capture during the front-end processing, partial capture at the front end and later completed, or minimal capture at the front end and later completed.

- The type and number of taxes administered and collected—a few homogeneous taxes deposited to one fund or numerous taxes of a heterogeneous nature with multiple funds.

Because of the presence of both overlaps in their general functions and significant distinctions in their specific activities, any consolidation would be a complex process. As directed by statute, we consider the fiscal implications of a physical consolidation below.

Economies of Scale

One of the standard means by which an assessment of whether a consolidation of tax agencies' operations would result in savings is by ascertaining whether or not "economies of scale" would occur. These are said to occur when an increase in output (or scale) results in a decrease in the average unit price of production. In other words, economies of scale exist as long as increased output results in declining average costs for each unit produced.

To the extent that scale economies are achievable through physical consolidation, this could occur through more intensive use of physical plant, capital equipment, or staffing levels. Specifically:

- ***Physical Plant.*** If consolidation included partial or full physical consolidation of the tax agencies' processing facilities—either through an expansion of existing facilities or a new centralized facility—a reduction in space might be achieved. As an example, a 20 percent reduction in space would result in savings of under $1 million annually.

- ***Capital Equipment.*** If the agencies' front-end processing equipment is somewhat compatible and has excess capacity, there may also be some potential savings from consolidating the use of this equipment. Given the different approaches to data capture as well as other activities, it is likely, however, that only minor savings would occur through consolidated use of the equipment.

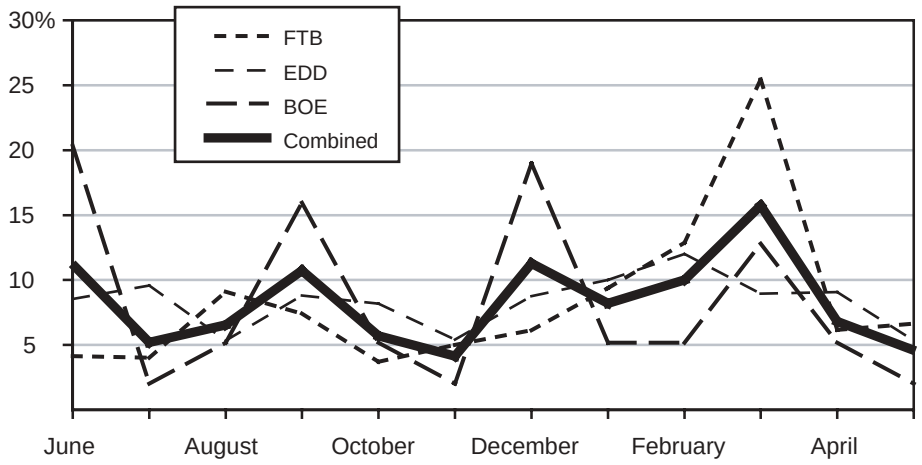
- ***Staffing Levels.*** Given the ability of the tax agencies to increase or reduce direct staffing levels depending upon processing requirements and workload, there are unlikely to be significant personnel savings from consolidation. However, there may be some savings from a reduction in indirect staffing (for example, middle and upper management) or the elimination of some training expenses.

Based on the limited amount of information we were able to gather from the tax agencies, there does appear to be *some* evidence of the existence of economies of scale—at least over the current output range for each of the agencies. That is, increased processing appears to relate to a reduction in the average unit costs for the limited number of workload categories we looked at. Economies of scale were particularly evident for electronic processing. However, we would note that a full analysis of scale economies—including variations among difference document types, tax types, and processing modes—is beyond the scope of this report. In fact, it is unlikely that the tax agencies would be able to provide—without incurring considerable expense—the data necessary for a comprehensive analysis of this type.

Figure 9

Comparison of Workload Timing of Individual Versus Combined Tax Agencies[a]

Percent of Annual Workload, 2003-04



[a]Index value in each month represents the percent of each respective agency's annual processing volumes in that particular month.

