January 7, 2022

Dear Interested Party:

Enclosed is the Discussion Paper on proposed amendments to Audit Manual – Chapter 13, *Statistical Sampling* and Chapter 4, *General Audit Procedures*. We would like to invite you to discuss the issue and present any additional suggestions or comments. Accordingly, a virtual interested parties meeting is scheduled as follows:

**February 2, 2022**
**10 a.m.**
*(Microsoft Teams)*

You may join us on your computer or mobile app through [Microsoft Teams](http://www.cdtfa.ca.gov) or by calling 1-916-535-0987 and then entering the conference identification number 145 701 862. You are also welcome to submit your comments to me at the address or fax number in this letterhead or via email at BTFD-BTC.InformationRequests@cdtfa.ca.gov by February 23, 2022. You should submit written comments including proposed language if you have suggestions you would like considered during this process. Copies of the materials you submit may be provided to other interested parties, therefore, ensure your comments do not contain confidential information. Please feel free to publish this information on your website or distribute it to others that may be interested in participating in the meeting or presenting their comments.

If you are interested in other Business Taxes Committee topics refer to the CDTFA webpage at [http://www.cdtfa.ca.gov/taxes-and-fees/business-taxes-committee.htm](http://www.cdtfa.ca.gov/taxes-and-fees/business-taxes-committee.htm) for copies of discussion papers and calendars of current and prior issues.

Thank you for your consideration. We look forward to your comments and suggestions. Should you have any questions, please feel free to contact Business Taxes Committee team member Michael Patno at 1-916-309-5303, who will be leading the meeting.

Sincerely,

Aimee Olhiser, Chief
Tax Policy Bureau
Business Tax and Fee Division
cc:  (all with enclosures)
    Mr. Nicolas Maduros (MIC 104)
    Ms. Trista Gonzalez (MIC 104)
    Mr. Robert Tucker (MIC 83)
    Ms. Susanne Buehler (MIC 43)
    Ms. Michele Pielsticker Linton (MIC 105)
    Mr. Jason Mallet (MIC 25)
    Mr. Robert Colivas (MIC 47)
    Mr. Bill Hain (MIC 70)
    Mr. Hal Lovell (MIC 62)
    Mr. James Dahlen (MIC 57)
    Mr. Jason Parker (MIC 49)
    Mr. Steven Mercer (MIC 25)
    Ms. Ester Cabrera (MIC 23)
    Mr. Jeff Vest (MIC 85)
    Mr. Mike Loretta (MIC 42)
    Ms. Pamela Bergin (MIC 82)
    Mr. Bradley Heller (MIC 82)
    Mr. David Levine (MIC 85)
    Ms. Dana Brown (MIC 85)
    Ms. Casey Tichy (MIC 85)
    Mr. Cari Huxsoll (MIC 82)
    Mr. Joseph Boniwell (MIC 82)
    Mr. Mike Skikos (MIC 47)
    Mr. Marc Arniotes (MIC OHB)
    Mr. Jacob Kepple (MIC OHA)
    Mr. Todd McLain (MIC OHA)
    Mr. Jeffrey Wolf (MIC OHA)
    Ms. Lynn Whitaker (MIC 50)
    Ms. Laurel Williams (MIC 101)
    Ms. Mariflor Jimenez (MIC 49)
    Mr. Brian Brewer (MIC 57)
    Mr. Tuan Nguyen (MIC 57)
    Mr. Gentian Droboniku (MIC 67)
    Mr. Tom Trach (MIC 67)
    Mr. Greg Buehrer (MIC 44)
    Ms. Jamie Mason (MIC 44)
    Ms. Katherine Katayama (MIC 44)
    Ms. Christine Castillo (MIC 104)
    Mr. Marc Alviso (MIC 104)
    Ms. Claudette Yang (MIC 104)
    Mr. Michael Lee (MIC 43)
    Ms. Karina Magana (MIC 47)
    Mr. Dennis David (MIC 47)
    Ms. Lyndsy Barge (MIC 47)
    Mr. Bradley Miller (MIC 92)
    Ms. Ardyn (Hazel) Iguban (MIC 92)
    Mr. Robert Prasad (MIC 50)
    Mr. Michael A. Patno (MIC 50)
DISCUSSION PAPER
Proposed Amendments to Audit Manual
Chapter 13, Statistical Sampling, and Chapter 4, General Audit Procedures

Issue

The California Department of Tax and Fee Administration (Department) is amending Audit Manual (AM) Chapter 13, Statistical Sampling, and Chapter 4, General Audit Procedures, to clarify and update the policies and procedures followed when using statistical sampling in audits. Only the sections of Chapter 4 that reference Chapter 13 are being amended at this time.

Background

Chapter 13 provides guidance to team members on how to use statistical sampling when conducting audits. The last major rewrite of Chapter 13 occurred in 2001. At that time, the Department was conducting predominately paper-based audits of the paper records prepared and maintained by taxpayers. Today, however, many taxpayers maintain only electronic records and Department auditors review them through the taxpayers’ systems.

Chapter 13 text has been rearranged and extensively revised by removing some of the statistical sampling theory and technical jargon in favor of clearer directions for auditors to follow while conducting audits. Policies have been rewritten for updates and improved clarification, and the proposed amendments include the addition and removal of some key policies. The Chapter 13 update encourages auditors to use the best sampling practices.

During our revision process, it is customary to show proposed amendments using underlined text for new text and strikeout text for deleted text. However, since the proposed amendments to Chapter 13 were numerous, we decided for ease of reading to present Chapter 13 in its entirety without underline or strikeout text. See Exhibit 1. This discussion paper addresses the proposed changes to the chapter in the order they appear in the Audit Manual.

Discussion of Chapter 13, Statistical Sampling

COMPUTER AUDIT SPECIALIST – AM 1301.25

We propose to renumber and rewrite this section to explain what a Computer Audit Specialist (CAS) is and their relationship to a Computer Audit Program. The CAS provides technical assistance to Department auditors who are working with taxpayers’ electronic data, conducting statistical samples, or working with complex accounting systems. The CAS has access to specialized software programs capable of processing large data sets in a variety of data formats. AM 1301.25 addresses when to contact the CAS and what auditors should expect when working with them. The Computer Audit Program was initiated in response to the growing need to audit through sophisticated taxpayer computer systems.

First, for sales and use tax audits, we propose that a CAS be contacted when the hours charged on the prior audit were 300 or more hours instead of the current 400 hours. To efficiently audit through electronic records, the CAS should be involved in an audit at the earliest possible stage. We believe that lowering the threshold to 300 prior audit hours charged will help auditors better plan audits that will likely need CAS services. At the time each mandatory CAS audit is assigned
to an auditor, the lead auditor must contact their specific CAS to arrange a meeting to review the prior audit and discuss the current audit objectives.

The Department is also adding requirements for CAS involvement on special taxes and fees accounts. When beginning an audit of cigarette and tobacco products distributors, emergency telephone user surcharge, suppliers of motor vehicle or diesel fuels, and any other special tax and fee accounts, we propose that it be mandatory to contact a CAS when the prior audit took 100 or more hours. In all other cases for special taxes and fees accounts, the audit supervisor of a specific tax or fee program will determine whether a CAS should be involved.

Second, AM 1301.25 will encourage auditors to contact a CAS (regardless of the size of the audit), whenever assistance is needed due to the volume of computerized records, or whenever auditors need assistance in setting up a test or have questions regarding statistical sampling procedures. The CAS should be contacted before the first meeting with the taxpayer or as soon as a problem arises. When data is received, the CAS will verify the data is complete, analyze it, and then prepare summaries. Auditors will use the summaries to reconcile the data to the taxpayer’s books and records. The CAS and the auditor will process the data and develop an efficient and effective sampling approach. If an actual basis review is not feasible, the CAS will pull a statistical sample and provide a sample workbook to the auditor. Auditors are responsible for preparing the audit sampling plan and evaluating the sample results.

REQUIRED ELECTRONIC DATA – AM 1302.00

The text of AM 1302 is entirely new and references sections of the law and regulations that support the Department’s right to receive electronic data maintained by the taxpayer. This new language encourages audit staff to obtain complete data sets from taxpayers to allow for statistical sampling to be utilized. This leads to more accurate and efficient testing. For proper statistical sampling to be performed, specific data fields are required to be able to accurately determine the taxability of transactions in the audit population. This section lists key fields auditors should ask to be included in the data and encourages audit staff to reach out to the CAS with any questions.

SETTING UP THE TEST – AM 1303.00

AM 1302 has been renumbered to AM 1303. Most of the current AM 1302 text remains but numerous small changes are recommended throughout the new AM 1303 which include:

- AM 1303.05 clarifies that the main purpose of the audit program is to determine the accuracy of reported amounts in the least amount of time, specifically through statistical sampling.
- AM 1303.15 directs that once a population has been defined, auditors should try to further refine it, by removing transactions they can easily identify as non-errors, which can lead to lower confidence intervals, reduced sampling risk, and greater precision of the estimated liability or refund.
- AM 1303.15 explains that a statistical sample can be performed in instances when taxpayers only have a year or two of records available for an audit, provided the reasons
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for doing so are well documented in the audit. AM 1303.15 also includes an example of a population reconciliation (see new Chapter 13, Exhibit 6).

- AM 1303.20 addresses and provides examples of a sample unit. It also discusses sample units when working with electronic data as well as when auditors should create a “unique” field in the data.

Special Considerations – AM 1303.25

This section was amended considerably to revise text, section numbering, subsection titles and to add additional special factors to consider whenever a statistical sampling plan is being developed.

Voids - This section has been revised to explain that since voids are not considered true sales, they should be removed upfront during the reconciliation and refinement process.

When voids are not removed from the population upfront, and a sample item is a voided transaction, it should be considered a “zero” or non-error within the sample numerator. There should be no removal of any voids in the sample denominator or population as the treatment of the void(s), as a non-error, is represented in the projected results.

Credit Invoices and Credit Memos - This section was also extensively revised starting with explaining how long electronic data should be maintained pursuant to Sales and Use Tax Regulation 1698, Records, and Special Taxes Regulation 4901, Records. Records are typically required to be maintained for four years. However, for reporting periods subject to the extended statute of limitations contained in Revenue and Taxation Code section 7073(d) regarding the tax amnesty program, records must be maintained for ten years.

Credits reduce or totally offset previously issued invoices, which affect the taxability of an original invoice. The subsection currently lists three types of credit methods that can be used for a statistical sample. The Department now only recommends one credit method for use in a stratified statistical sample which is referred to as “Method 1” in the current AM text. When auditors are reviewing electronic data, attempts should be made to match up credit invoices to original invoices (including partially) if it is certain the credit invoices are related to the original invoice. For all credit memos that are not matched to original invoices, these credits will be removed from the population prior to selecting samples. However, these credits, and any other credits not originally provided, are available to be used to offset any invoices that are selected during the sampling process. This is to ensure that the final net amount related to the transaction in question is used to project any errors related to that transaction. Credits may not be used to offset invoices not included in the sample base.

Other amendments in AM 1303.25 add new special considerations, such as:

- Multiple Divisions - Usually applies to a large company with multiple divisions in which each one uses a different accounting system.
- Cut-off Techniques - The section recommends auditors review all the sample items selected as part of a test but to be aware there are times when they need to cut-off the test and abandon the sample.
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- Non-Recurring Errors - The new section explains how the auditor should handle unusual or infrequent errors encountered in a sample.

SAMPLE SELECTION TECHNIQUES – AM 1304.00
This section has been updated to encourage team members to use stratified random statistical sampling whenever feasible. Unrestricted random sampling, systematic sampling, and cluster sampling have been moved to new AM 1309.00, Other Sampling Techniques. AM 1304.00 amendments provide auditors with practical advice and guidance on how to perform a stratified random sample. The section also provides guidance on how many strata to use and where to determine strata breaks. Finally, a paragraph discussing the difference between sampling “with replacement” and “without replacement” has been added.

DETERMINING SAMPLE SIZE – AM 1305.00
Currently, AM 1303.25 lists population size, confidence level/interval, cost benefit ratio, standard deviation, and stratification as factors affecting sample size. These have been replaced in new AM 1305.10 with materiality, expected error rate, and refunds.

Currently, the “minimum sample size of at least 300 items of interest is to be used in all tests, except where the auditor can support a smaller sample size and it evaluates well.” (AM 1303.05.) Under the new subsection titled “Materiality,” a minimum of 300 sample items per test stratum is recommended. CAS approval is required for selecting less than 300 sample items per test stratum.

In many instances, a sample size of 300 items, for all test strata combined, is not a sufficient sample size to accurately estimate the taxpayer’s liability or refund. We are recommending that as a default, auditors should be required to review at least 300 sample items per test stratum. There are, however, instances when using a smaller sample size is justified. The current versions of AM 1303.05 and AM 1303.10 state it is the auditor’s discretion for when to use a smaller sample size and the support required to justify that decision is ambiguous. The proposed change requires that the auditor’s support be reviewed and approved by the CAS to ensure that a smaller sample size is justified.

In the section addressing sampling refund populations, team members can select as few as 100 sample items per test stratum without CAS approval, provided the expected error rate is sufficiently high (greater than 20%). With an error rate of 20%, and a sample size of 100, a smaller sample size is justified because the test stands an approximately 95% chance of evaluating within the CDTFA standards outlined in Chapter 13.

EVALUATION OF SAMPLE RESULTS – AM 1306.00
This section has been renumbered and updated to discuss problems the auditor might encounter, and how to deal with them, if their stratified random sample does not evaluate. A statistical sample needs to evaluate with a 75% confidence interval, at an 80% confidence level to project. Worksheet templates were developed to assist team members with their statistical evaluation calculations. One template is for a combined evaluation of all strata including the actual basis...
for every sample item.

**ESTIMATION - PROJECTION TECHNIQUES – AM 1307.00**

This section has been renumbered and now recommends two projection techniques for estimations instead of the current three. The two projection techniques that continue to be recommended for use in audits conducted by team members are the ratio estimation and difference estimation. The ratio estimation is a projection technique that applies a percentage of error to the stratum’s recorded book value. The percentage of error is calculated by taking the sum of the errors questioned in the stratum and dividing it by the sum of the stratum’s sample items. The difference estimation is also a projection technique that calculates the average error per sample item (sum of errors ÷ sample size) and applies it to the number of units in the stratum’s population. At times, it may be a useful statistical method in situations where no recorded book value is available for individual population items or the taxpayer has been using estimates. This projection method may also be used when auditing a taxpayer’s zero-dollar transactions in a sales exam.

The mean-per-unit projection technique was removed as it is no longer considered to have any practical application to sales and use tax audits.

**WORKING PAPER TECHNIQUES – AM 1308.00**

This section had minor changes regarding the “minimum documentation” required for statistical sampling. Clarifying language regarding the documentation currently required has been added, as well as several additional types of records that should be included to document the sample.

**STATISTICAL SAMPLING AUDIT PROGRAM – AM 1310.00**

The significant change to this section is the deletion of the ‘three error’ rule requirement. The current text of AM 1308.05 explains that when a sample produces only one or two errors, the auditor must evaluate whether these errors are representative, or whether it is possible that they indicate problems in certain areas that could be examined separately. The manual further explains that such a low error occurrence rate could then leave doubt as to whether the sample is representative and should be projected. However, the number of errors identified in a sample does not give any indication whether the sample is representative or not. For example, a sample with a low error occurrence rate could be a representative result for a population with a low error rate. Through the statistical evaluation math, we can calculate the accuracy of our estimates regardless of how many errors are found. If the combined evaluation evaluates within Department standards, it is justified to project the results even if one or two errors are found. The same evaluation standards will still be in place and will ensure unreliable statistical samples will not be extrapolated.

In addition, we believe there are benefits to doing away with the three-error rule. It will encourage auditors to use the best sampling practices, including stratifying more and selecting fewer overall sample items. In many instances, the Department contends that team members could avoid unnecessary work by both the auditor and the taxpayer associated with expanding a sample or
scheduling known errors on an actual basis for a given test stratum, when fewer than three errors are found. Additionally, there would be more opportunities to use prior audit percentages of error on subsequent audits, which would be more efficient for both the taxpayer and the Department.

Discussion of Chapter 4, General Audit Procedures

The changes being proposed to Chapter 13 also impact several subsections of Chapter 4. The proposed changes to Chapter 4 include reference updates and additional audit scenarios requiring the involvement of a CAS serving in a consulting capacity. Other changes involve the usage by CAS of the Notes tab in the Department’s computer system. Notes are mandatory for all audit assignments and create a record of contacts, audit team members’ actions, taxpayer responses, and significant events that occur during an assignment. See Exhibit 2.

Summary

This paper discusses the significant amendments being proposed by the Department concerning AM Chapter 13, Statistical Sampling and AM Chapter 4, General Audit Procedures, such as:

- The three-error-rule has been removed.
- 300 minimum sample items per stratum is required unless the auditor has obtained approval from CAS to select fewer than 300.
- Refund Populations – Minimum of 100 sample items per stratum is required.
- It is now mandatory to contact CAS when the prior audit had 300 hours charged to the audit.
- Credit Methods 1, 2, and 3, have been replaced with one recommended approach to handling credits in a statistical sample.
- The mean-per-unit projection technique has been removed

We welcome any comments, suggestions, and input from interested parties on the proposed amendments to AM Chapters 13 and 4. We also invite interested parties to participate in the February 2, 2022 interested parties meeting via Microsoft Teams. The deadline for interested parties to provide written submissions regarding this discussion paper will be February 23, 2022.
Audit Manual

Chapter 13

Statistical Sampling

Business Tax and Fee Division
California Department of Tax and Fee Administration

This is an advisory publication providing direction to team members administering the Sales and Use Tax Law and Regulations. Although this material is revised periodically, the most current material may be contained in other resources including Operations Memoranda and Policy Memoranda. Please contact any California Department of Tax and Fee Administration office if there are concerns regarding any section of this publication.
TABLE OF CONTENTS WILL BE ADDED LATER.
INTRODUCTION

GENERAL

This chapter provides guidelines to follow when a statistical sample is used to perform a test in an audit. There is no intention to establish rigid rules; rather this chapter will set forth general goals for statistical sampling and will allow auditors discretion in the implementation of various analytical procedures to develop an appropriate sampling plan.

Planning and evaluating audit samples is a critical part of the California Department of Tax and Fee Administration’s (CDTFA) mission, as stated in Audit Manual (AM) section 0101.03. During the sample planning phase, auditors gather information about the taxpayer’s accounting systems and tax issues. Auditors should take the opportunity to educate taxpayers on the objectives of the sampling process and encourage taxpayers to offer suggestions on designing the sampling plan. The taxpayer may be able to share specialized knowledge about their accounting system and sampling techniques that could result in a more effective and efficient audit. Auditors should work with taxpayers to find the best procedures for a given situation. However, it is a general principle of auditing that auditors are ultimately responsible for assuring that adequate tests are conducted to provide them with assurance of the accuracy of the records. Auditors should refer to Chapter 4 for general audit procedures regarding tests of specific items.

The primary objective of tax and fee audits is to determine, with the least possible expenditure of time for both taxpayers and auditors, the accuracy of the reported tax. Auditors should consider the possibility of both overpayments and underpayments when designing a sampling plan. A sample or an audit may result in a net refund if the dollar value of tax overpayment errors exceeds the value of tax underpayment errors. As stated in AM section 0101.20, CDTFA is just as willing to recommend a refund of an overpayment as we are to propose a deficiency determination.

AM section 1311.00 contains a glossary of terms relevant to testing by the statistical sampling method. CDTFA auditors are required to have a working knowledge of these terms. It is suggested auditors be familiar with these terms prior to reading this chapter.

TESTING WITH STATISTICAL SAMPLES

Publications of the American Institute of Certified Public Accountants (AICPA) and its committees have recognized the importance of statistical sampling in financial audits. Statistical sampling is widely used in private industry and by certified public accounting firms. There are also well-established statistical sampling programs used by the Internal Revenue Service and other states in their tax audits.

Certified Public Accountants perform many different types of audits, including tax audits. In financial statement audits, the auditor’s primary objective is to reach a conclusion about whether there is sufficient evidence to conclude that the financial statements are fair representations of the entity’s condition. Financial auditors perform both attribute and variable sampling, but their conclusion is either “yes” or “no.” Tax auditors have a more difficult task — to estimate the difference between the taxpayer’s reported tax and the tax due as estimated from the audit evidence. It is important to understand the difference in the two approaches in order to be able to successfully discuss the audit results with taxpayers and their representatives.
The CDTFA encourages the use of statistical sampling techniques whenever feasible. CDTFA auditors must develop and use recognized testing methods that will be accepted with confidence by taxpayers and their accountants.

**ADVANTAGES OF THE STATISTICAL SAMPLE**

A statistical sample provides for objective projection and evaluation of the sample results. When a sample is obtained by this method, it is possible to state with a desired level of confidence that the sample result is no further away than some calculable amount from the result attainable from a complete examination of all items. This provides a number of advantages which are explained as follows:

**a. Sample Result Is Objective and Defensible**

One important feature of statistical sampling is that all items in the population have an equal or known chance for selection as a sample item. This random selection process eliminates bias and produces an objective and defensible result.

**b. Method Provides for Advance Estimation of Sample Size**

An advance estimation of the sample size can be computed based upon statistical principles. The advance estimation provides both a defense for the reasonableness of the sample size and a justification for the expenditure involved. However, determination of sample size is not purely mechanical – it calls for good analytical skills and decisions by auditors. The CDTFA policy concerning minimum evaluation requirements (AM section 1306.15) should also be considered.

**c. Statistical Sampling May Save Time and Money**

When the information is available to calculate an advanced estimate of the required sample size, a statistical approach may result in a smaller sample size than might be arrived at using a non-statistical approach. Although the statistical approach will not always produce smaller sample sizes, they will always result in an objective and defensible audit result.

**d. Multiple Samples May Be Combined and Evaluated**

When the entire test has an objective and scientific basis, it is possible for different auditors to participate independently in the same test and for the results to be combined as though the test was accomplished by one auditor. For instance, in an audit covering a number of locations, the audit can be accomplished independently and separately at the different locations and the results combined for an overall evaluation, if statistical sampling techniques are used.

**e. Objective Evaluation of Test Results Is Possible**

The results of a judgmental sample can be projected to the population, but there is no way of objectively evaluating the reliability or accuracy of the test. If the statistical method is used, the audit test result can be projected, given a stated confidence level, to be within not more than a known interval from the result that would have been obtained if the population had been examined on an actual basis.
ATTRIBUTE SAMPLING VS. VARIABLE SAMPLING

Attribute sampling provides a qualitative measure that estimates the proportion of items in a population containing an attribute of interest. In attribute sampling, the value of each data item is one of a few discrete qualitative categories:

a. Missing or non-missing;
b. Underpaid, correctly paid, or overpaid;
c. Valid or invalid supporting documents

The objective of attribute sampling in auditing financial records is to reach a conclusion about whether there is sufficient evidence to conclude that the frequency of errors exceeds a tolerable level. For example, does the rate of missing documentation exceed one percent or not? Attribute sampling is widely used in internal auditing and financial statement auditing, but is not frequently used in tax auditing. Attribute sampling can be used to determine if a managed compliance program performs within an acceptable deviation rate.

Variable sampling, in auditing financial records, provides a quantitative measure which is used to estimate an average or total dollar value of a given population. In variable sampling the value of each data item is a quantity drawn from a continuous range, such as dollars, percentages, or number of pieces. The objective of variable sampling is to estimate a quantity. For example, what is the dollar amount of an audit adjustment to taxable sales? Or, what is the percentage of sales excluded on the tax return for which no valid exemption documentation exists? Tax auditors are nearly always doing variable sampling.