Workload Timing

It is also possible that consolidation could achieve savings related to workload timing. The seasonality and monthly variations in tax agency workload indicate that just as there are peak periods of remittance and nonremittance workload, there are off-peak periods as well, potentially resulting in underutilized capital equipment or staffing.

With respect to staffing, this does not appear to represent a significant issue for the agencies since peaks are addressed through either temporary hires or permanent-intermittent employment. However, to the extent that peak and off-peak periods for the three agencies partially offset one another, the use of shared or common equipment could result in reduced costs through a more consistent use of capital equipment. The process by which the use of capital equipment is equalized throughout the year is referred to as "workload leveling."

Figure 9 indicates the peak and off-peak processing activities of the three agencies, as well as for a combined agency (weighted to account for differing volumes). The figure—along with related statistical analyses we performed on the data—suggest that a consolidated tax agency may result in some workload leveling and thus achieve possible savings through more intensive use of capital.

Additional Interest Earnings

In the past, when the state was almost exclusively dealing with paper remittances and filings, processing backlogs would occur—particularly during busy weeks or months of the year. These backlogs would often result in lags of a week or more be-

tween the time payment was mailed by the taxpayer and when it was deposited by the state. These delays in making deposits would lead to a considerable loss in interest earnings by the state—sometimes exceeding millions of dollars annually.

As the state has become more reliant on electronic filings and remittances, lost interest due to delays in deposits has declined substantially. The tax agencies have provided the following information regarding lost interest due to deposit delays:

- ***Franchise Tax Board.*** The agency reports that in 2003-04, estimated General Fund interest lost by not making a "same-day" deposit was about $1.2 million. Most of this loss was due to the inability to process the sheer volume of remittances around April 15 when final PIT payments are made. In addition, however, about $200,000 was lost due to the absence of taxpayer information needed to credit the account. Average delays for deposits ranged from 2.5 days for certain "information-lacking" payments to four days during the April filing season.

- ***Board of Equalization.*** The agency has no direct information regarding loss of interest due to delays in depositing remittances. However, about 60 percent of revenues received by the agency are in the form of EFT. These funds are credited to the state's account on the same day that the remittance is initiated by the taxpayer, and thus no loss in interest occurs. The remaining revenues—about $10 billion—are received by the BOE in check format and thus are potentially subject to delay. The BOE experiences some delay every quarter and lesser delays on a monthly basis. Assuming that one-third to one-half of the checks are received during one of the 12 peak periods (quarterly peaks coincide with four monthly peaks), we estimate that the loss in interest earnings would be in the range of $1 million to $2.2 million annually.

- ***Employment Development Department.*** The agency receives about 70 percent of its revenues through EFTs and thus the issue of potential deposit delays applies to a relatively minor portion of its collections. According to the department, it experiences some delays in depositing checks, generally during the months when quarterly payments are due—August, November, February, and May. According to EDD, during 2003-04, a little over 100,000 payments were not deposited on the same day received. These represent about 2.2 percent of all paper remittances. The total amount of collections experiencing a delay was $117 million, and delays caused a loss in interest of about $5,000.

Interest Losses Are Currently a Minor Concern. Largely because of a shift in the means of remittance processing from paper to electronic deposits, lost interest due to processing backlogs likely represents a relatively small amount of potential state revenue. Based on 2003-04 data we were able to obtain from the agencies, these losses are

estimated to be between $2.5 million and $3.5 million annually. Such losses are very small at EDD, and moderate at FTB and BOE. One reason for the relatively small interest loss magnitude is the low interest rates that currently are in effect. If such delays were to continue during higher interest rate environments, the related interest lost could increase substantially.

While consolidation might be one way in which to achieve improvement in processing time, it is apparent that the decrease in processing time from earlier periods to the present is largely related to the increase in EFT and other electronic remittance activity, and is not due to using existing physical processing equipment more efficiently. The use of these means of remittances eliminates (not just reduces) delays in crediting the state account and maximizes interest earnings.

In addition, we note that making paper processing more efficient may be just a small component of any delay in depositing remittances. The state has no control over the length of time it takes the U.S. Post Office or other common carriers to deliver a physical document to the tax agency. During peak periods, this delivery-related (as opposed to processing-related) time delay may be considerable. For example, FTB indicates that delivery delays during the April 15 filing season may be three weeks or longer.

Because of these factors, large improvements in the ability to process paper documentation may result in relatively small fiscal gains. In addition, these small gains in terms of additional interest are likely to be overshadowed by the gains in interest income that could result from additional use of EFTs and other electronic remittance means.

Other Issues

Document Processing. The tax agencies carry out very similar activities during the initial processing of payments and documentation. Delivery, sorting, content removal, and data capture are all similar activities among the departments. However, these broadly defined activities conceal substantial dissimilarities that occur at a more detailed level. Some of these dissimilarities are simply based on administrative and management choices regarding how the processing activities are designed, while other differences relate directly to the different responsibilities of the departments.

As an example of the former situation, the mere physical dimensions of the envelopes and the tax return documentation requires that different types of equipment be used. It certainly is possible that such documentation could be altered such that the same process and equipment could be used for each of the three agencies. However, even this change would require an up-front investment in order to make all the various forms compatible in this regard.

As an example of the latter situation—different responsibilities—the tax agencies have very different requirements regarding the level and type of detail that is compiled. Sales tax filing forms are extremely detailed with respect to sales origin and allocation. They also have multiple pages resulting in returns that can be quite voluminous. Corporation tax returns can be exceedingly complex due to the number of reporting entities

and the manner in which income is apportioned. These substantial differences require different levels of data capture capabilities, resulting in a practical limit on the amount of consolidation actually achievable.

In each of these cases, adaptation is possible—in the first situation, by making revisions to physical documentation and, in the second situation, by putting in place equipment and tasks that are flexible enough to capture and process a variety of tax information. However, these changes would require substantial investment and raise the issue as to whether this is the means by which to capture the greatest savings through additional investment. In addition, each of the agencies receives a considerable amount of "exceptional mail"—mail that includes non-agency-produced forms, envelopes that cannot be scanned, and mail that includes letters. Thus, any processing system must be flexible to adapt to such exceptions.

Data Capture Approach. For each of the agencies, the process of data capture from tax returns is vital to the mission of the agency. The data capture process allows remittances to be properly credited to the taxpayer's account and tax agencies to note any discrepancies that occur. This, in turn, provides a basis for the entire spectrum of activities involving compliance, enforcement, audit, and collection efforts of the agencies—including any legal action that might ensue.

In addition, the data capture process is integral to the crediting of remittances to the proper funds. At FTB, this is largely the General Fund. For BOE, this includes special funds, the General Fund, local government funds, health care funds, as well as several others. The situation is similar at EDD, with remittances made for PIT withholding, disability insurance, and unemployment insurance, among others.

While each of the three tax agencies must recover and store volumes of data and taxpayer information, the manner in which this is accomplished is quite different. For example:

- At EDD, data capture is basically conducted coincidentally with remittance processing; data capture and remittance and nonremittance processing basically "nested" activities. Virtually all data capture is through scanning.

- At FTB, some data are captured up front with the remittance processing, but most of the necessary information is captured somewhat later in the process, particularly during peak periods. Data capture is through a mixture of scanning and keying-in data.

- At BOE, data capture at the front end is limited to only what is required to link payments with taxpayer accounts. Most data capture is through manually keying necessary information from each of the returns.

In terms of sophistication and speed, nesting the processing with the data capture component is the most advanced of the three approaches. Converting all three agencies

into this mode of operation would involve substantial investment in order to procure the necessary scanning and image capturing equipment.

Fiscal Impact of Consolidation

As suggested above, there are potential savings associated with consolidation of remittance, cashiering, and mail processing. The consolidation of various physical and procedural components of the processing activities of the three tax agencies could lead to more intensive use of capital equipment and reductions in physical plant requirements. This could result in annual budget savings in the low millions of dollars based on current filing and processing methods. However, achieving this level of savings would be largely dependent on some up-front investment by the state in new systems and equipment.