Another way to define the difference between attribute sampling and variable sampling is that attribute sampling is concerned with the frequency of an attribute, while variable sampling is concerned with the value of a variable.

COMPUTER AUDIT SPECIALIST (CAS)

In response to the growing need to audit through sophisticated taxpayer computer systems, the CDTFA initiated a Computer Audit Program. The goal of the program is to provide technical assistance to CDTFA auditors who are working with electronic data, conducting statistical samples, or working with complex accounting systems. The Computer Audit Specialists (CAS) have access to specialized software programs capable of processing large data sets in a variety of data formats. The CAS are available to assist auditors, Audit Supervisors, and Audit Principals from any office. The CAS can also assist the taxpayer’s information technology team members in designing a data download. Refer to the Computer Audit Specialist Section on myCDTFA, under the Field Operations Division, to find location information and phone numbers for the CAS.

When to Contact CAS:

It is mandatory that the sales tax auditor contact the CAS when the prior audit expended 300 or more hours, there are large amounts of electronic data, any time auditors need assistance, or the CAS was involved in the prior audit.

For audits of special taxes and fee accounts, it is mandatory that auditors consult with a CAS on audits of cigarette and tobacco products distributors, emergency telephone user surcharge, motor vehicle fuel suppliers, diesel fuel suppliers, and any other account where the prior audit expended 100 or more hours.
In all other cases for special taxes and fees accounts, it is up to the discretion of the Audit Supervisor, whether a CAS is involved.

Auditors are encouraged to contact a CAS (regardless of the size of the audit), whenever assistance is needed due to the volume of computerized records, or whenever auditors need assistance in setting up a test or have questions regarding statistical sampling procedures. Ideally, the CAS should be contacted prior to the first meeting with the taxpayer or as soon as a problem arises.

**What to Expect When Working with CAS:**

- **Contacting CAS:** Be prepared to discuss the audit objectives and the prior audit results when applicable.
- **Discussions with Taxpayer:** CAS will engage in discussions with taxpayers and/or their representatives regarding their accounting systems and available electronic records. Topics discussed may include the data layout, data format, file sizes, and the sampling plan.
- **Review the Data:** When data is received, a CAS will verify the data is complete by reconciling the data to control totals provided by the taxpayer. A CAS will analyze the data and prepare summaries. Auditors will use the summaries to reconcile the data to the taxpayer’s books and records.
- **Process the Data:** CAS and auditors will work closely to develop an efficient and effective sampling approach. If an actual basis review is not feasible, a CAS will pull a statistical sample and provide a sample workbook to the auditor.
- **Auditor Responsibilities:** Auditors are responsible for preparing the audit sampling plan (CDTFA-472), and evaluating the sample results. Auditors are encouraged to reach out to a CAS with any questions regarding the preparation of the CDTFA-472, or the evaluation of the sample results.
REQUIRED ELECTRONIC DATA

With the continued advance of technology used to support business infrastructure, including Point of Sale electronic cash registers, sophisticated Enterprise Resource Planning (ERP) software, cloud computing, and data archiving solutions, the ability for businesses to maintain and analyze detailed accounting records has never been greater. This technology, along with legislative requirements enacted by the State of California, enables and requires detailed, transaction-level detail to be provided, upon request, during an audit of a taxpayer's books and records.

California Sales and Use Tax Law Sections 7053 (Records) and 7054 (Examination of Records) and similar special tax and fee law provisions, and Special Taxes Regulation 4901, as well as Sales and Use Tax Regulation 1698, Records, require electronic data be retained for at least four years, unless the taxpayer is authorized by the CDTFA to destroy the records sooner, or ten years, for reporting periods subject to the extended ten-year statute of limitations contained in Revenue and Taxation Code section 7073(d). Taxpayers should retain all records for open audit periods and for disputed periods, even if that means retaining the records for longer than four or ten years.

For proper statistical sampling to be performed, specific data fields are required in order to be able to accurately determine the taxability of transactions in the audit population. In general, required fields would include all original fields found on a source document (e.g., Sales Invoice, Purchase Invoice).

Common fields auditors should request include, but are not limited to:

**Sales Data Fields:**

- Company Code
- Invoice Number
- Invoice Date
- Customer Name – Bill-To and Ship-To
- Ship to City
- Ship to State
- Item Description(s) – Includes description of each product sold on an invoice
- Item Sales Amount – Includes Extended Sales Price for each product sold on an invoice
- Customer Purchase Order Number
- Customer Seller Permit Number
- Method of Delivery
- Item Tax Amount* – Includes the amount of tax billed for each product sold on an invoice

*If each item’s tax amount is not available, each item’s taxability flag (recorded at time of sale) and invoice total tax amount can be provided.
Purchase Data Fields:

- Company Code
- G/L Distribution Account Number
- G/L Distribution Account Name
- G/L Posting Date
- Vendor Number
- Vendor Name
- Vendor Address (street, city, state)
- Invoice Number
- Invoice Date
- Purchase Order Number
- Ship To Location
- G/L Distribution Amount
- Tax Paid Amount
- Tax Accrued Amount
- Total Invoice Amount

For a more complete listing of Electronic Data fields commonly requested during a Sales and Use Tax Audit, refer to Exhibit 5. Data fields requested by the auditor may be different for Special Taxes and Fees audits.
The primary purpose behind the CDTFA audit program is to determine the accuracy of reported amounts with the least possible expenditure of time for both the taxpayer and the CDTFA. In cases where it is not practical to audit all transactions, the CDTFA encourages the use of statistical sampling whenever feasible.

Form CDTFA-472, Audit Sampling Plan, was developed to document the sampling plan and to set the criteria by which the sample results will be evaluated. Any time sampling is performed, this form must be completed by the auditor and discussed with the taxpayer prior to the actual selection of the sample.

The information and sampling methods documented in form CDTFA-472, are not binding on either party. The sampling plan can and should be continually evaluated (and changed, if necessary) based upon information obtained during the audit process. However, if any deviation from this sampling plan is required, the deviations must be fully explained and discussed with the taxpayer. All versions of the Audit Sampling Plan must be included in the audit working papers.

This section will assist auditors with setting up a statistical sample and filling out form CDTFA-472, Audit Sampling Plan.

DEFINE THE OBJECTIVE OF THE TEST 1303.10

Each test should have a specific, stated objective. The usefulness of any sampling test depends on a clear recognition of the relationship between the test objective and the corresponding audit objective.

Examples of an objective of a test include:

- The objective is to test sales for resale.
- The objective is to test accounts payable purchases.
- The objective is to test claimed bad debt deductions.

DEFINE AND LIMIT THE POPULATION 1303.15

The population should be defined and limited to the area(s) of audit interest. For instance, if auditors are testing sales for resale (resales), the population should be limited to resales. In an accounts payable test, auditors should limit the population to the accounts that are of audit interest.

Once the population has been defined, auditors should make an effort to further refine the population. Pulling a sample from an unrefined population may be less time consuming initially, but it is generally not efficient or effective when performing the testing. An actual basis review of a large population is effective, but it is generally not efficient. A hybrid approach can often produce accurate results while minimizing the expenditure of time for both taxpayers and auditors.

When refining the population, auditors should look to remove transactions they can easily identify as non-errors. For example, if the taxpayer has valid resale certificates on file for their 20 largest customers, and those customers account for 80% of the resale population, the test would be more effective if those customers were removed from the population before pulling a sample.
When auditing a taxpayer’s purchases for unreported use tax, auditors should consider removing California vendors (provided auditors can verify the taxpayer is not issuing resale certificates for items consumed).

Refining the population in this way can lead to lower confidence intervals, reduced sampling risk, and greater precision of the estimated liability or refund.

Auditors should be aware, that at a certain point, the costs associated with expending time to make additional refinements may exceed the benefits. Auditors should balance the effectiveness that comes from making refinements with the efficiency that sampling offers.

It is recommended that all tests include samples taken from the entire audit period whenever possible. Generally, a minimum period of two years (unless an audit period is shorter) of records should be available in which to perform a statistical sample. On rare occasions, fewer than two years, but no less than one year, of records may be used. If the taxpayer only has one or two years of documentation available in a three-year audit period, a statistical sample can still be performed. In these instances, results from a statistical sample can be projected to areas outside the defined population, however, no statistical inferences can be made for projections to periods that fall outside of the test population. Auditors should discuss the projection of the test results to periods outside of the test population with the taxpayer prior to pulling the sample items. The reasons for testing a period less than three years must be well documented in the audit.

A clear audit trail of the population should be included in the working papers. Auditors must clearly describe the choices, assumptions, and methodologies used in the statistical sample, specifically relating to the definition of the population so that an adequate trail is developed to permit subsequent review of the auditor’s work by the taxpayer. Refer to Exhibit 6 for an example of a population reconciliation.

**DEFINE THE SAMPLING UNIT AND CHARACTERISTIC**

Auditors should carefully define the sampling unit and determine a means of measuring it. An example of a sample unit would be an invoice, a purchase order, or a bill-of-lading. For a sample to be considered a valid statistical sample, every sample unit must be given an equal chance for selection. Choosing a good sample unit is key to maintaining the statistical validity of the sample.

When working with electronic data, using one data field as the sample unit may not be sufficient. For example, some accounting systems re-use invoice numbers every calendar year. When auditing purchases, it is common to see different vendors use the same invoice number. For these reasons, it is recommended that auditors create a new “unique” field in the data that combines an invoice number, the invoice date, and a customer/vendor number. Creating a unique sample unit field will help ensure that each sample unit represents one accounting transaction.

When electronic data is provided at the line item detail level, meaning, each line item from an invoice is displayed as a separate record in the data, auditors should summarize the data by the unique sample unit field so that one record represents one accounting transaction. In most instances, sampling at the invoice header level is preferred because it allows the auditor to review more dollars without having to review additional source documents. The numeric value utilized by auditors may vary depending on the test’s objective.
For example, some taxpayer’s systems break down a non-taxable subtotal (sale for resale), and an exempt subtotal (exempt food or medical product), for each transaction. Auditors should consider the test objective and the taxpayer’s accounting system when choosing the appropriate numeric value for the sample unit.

SPECIAL CONSIDERATIONS

A number of special factors must be considered whenever a statistical sampling plan is being developed. These factors should be discussed with taxpayers when developing the sampling plan (Form CDTFA–472), so taxpayers understand how these factors will be handled if they are encountered during the test. These factors include:

a. Multiple Locations – When a taxpayer has multiple locations auditors must carefully determine how the records are maintained and whether internal controls are adequate. It is necessary to determine whether the record keeping is centralized at one location or whether each location maintains its own records.

b. Multiple Divisions – Some large taxpayers have multiple divisions and it is possible that each division utilizes different accounting systems. If a taxpayer utilizes multiple accounting systems, it is recommended that auditors contact a CAS.

c. Arrangement of Source Documents – There may be cases where taxpayers do not maintain electronic copies of source documents. Documents may be maintained by taxpayers in a number of ways such as numeric, periodic, cyclical, alphabetical, in batches, etc. In most cases, the taxpayer’s method of maintaining documents will not preclude the use of statistical sampling techniques. Some consideration may be given to the time and effort needed to retrieve the source document if it is needed to support a sample item. Employee Procurement Cards (P-Cards) provides a good example. A taxpayer may keep hard copy receipts to support P-Card purchases. These purchases are often smaller dollar recurring purchases for things such as office supplies. The receipts are often stored in a batch by employee by month. In a case like this, it would take some time to retrieve one receipt out of a batch of numerous invoice copies. An alternate sampling approach, such as cluster sampling, may be useful for cases like this. Refer to AM section 1309.25 for more information on the cluster sampling technique.

d. Non-Response – Occasionally, taxpayers will not be able to obtain a response to a confirmation request, e.g., XYZ letter (CDTFA-504), despite sending a second or even a third request. Non-responses to XYZ letters should not automatically be considered errors or non-errors.

The use of statistical sampling techniques should not change the auditor’s reasoning in determining whether to accept or disallow a transaction. Auditors should still determine whether the transaction questioned can be supported by alternative means. When XYZ responses are not returned, auditors should make every effort to determine the taxability of the questioned sale by alternative methods. Such methods could include, but are not limited to:

- Examine the customer’s seller’s permit registration to determine whether the purchaser had a permit at the time of purchase, the type of business, reported sales, etc.
- Determine whether the sales in question were most likely for resale or consumption based on the quantity and type of items sold.
• Examine other types of items sold to the customer.
• Contact the customer by telephone to determine the true nature of the sale. If the customer indicates that the sale was for resale, a copy of the XYZ letter request should be emailed to the customer for immediate response. This XYZ response will be subject to the same verification as any other XYZ response.
• Accept or deny the transaction based on personal knowledge auditors gained from prior audits or other sources.

There are occasions when taxpayers are unable to obtain an XYZ letter response because the customer is no longer in business. In this situation only (not where there is just a change in ownership, such as a change in partners or a change from a sole proprietorship to partnership/corporation in which the previous owner continues the business under the new ownership), the sale will be considered a sale for resale if the property purchased by the customer is consistent with the type of sales the business makes. Auditors must verify information contained in the taxpayer's file regarding the close-out or bankruptcy of the business, as well as the type of business operations of the customer to ensure that the situation meets these specific requirements.

In all other situations, if the sale appears to be for consumption, taxpayers are unable to obtain a proper XYZ letter response, and auditors are unable to determine the exempt status of the sale by alternative means, the non-response should be considered an error.

e. Timing — Progress Payments/ Installment Contracts – Auditors must be aware of timing differences between the date of a transaction and the date it is recorded by the taxpayer. For example, paid bills are frequently recorded when paid rather than on the date of the invoice.

In addition, auditors must take special care when a sample item is found to involve an installment contract. Not only must auditors determine whether the sample item constitutes a difference, they must also determine the taxable measure of that difference. For example:

ABC Company, a non-permitized out-of-state vendor, enters into an installment contract with XYZ Corporation to furnish and deliver a piece of manufacturing equipment for $1,000,000. The contract specifies the following progress payments:

<table>
<thead>
<tr>
<th>Payment</th>
<th>Amount</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payment 1</td>
<td>$200,000</td>
<td>Contract signing</td>
</tr>
<tr>
<td>Payment 2</td>
<td>$200,000</td>
<td>Design approval</td>
</tr>
<tr>
<td>Payment 3</td>
<td>$200,000</td>
<td>Completion of manufacture</td>
</tr>
<tr>
<td>Payment 4</td>
<td>$200,000</td>
<td>Delivery</td>
</tr>
<tr>
<td>Payment 5</td>
<td>$200,000</td>
<td>Completion of installation and testing</td>
</tr>
</tbody>
</table>
The contract specifies that title and possession of the equipment transfer from ABC Company to XYZ Corporation upon delivery, when the fourth installment payment becomes due and payable. In this example, Payments 1, 2, 3, and 5 would not constitute differences for sampling purposes because they do not represent a “sale.” On the other hand, Payment 4 would be a taxable transaction with a measure of $1,000,000, even if the statute of limitations has expired on one or more of the earlier progress payments or Payment 5 is not yet due. **Care should be taken** to determine whether XYZ Corporation reported tax on the earlier progress payments. If it did, then the $1,000,000 taxable measure should be reduced accordingly.

Progress payments can cause the sample amount to differ markedly from the error associated with that invoice. What appeared to be a $200,000 transaction may actually have a $1,000,000 error in taxable measure (for example, if the buyer failed to pay tax on a purchase subject to use tax). Two undesirable consequences of this situation are that the stratum assignment of the invoice may not be optimal, and the computed confidence interval of the population may be large if the invoice represents an error. Unfortunately, the presence of an extremely large error in a stratum due to a progress payment may cause the audit results to fail to evaluate within a 75% confidence interval, at 80% confidence required by CDTFA audit policy. (Refer to AM section 1306.00, *Evaluation of Sample Results*)

When progress payments are encountered in a statistical sample, they should be handled in the following manner:

- The best option is to put any known or suspected progress payments (including those having $0 taxable measure) in the actual basis stratum prior to drawing random samples from the test strata. This will help keep the confidence interval low, increasing the accuracy of our projections.

- If progress payments are only identified while auditing the sampled invoices, then questioned progress payments should be handled in the manner described above. The invoice on which title transferred and a sale took place should be questioned in the full amount of the sale. In our example, if Payment 4 was a sample item, $1,000,000 in measure would be questioned and projected as part of the sample, if the transaction is considered an error.

- If large questioned progress payments cause the confidence interval to exceed 75%, at an 80% confidence level, auditors should only schedule, for purposes of the projection, the recorded measure of the invoice on which title transferred and a sale took place. Any additional measure due in excess of the amount scheduled for purposes of the projection, should be questioned separately on an actual basis. In our example, only $200,000 of the error associated with Payment 4 would be projected, and the remaining $800,000 would be questioned on an actual basis. This solution will systematically understate the taxpayer's true liability, but it may offer an option if other remedies are not available or are deemed inefficient by audit team members. If after making this adjustment the sample still does not evaluate within CDTFA standards, refer to AM section 1306.15 for additional guidance.
A CAS must be consulted before using this technique for handling progress payments.

- Auditors should document that progress payments were discussed with the taxpayer prior to sampling. A concerted effort should be made to identify and remove progress payments from any test strata prior to sampling.

f. **Voids** – An examination of the population prior to sampling should be done to determine if voids are included in the data provided. Since voids are not considered true sales, they should be removed upfront during the reconciliation and refinement process.

When voids are not removed from the population upfront, and a sample item is a voided transaction, it should be considered a “zero” or non-error within the sample numerator. There should be no removal of any voids in the sample denominator or population as the treatment of the void(s), as a non-error, is represented in the projected results.

g. **Credit Invoices and Credit Memos** – As noted in California Sales and Use Tax Regulation 1698, *Records*, and Special Taxes Regulation 4901, *Records*, it is required that electronic data be maintained for at least four years or ten years, for reporting periods subject to the extended ten-year statute of limitations contained in Revenue and Taxation Code section 7073(d). When reviewing electronic data and performing a statistical sample during a tax or fee audit, credit invoices and credit memos must be handled appropriately. These credits reduce or totally offset previously issued invoices, which affect the taxability of an original invoice.

When auditors are reviewing electronic data, attempts should be made to match up credit invoices to original invoices (including partially) if it is certain the credit invoices are related to the original invoice. For all credit memos that are not matched to original invoices, these credits will be removed from the population prior to selecting samples. However, these credits, and any other credits not originally provided, are available to be used to offset any invoices that are selected during the sampling process. This is to ensure that the final net amount related to the transaction in question is used to project any errors related to that transaction. Credits may not be used to offset invoices not included in the sample base (n). For example:

- If a sample unit which is a claimed resale is determined to be taxable, auditors would make certain that only the net amount due is projected in the test. The taxpayer may provide proof of a credit memo, issued for returned merchandise related to the original transaction in question, to lower or completely offset the original questioned amount related to the sample item.
- Questioned transactions subject to a discount or written off as a bad debt would be considered and adjusted in calculating the net amount of error when credit memos related to these adjustments are presented.
- Only net amounts paid to vendors would be projected in a paid bills test. For example, if a vendor issued a credit against a purchase invoice that was questioned in a sample, the questioned amount may be reduced by the amount of the credit (as it applies to the original invoice).
- For any item questioned in a sample, in general, auditors would look at prior and subsequent events that might affect the net amount due on that sample item.
Before the test is conducted, audit team members should discuss this method of addressing credits with the taxpayer and document the methods used on Form CDTFA–472–Audit Sampling Plan.

**h. Missing Documents** – If, during the course of a statistical test, a document cannot be located, auditors should attempt to ascertain the reason for the missing document or any incomplete documents. When the investigation fails to reveal any specific reason a document(s) is missing or incomplete, auditors should determine whether there is any acceptable alternative evidence available. If missing invoices would create a material error, and the taxpayer objects to the sample, auditors may want to discuss possible alternatives with their supervisor or a CAS. Auditors will need to determine whether to consider missing or incomplete documents as incorrect (in error), or correct (no error).

Alternative procedures that can be used when missing documents are encountered include:

- The taxpayer and/or auditor can contact the vendor or customer for a copy of the missing or unreadable documentation.
- Allow taxpayers to produce additional documentation on similar transactions for the same customer or vendor. Auditors can decide whether the taxability of the transaction(s) with missing documentation is similar to the transactions for which documentation is provided.
- Review all the fields available in the taxpayer’s electronic records to help determine if the questioned item is an error.

**i. Tax Overpayments** – During the course of a statistical sample, auditors may detect both underpayments and overpayments. It is very important that the underpayments and overpayments be treated equally. Therefore, both overpayments and underpayments need to be considered and treated the same when examining sample items, when analyzing the sample results, and when projecting the resulting errors to the population being tested. For example:

- Purchase examination: Any sample items that are identified and verified as overpayments of use tax to vendors, overpayments of tax accrued and paid directly to the CDTFA by the purchaser, or “tax paid purchases resold” should be treated in the same manner as underpayments. Sales tax reimbursement paid to a retailer in error cannot be used to offset understatements from other sample items, as sales tax is imposed on the retailer.
- Sales examination: Any sample items that are identified and verified as overpayments of sales or use tax reported by the retailer should be treated in the same manner as underpayments, provided the retailer has not collected tax reimbursement from the customer. (If tax reimbursement is collected, these sample item overpayments cannot be used to offset underpayments from other sample items.)

Auditors may project both overpayments and underpayments in a statistical sample, as long as the test evaluates according to CDTFA standards (AM section 1306.15); however, it should be noted that if a sample contains a significant number of underpayments and overpayments the likelihood of the sample evaluating is greatly reduced. Auditors should consider testing overpayments and underpayments in separate populations whenever it is feasible to do so.
Auditors should discuss the ramifications of projecting an overpayment with taxpayers. By projecting an overpayment, taxpayers may lose the ability to receive refunds later, if those overpayments were included in the sampled population. Auditors and taxpayers should consider treating overpayments as non-errors in the sample and examining overpayments in a separate test or on an actual basis.

**j. Cut-off Techniques** – It is recommended that auditors review all the sample items that were selected as part of a test; however, there may be occasions when auditors decide to cut-off the test and abandon the sample. A test being done on a random basis may be stopped at any time if the sample items are examined in the random order in which they were selected. The sample units must be reviewed in the order they were originally selected to avoid introducing bias into the sample.

**k. Non-Recurring Errors** – The term “non-recurring errors” is often used to describe errors that are unusual or infrequent. For example, a large retailer with several locations in California had one store that charged their customers the wrong sales tax reimbursement for an entire month. If a transaction for that store, for that month, was selected as a sample item and it was scheduled as an error, the taxpayer may argue that it is a non-recurring error that will overstate their true liability if it is included in the projection calculations. The taxpayer may suggest that the error be removed from the sample and scheduled on an actual basis.

In our example, assume the taxpayer can prove that this type of error was confined to one store, for one month. Auditors should **not** clear this error from the sample. When a sample is drawn, the sample count is often small relative to the total population count. This means that for every unusual or infrequent error encountered in a sample, there are likely other “non-recurring errors” within the sample population that we are not seeing. As an example, that same retailer may have incorrectly flagged a taxable product as exempt in their system. That product may not have been included in the sample, but it would be in the population we are projecting against. Errors that are identified in a sample, like the tax rate error, represent all other errors from the population from which they were chosen. In a statistical sample, sample items that are found to be in error should be scheduled and projected, even if the circumstances that led to the error are considered unusual or infrequent.