In the short term, these savings would likely be offset many times over by costs of re-engineering existing software to ensure compatibility, purchasing new or renovating existing capital equipment for shared deployment, reformatting existing remittance and nonremittance forms, as well as other changes necessitated by consolidation. Such costs are likely to be in the low tens of millions of dollars over a multiyear period.[1]

It is not clear how long the "payback" period for the investment in physical consolidation would be. This is because paper documentation and payments will constitute a shrinking proportion of payment and documentation processing as the use of electronic technologies expands. In fact, if electronic technologies are rapidly deployed by the tax agencies—as has occurred in other states—it is at least possible that the initial investment related to physical consolidation may exceed any eventual cost savings. This would occur if, due to the development of electronic technologies, physical processing rapidly became a substantially smaller share of overall tax agency processing activities.

It may be, however, that partial consolidation is intended to be a first step toward a more complete consolidation of the tax agencies. There are potentially many benefits from a full consolidation, such as increased coordination of compliance and enforcement activities. The partial approach may be one reasonable way to move this process forward. An alternative approach that would also advance overall consolidation is the aggressive pursuit of electronic technologies. This alternative approach—addressed briefly below—would also result in more substantial savings than would physical consolidation.

[1] For example, the Return Processing Automation Project (RPAP) submitted to the BOE board in December 2000, would have automated much of the tax processing at BOE at a cost of $31 million. Similarly, a technology "refresh" project currently in progress at EDD is expected to cost approximately $27 million.

Expanding Electronic Technologies

Recent advances in electronic communication and the ability of tax agencies to take advantage of these technological improvements provide a vital backdrop for any proposal to consolidate the tax agencies. As we have noted above, electronic payments through EFT or similar methods represent most of the revenues collected by each of the tax agencies. In addition, there have been significant expansions in the ability of taxpayers to file tax returns and other documents electronically, especially at FTB and EDD. Given the strength of the movement towards electronic transmission and processing and its potential for significant cost savings, we outline an alternative approach to simple consolidation—that is, expanding the use of electronic technologies.

Electronic Processing Increases Speed and Reduces Cost

Electronic Transmission Speeds the Process. Electronic remittances require the taxpayer to enter all information necessary to attribute any payment to the proper fund and results in the immediate deposit of a remittance to the state's account. This process eliminates the time consuming and expensive tasks associated with mail sorting, mail opening, data capture through scanning or keying, endorsing the remittance, and sorting and depositing the checks to the appropriate bank. The process not only eliminates these cost factors, but also eliminates delays in deposits caused by delivery delays or agency backlogs.

Electronic tax filing activities—such as quarterly filings and final payments—also eliminate many of the steps indicated above. In addition to the cost savings associated with the opening and processing steps noted above, the largest savings are achieved in avoiding labor-intensive processes of capturing data from physical documents. Instead of necessary data being keyed- or scanned-in, taxpayers enter data in an electronic form themselves and no further transcription is necessary. The data are immediately put into digital form, and are processed and archived by the tax agency without any intermediate processing required.

Electronic Filing Lowers Costs Substantially. As indicated above, the savings associated with expanding electronic remittances and filing are substantially greater than improvements in the processing of paper returns. For example, with respect to processing remittances, FTB reports that the cost of processing a paper remittance is about 55 cents, versus 9 cents for electronic remittances. Electronic processing of data-intensive documentation provides even greater savings compared to conventional methods.

Paper documentation is likely to represent a decreasing proportion of remittance and nonremittance activity. Thus, operational savings would have to be extracted or "squeezed" from a diminishing amount of paper processing costs. Since electronic filing and processing are an expanding part of the tax agencies' activities, focusing on these technologies would result in substantially greater savings.

Progress in Electronic Methods

Based on extensive conversations with the tax agencies and examination of data provided by these agencies, an alternative approach that expanded opportunities for electronic remittance and nonremittance processing would likely result in larger savings than the comparatively minor savings (and substantial short-term costs) indicated above for consolidation of paper-type workload. This approach would capitalize on improvements in electronic funds transfers, processing, and data storage.