If taxpayers disclose any known errors before the sample items are selected, it would be proper for auditors to remove those transactions from the population and schedule them on an actual basis. However, once the sample items are selected, those errors **must** be scheduled and projected.
SAMPLE SELECTION TECHNIQUES 1304.00

GENERAL 1304.05

There are several sampling methods auditors can use when performing a test, however, many sampling techniques have become outdated and inefficient due to technological advancements. Whenever electronic records are maintained by taxpayers, the preferred method of sampling within an audit is Stratified Random Sampling. Questions regarding alternative sampling approaches should be discussed with the Audit Supervisor and a CAS who will provide suggestions or assistance. Refer to AM section 1309.00 for more information on alternative sampling techniques.

STRATIFIED RANDOM SAMPLING 1304.10

Stratified Random Sampling allows auditors to examine a large percentage of the population dollars, with the least expenditure of time. With stratified sampling, an auditor can typically review 35–80% of the total population dollars. By reviewing more dollars, auditors can express a higher degree of confidence in the end result. Stratification also reduces the overall number of sample items needed to achieve our desired level of precision and reliability (See AM section 1305.00 for more information on sample sizes).

Stratification

For most audit populations, transactions are not distributed evenly around the population mean. Typically, audit populations have a higher volume of small dollar transactions, and a lower volume of large dollar transactions. The population is also likely to cover a wide range of values; for example, in a sales population, it is common to have some invoices smaller than $10, and others greater than $50,000. The further transactions are spread apart, the greater the variability that exists within the population. When transactions are not evenly distributed around the mean and there is high variability in the population, the precision of our estimates decrease.

Stratification is a sampling technique that groups items in a population into sub-groups (strata), which are then sampled independently. Stratifying the population by dollar values is an effective way to reduce the variability of our audit populations. By reducing the variability of the population within each stratum, we can increase the precision of our estimates.

Here are some tips to consider when performing a stratified random sample:

**Determining Dollar Threshold Cutoffs:**

When reviewing the distribution of the population, auditors should first determine if there are certain transactions that may be deemed immaterial ("low dollar cutoff"), as well as transactions that are so large and rare that they warrant an actual basis review ("high dollar cutoff"). By establishing these thresholds, auditors can remove outliers from the test strata that would skew the examination’s results.

**Determining Number of Sample Strata:**

Once auditors have established a range of transactions to be sampled, they should determine the variability that exists within this range. A useful statistic that measures variability is called the coefficient-of-variation (COV). The COV is calculated by dividing the standard deviation of a population by its mean.
This statistic tells you how dispersed the population is relative to the mean. The higher the COV, the more variability there is in the population. As a rule of thumb, when a population has a COV greater than 1, auditors should consider having more than one test stratum. If a population has a COV greater than 2, more than 2 strata may be necessary. It is recommended that the COV for each test stratum should be no greater than 1. For the actual basis stratum, it does not matter what the COV is, because the results of the actual basis stratum will not be projected.

Refer to Exhibit 2 for an example of a stratified population and COV calculations.

**Random Selection**

Sampling bias occurs when some members (units) of a population have a higher probability than others of being chosen in the sample. The most effective method to avoid sampling bias is through Random Sampling. For a Statistical Sample to be valid, each unit in a population (stratum) must have an equal probability of being chosen. CDTFA samples are randomly selected using computer software to ensure all sample items are chosen at random.

**Selection With or Without Replacement:**

Depending on how the random number generator is programmed, sample items may be selected, with or without replacement. If a sample is pulled with replacement, every sample item has an equal chance of selection with every pull. If a sample is pulled without replacement, whenever a sample item is selected it is removed from the population and cannot be chosen a second time. As an example, when a lotto ball is selected it is not put back into the lottery machine. Once the number is chosen it is set aside and cannot be selected again. In theory, sampling without replacement introduces some degree of sampling bias into the test because probabilities change with every selection. In practice, audit populations are sufficiently large to render any difference between the two methods to be immaterial.

It is the policy of the CDTFA that all samples must be pulled by audit team members and not by the taxpayer or the taxpayer’s representatives.
DETERMINING SAMPLE SIZE

GENERAL

With statistics, it is possible to use advanced mathematical formulas to compute a sample size that will achieve a desired confidence interval. However, when dealing with stratified populations these formulas can be extremely complex and the inputs required to perform the calculations may not be available for every audit.

Additionally, CDTFA policy requires that a minimum sample size of 300 items of interest per test stratum be used in all statistical samples. There may be cases when a smaller sample size could be supported, however, CAS approval must be obtained to select a sample size that is less than 300 units per test stratum. There may also be instances when a sample size larger than 300 will be necessary to achieve the sample’s objective. This section discusses factors auditors should consider when deciding on an appropriate sample size for a given stratum.

FACTORS AFFECTING SAMPLE SIZE

a. Materiality – Generally, when dealing with a large population in terms of dollars, auditors should consider increasing the sample size beyond the minimum requirement of 300 items per stratum. With large populations, even a small number of errors can project out to a significant underpayment in tax. For example, with a population greater than $100 million in measure, an error rate of 1% would equate to hundreds of thousands of dollars in additional tax due. Auditors should select a sample size that allows for a material understatement in tax to be accurately estimated and assessed in the audit.

When dealing with a small population in terms of dollars and/or count, auditors may consider using a sample size less than 300 per test stratum. Generally, a sample size is considered excessive if more than 10% of the stratum’s population is reviewed as part of the sample. If the materiality of the dollars being examined is low, reviewing 300 sample items may not be an efficient use of time and auditors should consider selecting a smaller sample size. CAS approval needs to be obtained by auditors in order to select a sample size that is less than 300 units per test stratum.

b. Expected Error Rate – Auditors should draw from their knowledge of the business and its internal controls, knowledge of the industry, discussions with the taxpayer, and the prior audit results (when available), to develop an expected error rate. When developing an expected error rate, auditors should also factor in the degree to which refinements were made to the population. When the population is refined properly, the expected error rate of the sample population will increase.

If the expected error rate is low (less than 2%), the accuracy of the sample’s results will also be low. Auditors should consider increasing the sample size or making additional refinements to increase the precision of the test.

If the expected error rate is high (greater than 20%), auditors and taxpayers may benefit from selecting a sample size less than 300 items. With such a high expected rate of error, it may be worth sacrificing some precision in exchange for greater efficiencies. With the approval and assistance of a CAS, a smaller sample size may be considered.
c. Refunds:
When auditors are unable to review a refund claim on an actual basis, and sampling is warranted, the best option is to conduct a stratified statistical sample that follows the guidelines recommended in this chapter. With most refund populations, the expected rate of refund allowed is usually high (greater than 20%). For refund populations with an expected refund allowed rate greater than 20%, auditors can use reduced sample sizes as low as 100 sample units per test stratum without obtaining a CAS approval.
EVALUATION OF SAMPLE RESULTS 1306.00

GENERAL 1306.05

When scheduling transactions on an actual basis, auditors can calculate the exact amount of the additional liability due or refund allowed. When a sample is performed, auditors are estimating what the true error would have been had an actual basis review been performed. That estimate may be considerably more or less than the true error that exists in the population.

With non-statistical sampling, it is impossible to measure the accuracy of our estimates. Statistical sampling techniques allow auditors to calculate a range of values that the true error is likely to fall within, given a stated confidence level. This section covers how to perform those calculations and what to do if the evaluation results do not meet CDTFA standards.

CONFIDENCE INTERVAL CALCULATIONS 1306.10

The CDTFA has developed worksheet templates to assist auditors with their statistical evaluation calculations. The template is for a combined evaluation of all strata including the actual basis stratum. For each stratum, auditors are required to enter the following into the evaluation template:

- Population Count
- Population Dollars
- Sample Count
- Sample Dollars
- Sample Random Seed
- Recorded Amount for Each Sample Item
- Error Amount for Each Sample Item

The CDTFA uses an 80% confidence level in our statistical sample evaluation calculations. The output of the evaluation template is a confidence interval expressed as a percentage. The confidence interval can be used to calculate a range of values the true error is likely to fall within. As an example, imagine a resale exam that results in $10,000 in additional measure due. If the sample evaluates with a 30% confidence interval, that means there is an 80% probability that the true liability falls somewhere between $7,000 and $13,000 (30% more or less than the estimated liability of $10,000). It is the CDTFA’s policy to use the mid-point of the calculated range when assessing or refunding tax.

CDTFA EVALUATION STANDARDS 1306.15

If the confidence interval for the combined evaluation is less than or equal to 75%, then the errors should be projected for all test strata within the sample.

If the combined evaluation results in a confidence interval greater than 75%, auditors should check to see if a problem stratum or strata are causing the high confidence interval. If any of the strata, either individually or in combination, evaluate with a confidence interval less than 75%, those strata should be projected. Problem strata that cause the confidence interval to exceed 75% should not be projected without the taxpayer’s consent. In those instances, auditors should analyze the strata to determine why the result produced a confidence interval greater than 75%.
A list of likely causes of large confidence intervals (those greater than 75%) are noted below along with recommendations for handling those scenarios:

**Scenario #1:** Minimal number of errors were found in the sample.

**Recommendation #1:** Auditors should consider expanding the sample if the estimated liability is material. If the estimated liability is not material, auditors should consider scheduling known errors for the area on an actual basis.

**Scenario #2:** High variability among sample errors.

**Recommendation #2:** This can happen when errors fall outside the bounds of the stratification ranges. For example, a partial invoice error was scheduled in an amount well below the lower range of its stratum. In these instances, auditors should consider removing those outliers from the sample populations and scheduling those transactions on an actual basis. A CAS must be consulted before using this post-stratification technique.

**Scenario #3:** Overpayment errors were found in the sample.

**Recommendation #3:** This often occurs when auditing a company’s purchases. Auditors should discuss the ramifications of projecting an overpayment with taxpayers. By projecting an overpayment, taxpayers may lose the ability to receive refunds later if those overpayments were included in the sampled population. Auditors and taxpayers should consider treating overpayments as non-errors in the sample, and examining overpayments in a separate test or on an actual basis.

In all of the scenarios discussed above, if the results appear to be representative, meaning another sample would likely produce a similar outcome, it is recommended that the sample results be accepted with the taxpayer’s approval. If auditors follow the recommendations noted above and it results in a confidence interval equal to or less than 75%, the results should be projected.

For any test strata that are not projected due to a failed evaluation, auditors should schedule any known errors from that stratum’s population on an actual basis. Known errors include, but is not limited to, transactions with customers/vendors that were identified as errors in other strata. Auditors should not attempt to review the non-projected stratum on an actual basis. Auditors should simply schedule the errors that were readily known to the auditor through their review of the taxpayer’s records.

**EXPANDING THE SAMPLE**

After analyzing the original sample results, sample evaluation, and any additional factors, auditors must decide whether to accept the sample or to expand it. If auditors are considering expanding the sample, the auditor’s supervisor should be notified and the CAS should be consulted. Care must be taken in deciding if expansion is necessary because expanding the sample requires additional work for both the taxpayer and the auditor(s). Every attempt should be made to select an adequate sample size before conducting the test rather than relying on the ability to expand the sample at a later date. If the decision is made to expand the sample, auditors should discuss the need for the selection of additional sample items with the taxpayer.
If the sample is expanded, the additional sample items will not replace the original sample items. The audit findings will be based upon the combined results. It is important to advise taxpayers, prior to expansion, that they cannot later accept the initial sample and disregard the expanded sample, if the combined results prove to be unfavorable. When expanding the sample, auditors must use the same random seed number that was used to select the original sample. Auditors must also document why the sample is being expanded and how the additional sample size was determined.
When conducting a statistical sample for sales and use tax purposes, an auditor reviews a subset of a population and determines the error(s) that exist within the sample. The sample results are used to estimate what the liability/refund would have been had an actual basis review been performed of the entire population. There are two projection techniques recommended for use in audits conducted by the CDTFA – ratio estimation and difference estimation.