Through various means, the FTB has increased the amount of electronic remittances and filings that occur. For example, tax practitioners who file 100 or more returns are required by statute to file electronically. In addition, FTB is expanding the ability of PIT taxpayers to file conveniently using Internet-based programs.

Data provided by FTB suggest that adopting additional incentives, expanding filing requirements modestly, and improving technological capabilities, could reasonably result in over nine million electronic returns by 2008. This would represent about 55 percent of the total, and be a substantial increase over the 600,000 electronic returns that were filed in 1997 (the first year such data were tracked). The department also expects significant growth in remittances filed electronically. To the extent that this type of growth is realized at FTB, and proportionately mirrored at EDD and BOE, it would represent a considerable increase from the current electronic filing and payment base.

Electronic Expansion Would Benefit Taxpayers

In order to successfully increase the amount of electronic filing and remittances, a combination of incentives and statutory requirements would need to be used. Some taxpayers would be influenced by the use of incentives—such as being able to receive refunds earlier than they otherwise would have. However, in other cases, electronic filing would need to be required in order to reach a cost-saving minimum threshold of electronic filers.

Expanding electronic technologies would significantly benefit many taxpayers. One of the adverse consequences of having three separate tax agencies is the considerable confusion it creates for some taxpayers. The uncertainty regarding what tax agency is responsible for what tax results in additional compliance costs for certain taxpayers.

Expanded electronic filing and processing would ease considerably taxpayer confusion and expense associated with the current system. In addition, however, these technologies could be used to achieve what might be termed a “virtual consolidation” of remittance and document processing. Under this type of system, taxpayers could log onto a single Web site and through a series of menus, be directed to the proper form which would allow them to file their taxes or remit a payment. This payment, in turn, would be automatically directed to the appropriate agency.

Fiscal Impacts of Electronic Technologies

As a component of this analysis, we requested the tax agencies themselves to provide general estimates regarding the costs and savings associated with certain expanded electronic processing options. Although the agencies took slightly different approaches, the estimates generally assume some up-front costs in the first few years for converting to such an electronic-based system, and substantial savings in the medium and longer term. Based on data provided by the agencies, the estimates of the savings are:

- ***FTB.*** Adopting various electronic filing and processing actions would result in annual savings in the $7 million to $10 million range, with first-year savings of about one-half that amount.

- ***BOE.*** It appears that by shifting to electronic processing in a variety of areas, the agency could annually save approximately $1 million.

- ***EDD.*** Annual savings from additional conversion of paper filings to electronic submissions would be in excess of $2 million, offsetting budgetary costs in the initial years due to required technology upgrades.

Based on these estimates, it would appear that by placing increased emphasis and resources on electronic payments and document filing, ongoing savings would be on the order of $10 million to $20 million annually for the agencies combined. In addition, converting to primarily electronic technologies would greatly facilitate the ability of the tax agencies to coordinate their compliance and enforcement efforts, which would likely result in additional revenue collections.

Conclusions

California's three principal tax administration agencies conduct very similar activities at the "front end" of the processing functions. There exist potential long-term savings associated with the partial physical consolidation of the agencies' payment and document processing activities by reducing duplication, streamlining staffing, and making more efficient use of existing capital.

However, these savings are likely to be achievable only through an up-front investment by the state in additional systems that allow the agencies' separate and distinct processes to function in a consolidated fashion. In addition, given that the agencies are at different levels of technological advancement, considerable additional investment may be necessary to avoid losing the technological edge that some agencies have achieved in their processing functions.

Although the partial physical consolidation presents a potential for budget savings, we think that an alternative approach focused on electronic technologies in the tax remittance and document processing is likely to result in greater budget savings. This approach would also present opportunities for greater consolidation of the activities of the tax agencies in the future and provide simplification benefits for tax payers.

Given these findings, we recommend that the Legislature consider various means by which to expand the role for electronic processing in order to achieve budget savings and ease the compliance burden on taxpayers.

This report was prepared by Mark A. Ibele and reviewed by Jon David Vasché. The Legislative Analyst's Office (LAO) is a nonpartisan office which provides fiscal and policy information and advice to the Legislature.

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