**RATIO ESTIMATION (PERCENTAGE OF ERROR)**

This projection technique applies a percentage of error to the stratum’s recorded book value. The percentage of error is calculated by taking the sum of the errors questioned in the stratum and dividing it by the sum of the stratum’s sample items. A separate error percentage is calculated for each stratum and applied accordingly. This technique should be used to project sample results unless there is a compelling reason to use another method.

**DIFFERENCE ESTIMATION**

This projection technique calculates the average error per sample item (sum of errors ÷ sample size) and applies it to the number of units in the stratum’s population. At times, it may be a useful statistical method in situations where no recorded book value is available for individual population items or the taxpayer has been using estimates. This projection method may also be used when auditing a taxpayer’s zero-dollar transactions in a sales exam.

<table>
<thead>
<tr>
<th>Description</th>
<th>Units</th>
<th>Dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>N=40,000</td>
<td>$52,100,000</td>
</tr>
<tr>
<td>Sample</td>
<td>n=100</td>
<td>$130,237</td>
</tr>
<tr>
<td>Differences</td>
<td>D=10</td>
<td>$6,823</td>
</tr>
</tbody>
</table>

**RATIO ESTIMATION (Percentage of Error)**

Percentage of Error = $6,823/$130,237 = 5.24%
Disallowed Resales = 5.24% x $52,100,000 = $2,730,040

**DIFFERENCE ESTIMATION**

Average Difference per Sample Item = $6,823/100 = $68.23
Disallowed Resales = $68.23 x 40,000 = $2,729,200
Statistical sampling techniques must be adequately documented in the working papers. An audit trail is needed to provide a means for review and, if necessary, to allow for replication and/or expansion of the sample. Proper documentation is also necessary to support the statistical validity of the sampling techniques used in the audit.

**MINIMUM DOCUMENTATION**

Minimum documentation should include:

a. **Audit Sampling Plan Form CDTFA–472.**

b. **Population Reconciliation:** The original population total, its source, and a reconciliation and explanation of items removed or segregated from the original population. Additionally, a reconciliation of strata totals to the population total should be included in the working papers.

c. **Selection Technique Used:** If a random number generator was used, the random seed should be documented in the working papers. This information is essential in the event the sample needs to be expanded.

d. **Pull Sheet:** A pull sheet should be included in the work papers. The pull sheet is a listing of all the items selected in the test, including actual basis items. This should include the original sample unit amount (amount questioned). Each item should also reference the test strata the sample unit was pulled from and the order in which it was pulled within each stratum. In addition, the following fields should be provided on the pull sheet:

   - Invoice number
   - Invoice Date
   - Vendor/Customer name
   - Vendor/Customer address
   - Shipped from/to
   - Amount in question
   - If there are sample items that are not carried forward from the pull sheet to a formal schedule, auditors should include a comment explaining why the sample item was not scheduled and questioned

e. **Pull Sheet Detail:** If the taxpayer provided line item detail, and the sample was pulled at the invoice header level, the line item detail for the transactions listed on the pull sheet should also be included in the work papers.

f. **Questioned Items Schedule:** All transactions selected on the pull sheet should be carried forward to the “Test of Exempt Sales” or “Test of Paid Bills” templates from the audit macro package (or to a similar schedule). This schedule should include an amount questioned, an amount taxable, a district measure, and an auditor comment.

g. **Combined Evaluation:** A combined evaluation template should be included as part of the audit work papers. See Exhibit 4.

h. **Audit Findings:** This will be used as the basis for projecting the results of the sample to the total population.
OTHER SAMPLING TECHNIQUES

GENERAL

Stratified random statistical sampling is the sampling method auditors should use whenever it is feasible to do so. There are rare circumstances where it may not be possible to conduct a stratified random statistical sample. This section discusses some alternative sampling techniques that can be used in those instances. When using some of these techniques, the sample will no longer be considered a valid statistical sample. If the reliability or accuracy of a sample is called into question, non-statistical samples are harder to defend because they cannot be evaluated. Stratified random sampling is a superior sampling technique because it consistently produces the most accurate results and the precision of those estimates can be quantified.

UNRESTRICTED RANDOM SAMPLING

Unrestricted random sampling is the sampling method by which sample items are randomly selected from the entire population without any segregation or stratification. Because of the variation that exists within most audit populations, a sample that is selected using this method is unlikely to evaluate within CDTFA standards. If taxpayers can provide electronic records, and there is a numeric measure associated with each sample unit, this method should not be used. In rare instances, when it is not possible for taxpayers to provide numeric values for each transaction, the use of this method may be warranted. In those instances, the sample results would need to be projected using the difference projection technique.

SYSTEMATIC SAMPLING

A systematic sample is a sampling method that utilizes an alternative approach to selecting sample items. With a random sample, every sample item is chosen randomly. With a systematic sample, only the first sample item is chosen at random and each subsequent sample item is selected using a skip interval. This sample selection technique could be used on unrestricted populations or those that have been segregated or stratified.

To use this method auditors must first determine an appropriate sample size. The sample size will be used to calculate the skip interval (population count ÷ desired sample size = skip interval). For example, if an audit population has 1,000 transactions and the desired sample size is 100, the skip interval would be 10 (1,000 ÷ 100 = 10). Auditors would need to assign a reference number to each transaction, from 1 to 1,000. A random number generator would then be used to select the first sample item. In our example, if the first sample item selected was transaction number 5, the auditor would use the skip interval to select every 10th transaction (5, 15, 25, ... 995) until 100 sample items are selected.

At a technical level, systematic sampling does not create a truly random sample. It is often referred to as “pseudo random sampling” or “quasi-random sampling.” This sampling method may not give each unit an equal chance for selection, and it does not provide for every possible combination of \( n \) to have an equal chance for selection. Only the first unit selected in systematic sampling is a probability selection. This can lead to statistically biased results. A sample selected using this method should not be evaluated.
Block sampling involves selecting a group of transactions (typically a week, a month, a quarter, or a year) to constitute the sample. The sample period may be chosen manually or with a random number generator. Block sampling is considered a non-statistical sampling method; therefore, the results cannot be evaluated. This method is inferior to statistical sampling and should be avoided whenever possible. For more information on the block sampling technique, refer to AM section 0405.20.

**CLUSTER SAMPLING**

In a cluster sample, several transactions are grouped together into one sample unit. For example, a store-day test of a retailer’s sales would be considered a cluster sample. In a store day test, one sample unit would include all the sales for a given store, for a given day.

When deciding on an adequate sample size, auditors should consider a number of factors:

- How many transactions are there within a sample unit?
- How many sample items would be feasible to review?
- How many sample items would it take to get a good cross-section of the population?
- What is the expected error rate?

Once auditors determine an appropriate sample size, a random number generator should be used to select the sample items.

The taxpayer would then provide transaction-level detail for the selected sample items. If the transaction-level detail is too voluminous to review, auditors should consider performing a two-stage cluster sample. This sampling method is often referred to as a “sample within a sample”. Auditors would combine the transaction level detail from the selected clusters to create a new population. At this second stage, auditors should use a random number generator to select the sample items.

With a two-stage cluster, it is possible to use different projection techniques for each stage. For example, if a stratified random sample is drawn at the second stage, a ratio estimation projection technique could be used. The result of the second stage sample would be the total projected measure in error. That result could be used in a difference projection calculation at the first stage. See AM section 1307.00, for more information on projection techniques.

Even though, in some instances it is mathematically possible to evaluate cluster samples, CDTFA auditors are not required to evaluate a cluster sample. CDTFA has no established criteria in place for evaluating cluster samples.

In the past, when the cost of retrieving transaction-level detail for the entire audit period was high, a cluster sample was the only feasible sampling method available. As technology has advanced, the taxpayer’s ability to provide a large amount of data, and the CDTFA’s ability to process that data, has improved. When an auditor is considering using the cluster sampling method the CAS should be consulted. Stratified random samples should be used whenever it is feasible to do so.
When auditors decide to use Stratified Random Sampling for validation testing, they should carry out the following steps in designing, implementing, evaluating, and documenting the test, and include related items or comments in the Audit Work Papers:

- Obtain electronic data and document the files received (section 1302.00)
- Validate the Data (section 0403.12)
- Define the Objective of the Test (section 1303.10)
- Define and Limit the Population (section 1303.15)
- Define the Sampling Unit and Characteristic Being Measured (section 1303.20)
- Stratification: Determine the number of strata and strata value boundaries (section 1304.10)
- Determine the Sample Size (Section 1305.00)
- Random Selection of Sample Units (Section 1304.10)
- Evaluation of the Sample Results (Section 1306.00)
- Project the Sample Results (Section 1307.00)
  - Ratio Estimation - Percentage of Error (Section 1307.10)
  - Difference Estimation (Section 1307.15)
- Working Paper Documentation (Section 1308.10)
  - Form CDTFA-472, Audit Sampling Plan
  - The Population Reconciliation
  - Selection Technique used
  - Pull Sheet
  - Pull Sheet Detail
  - Questioned Items Schedule
  - Combined Evaluation
  - Audit Findings
Actual Basis/Census Review: Examination of 100 percent of the population.

Attribute: A qualitative characteristic that a unit of a population either possesses or does not possess.

Attribute Sampling: Used to estimate the proportion of items in a population containing a characteristic or attribute of interest. Attribute sampling is concerned with the frequency of an attribute. This is a qualitative measurement and is useful when the objective of the test is a yes or no answer.

Confidence Interval: Describes the limits of accuracy of an inference. This precision interval is a statistical measure of the inability to predict the true population error because the test is based on a sample, rather than a census.

Confidence Level: An inference from a sample that tells us the proportion of times a statement about the population is likely to be true, in the long run.

Confidence Limits: The confidence interval expressed as a range between the lower and upper bound on the confidence interval.

Data: Factual information used as a basis for analysis.

Mean: Arithmetic average of the sample.

Non-Sampling Error: Errors in sampling due to bias, fatigue, lack of experience, and other auditor errors.

Parameters: A set of physical properties that describes a population, such as the mean, number of transactions in the population, standard deviation, etc.

Population: Any group of units with some attributes in common. The total units from which the sample is drawn.

Precision: The range within which the universe average will lie, with the degree of certainty specified in the confidence level.

Random: An order of selection governed by chance.

Range: The difference between the lowest and highest values in the population.

Sample: Any number of units drawn from a population. A Judgment Sample is a sample where the criteria for including a unit in the sample is decided in advance.

Random Sample is a sample where every unit still remaining in the population has an equal chance of selection on each draw.

Sampling Bias: When some members (units) of a population have a higher probability than others of being chosen in the sample.

Sampling Error: Error due to chance that the sample is not a miniature replica of the population.

Sampling Frame: The population from which the sample units will be selected, limited to the area of audit interest.

Standard Deviation: A measurement of the distance of all values from the arithmetic mean. The sample standard deviation is used as an estimate of the population standard deviation.

Standard Error: The standard deviation of all possible sample means of a given size.

Statistic: Descriptive terms used to define or describe the sample.
**Statistical Sample:** One where the selection of the items to be included is independent of the sample and which provides a means of establishing the sample size objectively and a means of objectively appraising the sample results.

**Stratum:** A statistical sub-population. Dividing a population into sub-populations. (Plural: Strata).

**Stratification:** Physical segregation of the population into more homogeneous groups with the express purpose of improving sample efficiency and/or sample reliability.

**Unit:** A member of a population. For example, each sale is a unit of the total sales population.

**Universe:** The total units from which the sample is drawn.

**Unrestricted:** A sample population that is not stratified or segregated.

**Variable Sampling:** Method used to estimate the dollar value of a given population — provides a quantitative measurement.
Audit Sampling Plan.................................................................................................................................................. Exhibit 1
Stratification and Coefficient of Variation........................................................................................................... Exhibit 2
Random Number Generator................................................................................................................................. Exhibit 3
Combined Evaluation Worksheets....................................................................................................................... Exhibit 4
Electronic Data Checklist....................................................................................................................................... Exhibit 5
Sample Population Reconciliation......................................................................................................................... Exhibit 6
Bibliography............................................................................................................................................................. Exhibit 7
Use of Sampling in Auditing

The primary purpose behind the California Department of Tax and Fee Administration (CDTFA) audit program is to determine, with the least possible expenditure of time for both the taxpayer/feepayer and the CDTFA, the accuracy of reported amounts. Sampling serves to accomplish this purpose.

Sampling is a process of drawing a conclusion about an entire body of information based on measurements of a representative sample of that information. Sales and use taxes are transaction taxes, meaning that tax is determined on a transaction-by-transaction basis. Therefore, verification must be done at the source document level. Since in many cases it is economically impractical to audit all transactions, the CDTFA encourages the use of sampling whenever feasible.

There are generally two methods of sampling: judgment sampling and statistical sampling. A judgment sample includes all samples obtained by non-statistical sampling methods. The most common type of judgment sample is the examination of a block period of time (for example, day, week, month, or quarter). A statistical or random sample is a sample in which each item in the population has an equal or known chance of being selected for examination. Examples of statistical or random sampling techniques include unrestricted sampling, stratified sampling, systematic sampling with random start, and cluster sampling. While judgment samples are not necessarily less accurate than statistical samples, there is no way of objectively evaluating the accuracy or reliability of the test. The advantages of statistical sampling over non-statistical sampling are:

- It provides a selection process representative of the types of transactions involved and eliminates bias, since every item in the population has an equal or known chance of being selected.
- It provides an advance estimate of the sample size required for a given objective. The results can be objectively evaluated.
- Multiple samples may be combined and evaluated.
- Properly conducted statistical sampling can yield more reliable results than judgment sampling.
- It is a method approved and recommended by the American Institute of Certified Public Accountants (AICPA).

Other factors to be considered in determining the best type of sample to conduct are the format, condition, storage, and availability of business records. The auditor and taxpayer/feepayer should discuss the most beneficial approach to examining source documents after the auditor has had an opportunity to review the business records but prior to the selection of the sample.

The attached CDTFA-472, Audit Sampling Plan, was developed to document the sampling plan and to set the criteria by which the sample results will be evaluated. The purpose of this form is to obtain information regarding the taxpayer’s/feepayer’s operations in order to establish the most effective and efficient means of developing a sampling plan. The form covers many common situations that might arise in sampling which should be discussed with the taxpayer/feepayer. This form should be completed with the assistance of the taxpayer/feepayer, prior to the selection of the sample.

The information and methods documented in this form are not binding for either the taxpayer/feepayer or CDTFA staff. The sampling plan can, and should, be continually evaluated (and changed, if necessary) based upon information obtained during the auditing process. In addition, it is possible that stratification or expansion of this sample may be necessary depending on the results produced by this process. However, should any deviation from this plan be required, it will be fully discussed with the taxpayer/feepayer and documented in the audit and on the sampling plan.

If you have any questions regarding this form and accompanying information, please contact your auditor.
PART A. SAMPLE SET UP

THE OBJECTIVE OF THIS TEST

The objective is to test sales for resale.

THE POPULATION BEING TESTED

Refined ex-tax sales population.

THE SPECIFIC TYPE OF RECORDS TO BE EXAMINED IN THE POPULATION

Sales invoices, purchase orders, resale and exemption certificates, all other supporting documentation.

THE FILING METHOD FOR THE RECORDS TO BE EXAMINED (for example, numerical, alphabetical, electronic)

Electronic.

THE POPULATION WILL BE VALIDATED TO THE BOOKS AND RECORDS USING THE FOLLOWING METHOD

Reconciling summary figures from the data to general ledger totals.

TYPE OF SAMPLES

☑ Statistical Sample ☐ Block Sample ☐ other (describe)

THE SPECIFIC SAMPLING UNIT EXAMINED IN THE SAMPLE (for example, invoice, purchase order, line items, manifest, bill of lading)

Unique transaction identifier that combines the invoice number, invoice date and customer number.

REASON FOR SELECTING THE TEST PERIOD

Records were available for the entire audit period.

THE FOLLOWING WILL BE USED IN THE SAMPLE SELECTION

☐ Computer Audit Specialist ☐ Random Number Generator ☐ Random Number Tables

☐ Other (describe)

PART B. SAMPLE PARAMETERS

<table>
<thead>
<tr>
<th>TEST PERIOD OR STRATA BOUNDARIES</th>
<th>SAMPLE BASE (UNITS)</th>
<th>SAMPLE BASE (DOLLARS)</th>
<th>POPULATION BASE (UNITS)</th>
<th>POPULATION BASE (DOLLARS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1: &gt; $10 and &lt; $500</td>
<td>325</td>
<td>$56,877.94</td>
<td>9,160</td>
<td>$1,616,570.28</td>
</tr>
<tr>
<td>S2: &gt; $500 and &lt; $5,000</td>
<td>325</td>
<td>$439,548.28</td>
<td>4,331</td>
<td>$5,834,174.59</td>
</tr>
<tr>
<td>S3: Actual Basis Review ≥ $5,000</td>
<td>301</td>
<td>$2,985,240.63</td>
<td>301</td>
<td>$2,985,240.63</td>
</tr>
</tbody>
</table>

ADDITIONAL INFORMATION OR STRATA
PART C. SPECIFIC TESTING SITUATIONS

DUPLICATE SAMPLE UNITS
If the sample items are chosen with replacement, duplicate sample units will be removed.

MISSING SAMPLE UNITS
If a selected document is missing, the auditor should ascertain the reason for the missing or incomplete documents and/or use other available information to determine if the sample unit represents an error based upon the facts of the situation, the auditor and the taxpayer/feepayer together should discuss whether to consider missing or incomplete documents as incorrect (error), correct (no error), or whether to substitute another sample unit, or whether they should be removed from the sample base and projection (as set forth in section 1303.25 of the Audit Manual).

VOIDS OR CANCELLED TRANSACTIONS
- Leave voids and cancelled transactions in the population and treat as a non-error.
- Remove voids and cancelled transactions from the sample and population.
- Voids are not included in the population and will be disregarded.

SAMPLE UNIT IS A CREDIT INVOICE, CREDIT MEMO, OR DEBIT MEMO
When electronic data is available and statistical sampling techniques are used, credit transactions will be removed from the population. Allowable credit transactions may be examined and offset as needed. When electronic records are unavailable or non-statistical sampling techniques are used, credit transactions will remain in the sample and will generally be treated as non-errors.

The following situations will be handled accordingly:
- Sample unit is an error, but the transaction later resulted in a bad debt: Allowable bad debts will either be offset against sample items or be tested and adjusted separately (as set forth in section 1303.25 of the Audit Manual).
- Sample unit is an error, but the transaction is corrected at a later date: If a sample unit is an error, but the transaction is corrected at a later date, the sample unit will be considered a non-error. However, if a sample unit is an error, but the transaction is corrected as a result of the audit investigation, the sample unit will be considered an error for projection of error purposes, and an offset credit should be allowed in the amount of the error.
- Sample unit is a partial/down/installment or progress payment: Partial, down, installment, or progress payments will not constitute differences for sampling purposes because they do not represent a sale. On the other hand, payments made in conjunction with an act that constitutes a sale will be considered a difference for sampling purposes and may be considered an error upon investigation (as set forth in section 1303.25 of the Audit Manual).

OTHER:

PART D. PROJECTION OF ERROR
IF ERRORS FROM A SAMPLE WILL RF PROJECTED, THEY WILL BE PROJECTED USING THE FOLLOWING METHOD

- Percentage of Error
- Difference Estimation
- Other (describe)

If it is decided to not project the error(s), the auditor may use one of the alternatives listed below to handle the error(s) in that sample or stratum. The auditor, if necessary, will discuss the alternatives with the taxpayer/feepayer after the sample results are known and then make a decision on the alternative to use:
- Assess or allow known errors on an actual basis for the audit period.
- If feasible, expand that sample or stratum.
- Examine specific customers, vendors, accounts, known errors, etc., on an actual basis for that stratum.

PART E. TAXPAYER'S/FEEPAYER'S SIGNATURE FOR RECEIPT
This sampling plan is a collaborative effort by the auditor and taxpayer/feepayer to determine the most efficient method of determining the accuracy of reported amounts and establishing an estimated percentage of error, if any, for the population being tested. CDTFA staff should aid the taxpayer/feepayer in gaining a correct understanding of the law and demonstrate that we are as willing to recommend a refund of an overpayment as we are to propose a deficiency determination. The information and methods documented in this form are not binding on either the taxpayer/feepayer or CDTFA staff. This sampling plan may be modified if new or additional data is encountered. Should any deviation to this plan be required, it will be fully discussed with the taxpayer/feepayer.

AUDITOR'S SIGNATURE

DATE

TAXPAYER'S/FEEPAYER'S SIGNATURE FOR RECEIPT OF COPY

DATE
The Coefficient of Variation is a statistical tool that is used to help determine strata breaks when stratifying. The calculation is as follows:

\[
\text{Stratum Standard Deviation} / \text{Stratum Mean} = \text{Stratum Coefficient of Variation (COV)}
\]

### Statistics

<table>
<thead>
<tr>
<th>Stratum Std Dev</th>
<th>Stratum Mean</th>
<th>Coefficient of Var</th>
<th>Sample Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,110.17</td>
<td>1,288.78</td>
<td>86.14%</td>
<td>325</td>
</tr>
<tr>
<td>9,972.51</td>
<td>14,610.28</td>
<td>68.26%</td>
<td>300</td>
</tr>
<tr>
<td>34,311.02</td>
<td>78,697.85</td>
<td>43.60%</td>
<td></td>
</tr>
<tr>
<td>170,399.01</td>
<td>324,043.63</td>
<td>52.43%</td>
<td></td>
</tr>
</tbody>
</table>

*The statistics above show the calculation of the Coefficient of Variation (COV), by taking the Standard Deviation and dividing by the Mean. These statistics are used to measure the variability of a population (or Stratum). The higher the Coefficient of Variation, the higher the variability within the population the statistics are measuring. In general, having too high or too low of a COV can mean the strata breaks are likely too wide or too narrow. Understanding the meaning of the Coefficient of Variation is one of many tools used when determining the stratum breaks within a statistical sample.
RANDOM NUMBER GENERATOR

STATISTICAL SAMPLING INFORMATION SHEET

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**STEP 1. CLICK TO ENTER SAMPLE**

<table>
<thead>
<tr>
<th>SAMPLE CREATION AREA</th>
<th>REQUESTED</th>
<th>DESCRIPTION</th>
<th>ACTUAL</th>
<th>PICK ORDER</th>
<th>RANDOM NUMBERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>TYPE OF SAMPLE</td>
<td>NUMBER</td>
<td>NUMBER OF ITEMS IN POPULATION</td>
<td>9160</td>
<td>1</td>
<td>6454</td>
</tr>
<tr>
<td>NO. OF SERIES</td>
<td>1</td>
<td>ACTUAL SAMPLE SIZE INCLUDING DUPLICATES</td>
<td>329</td>
<td>2</td>
<td>2817</td>
</tr>
<tr>
<td>RANDOM SEED</td>
<td>27127</td>
<td>ACTUAL SAMPLE SIZE EXCLUDING DUPLICATES</td>
<td>325</td>
<td>3</td>
<td>4659</td>
</tr>
<tr>
<td>DESIRED SAMPLE SIZE</td>
<td>325</td>
<td>Duplicates deleted in sample</td>
<td>4</td>
<td>4</td>
<td>8216</td>
</tr>
</tbody>
</table>

**STEP 2. CLICK TO CREATE THE SERIES**

**STEP 3. GENERATE THE RANDOM NUMBERS**

SERIES: 1
SERIES HIGH: 1
SERIES LOW: 9160

NOTE: ONLY THE FIRST PAGE OF THE SHEET IS SHOWN HERE
### COMBINED EVALUATION

**Strata and Sample Information Worksheet**

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SAMPLE INFORMATION</strong></td>
<td></td>
<td>Ref</td>
<td>Sample SALES Stratum 1 ≥ $10 to &lt; $500</td>
<td>Sample SALES Stratum 1 ≥ $10 to &lt; $500</td>
<td>Sample SALES Stratum 1 ≥ $10 to &lt; $500</td>
</tr>
<tr>
<td>Sample Units</td>
<td></td>
<td>n</td>
<td>325</td>
<td>325</td>
<td>301</td>
</tr>
<tr>
<td>Sample Dollars</td>
<td>N/A</td>
<td>56,877.94</td>
<td>439,538.88</td>
<td>2,985,240.63</td>
<td></td>
</tr>
<tr>
<td>Sample Mean</td>
<td>(L2/L1)</td>
<td>175.01</td>
<td>1352.46</td>
<td>9917.74</td>
<td></td>
</tr>
<tr>
<td>Sample Random Seed</td>
<td>N/A</td>
<td>27,127</td>
<td>15689</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>STRATUM POPULATION INFORMATION</strong></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Stratum Population Units</td>
<td>N</td>
<td>9,160</td>
<td>4,331</td>
<td>301</td>
<td></td>
</tr>
<tr>
<td>Stratum Population Dollars</td>
<td>N/A</td>
<td>1,616,570.28</td>
<td>5,834,174.59</td>
<td>2,985,240.63</td>
<td></td>
</tr>
<tr>
<td>Stratum Population Mean</td>
<td>(L7/L6)</td>
<td>176.48</td>
<td>1,347.07</td>
<td>9,917.74</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>STRATUM POPULATION &amp; SAMPLE COMPARISONS</strong></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>% of Units Sampled</td>
<td>(L1/L6)</td>
<td>3.55%</td>
<td>7.50%</td>
<td>100.00%</td>
</tr>
<tr>
<td>% of Dollars Sampled</td>
<td>(L2/L7)</td>
<td>3.52%</td>
<td>7.53%</td>
<td>100.00%</td>
</tr>
<tr>
<td>Comparison of Sample Mean &amp; Population Mean</td>
<td>(L3/L8)</td>
<td>99.17%</td>
<td>100.40%</td>
<td>100.00%</td>
</tr>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>&lt;Stratum&gt;</td>
<td>&lt;Stratum&gt;</td>
<td>&lt;Stratum&gt;</td>
</tr>
</tbody>
</table>
**Stratum One Worksheet**

Evaluation of Sample Results
Sample SALES
Stratum 1

<table>
<thead>
<tr>
<th>Stratum Information</th>
<th>Number</th>
<th>Recorded Value</th>
<th>Errors</th>
<th>Errors Squared</th>
<th>Recorded Value Squared</th>
<th>Errors * Recorded Value</th>
<th>Error Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population Units</td>
<td>9,160</td>
<td>64.57</td>
<td>64.57</td>
<td>4,169</td>
<td>4,169</td>
<td>4,169</td>
<td>1</td>
</tr>
<tr>
<td>Population Dollars</td>
<td>1,616,570.28</td>
<td>480.32</td>
<td>N/A</td>
<td>N/A</td>
<td>230,707</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Population Mean</td>
<td>176.48</td>
<td>26.80</td>
<td>26.80</td>
<td>718</td>
<td>718</td>
<td>718</td>
<td>1</td>
</tr>
<tr>
<td>Sample Units</td>
<td>325</td>
<td>398.20</td>
<td>N/A</td>
<td>N/A</td>
<td>158,563</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Sample Dollars</td>
<td>56,877.94</td>
<td>204.71</td>
<td>204.71</td>
<td>41,906</td>
<td>41,906</td>
<td>41,906</td>
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</tr>
<tr>
<td>Sample Mean</td>
<td>175.01</td>
<td>98.48</td>
<td>N/A</td>
<td>N/A</td>
<td>9,698</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Ratio Estimation Stratum Calculations</td>
<td>N/A</td>
<td>73.00</td>
<td>N/A</td>
<td>N/A</td>
<td>5,329</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Error as % of Recorded Value</td>
<td>17.17835%</td>
<td>28.10</td>
<td>28.10</td>
<td>790</td>
<td>790</td>
<td>790</td>
<td>1</td>
</tr>
<tr>
<td>Estimated Total Error</td>
<td>277,700</td>
<td>40.00</td>
<td>40.00</td>
<td>1,600</td>
<td>1,600</td>
<td>1,600</td>
<td>1</td>
</tr>
<tr>
<td>Sum of Errors Squared</td>
<td>2,316,366</td>
<td>363.18</td>
<td>N/A</td>
<td>N/A</td>
<td>131,900</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Sum of Recorded Values Squared</td>
<td>14,873,798</td>
<td>64.00</td>
<td>N/A</td>
<td>N/A</td>
<td>4,096</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Sum of Error * Recorded Values</td>
<td>2,316,366</td>
<td>110.95</td>
<td>N/A</td>
<td>N/A</td>
<td>12,310</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>77.76703238</td>
<td>235.00</td>
<td>N/A</td>
<td>N/A</td>
<td>55,225</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>n/N (If less than 0.05 FPC used)</td>
<td>3.548035%</td>
<td>118.28</td>
<td>N/A</td>
<td>N/A</td>
<td>13,990</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Finite Population Correction Factor Used</td>
<td>No</td>
<td>318.48</td>
<td>N/A</td>
<td>N/A</td>
<td>101,430</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Standard Error</td>
<td>4.31373881</td>
<td>51.35</td>
<td>N/A</td>
<td>N/A</td>
<td>2,637</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Difference Estimation Stratum Calculations**

| Finite Population Correction Factor Used | N/A | 43.26 | 43.26 | 1,871 | 1,871 | 1,871 | 1 |
| Sum of Errors Squared                   | 95,466,383 | 34.16 | 34.16 | 1,161 | 1,161 | 1,161 | 1 |
| Sum of Squared Errors                   | 2,316,366 | 61.36 | N/A | N/A | 3,765 | N/A | N/A |
| Mean Error                              | 30.06366154 | 465.60 | 465.60 | 216,783 | 216,783 | 216,783 | 1 |
| Standard Deviation                      | 79.01053365 | 132.66 | N/A | N/A | 17,599 | N/A | N/A |
| Standard Error                          | 4.38271585 | 162.78 | 162.78 | 26,497 | 26,497 | 26,497 | 1 |
| Number of Errors in Stratum             | 67 | 390.18 | N/A | N/A | 152,240 | N/A | N/A |
| Total                                  | 56,877.94 | 9,770.69 | 2,316,366 | 14,873,798 | 2,316,366 | 67 |
### Stratum Two Worksheet

**Evaluation of Sample Results**

**Sample SALES**

**Stratum 2**

<table>
<thead>
<tr>
<th>Stratum Information</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Population Units</strong></td>
<td>4,331</td>
<td>645.25</td>
<td>645.25</td>
<td>416,348</td>
<td>416,348</td>
<td>416,348</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Population Dollars</strong></td>
<td>5,834,174.59</td>
<td>4,592.00</td>
<td>N/A</td>
<td>N/A</td>
<td>21,086,464</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td><strong>Population Mean</strong></td>
<td>1,347.07</td>
<td>913.76</td>
<td>N/A</td>
<td>N/A</td>
<td>834,957</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td><strong>Sample Units</strong></td>
<td>325</td>
<td>1,620.48</td>
<td>N/A</td>
<td>N/A</td>
<td>2,625,955</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td><strong>Sample Dollars</strong></td>
<td>439,548.88</td>
<td>855.00</td>
<td>N/A</td>
<td>N/A</td>
<td>731,025</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td><strong>Sample Mean</strong></td>
<td>1,352.46</td>
<td>2,753.60</td>
<td>N/A</td>
<td>N/A</td>
<td>7,582,313</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>

**Ratio Estimation Stratum Calculations**

<table>
<thead>
<tr>
<th></th>
<th>N/A</th>
<th>879.90</th>
<th>N/A</th>
<th>N/A</th>
<th>774,224</th>
<th>N/A</th>
<th>N/A</th>
</tr>
</thead>
</table>

**Error as % of Recorded Value**

12.484.12%

**Estimated Total Error**

728,345

**Sum of Errors Squared**

93,224,538

**Sum of Recorded Values Squared**

875,499,576

**Sum of Error * Recorded Values**

93,224,538

**Standard Deviation**

507.93990932

**n/N (If less than 0.05 FPC used)**

7.504041%

**Finite Population Correction Factor Used**

Yes

**Standard Error**

27.09767547

**Mean Error**

168.84246154

**Standard Deviation**

509.05234579

**Standard Error**

27.16015768

**Number of Errors in Stratum**

46

**Total**

439,588.88

54,873.80

93,244,538

875,499,576

93,244,538

46
## Stratum Three Worksheet

### Evaluation of Sample Results

#### Sample SALE

<table>
<thead>
<tr>
<th>Stratum Information</th>
<th>Number</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population Units</td>
<td>301</td>
<td>21,431.74</td>
<td>N/A</td>
<td>N/A</td>
<td>459,319,479</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Population Dollars</td>
<td>2,985,240.63</td>
<td>6,480.20</td>
<td>N/A</td>
<td>N/A</td>
<td>41,992,992</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Population Mean</td>
<td>9,917.74</td>
<td>38,680.10</td>
<td>N/A</td>
<td>N/A</td>
<td>1,496,150,136</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Sample Units</td>
<td>301</td>
<td>6,250.00</td>
<td>N/A</td>
<td>N/A</td>
<td>39,062,500</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Sample Dollars</td>
<td>2,985,240.63</td>
<td>45,535.60</td>
<td>N/A</td>
<td>N/A</td>
<td>2,073,490,867</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Sample Mean</td>
<td>9,917.74</td>
<td>6,180.50</td>
<td>6,180.50</td>
<td>38,198,580</td>
<td>38,198,580</td>
<td>38,198,580</td>
<td>1</td>
</tr>
</tbody>
</table>

#### Ratio Estimation Stratum Calculations

<table>
<thead>
<tr>
<th>Stratum Information</th>
<th>N/A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Error as % of Recorded Value</td>
<td>2.22110%</td>
<td>8,723.64</td>
<td>N/A</td>
<td>N/A</td>
<td>76,101,895</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Estimated Total Error</td>
<td>66,305</td>
<td>23,620.80</td>
<td>N/A</td>
<td>N/A</td>
<td>557,942,193</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Sum of Errors Squared</td>
<td>835,701,426</td>
<td>17,466.98</td>
<td>N/A</td>
<td>N/A</td>
<td>304,397,111</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Sum of Recorded Values Squared</td>
<td>42,789,973,156</td>
<td>6,260.00</td>
<td>N/A</td>
<td>N/A</td>
<td>39,187,600</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Sum of Error * Recorded Values</td>
<td>835,701,426</td>
<td>5,127.01</td>
<td>N/A</td>
<td>N/A</td>
<td>26,286,232</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>1,652,964,390.81</td>
<td>19,267.32</td>
<td>N/A</td>
<td>N/A</td>
<td>371,229,620</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>n/N (If less than 0.05 FPC used)</td>
<td>100.0000 %</td>
<td>13,759.80</td>
<td>N/A</td>
<td>N/A</td>
<td>189,332,096</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Finite Population Correction Factor Used</td>
<td>Yes</td>
<td>5,912.83</td>
<td>N/A</td>
<td>N/A</td>
<td>34,961,559</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Standard Error</td>
<td>0.0000</td>
<td>5,346.00</td>
<td>N/A</td>
<td>N/A</td>
<td>28,579,716</td>
<td>N/A</td>
<td>N/A</td>
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</tbody>
</table>

#### Difference Estimation Stratum Calculations

<table>
<thead>
<tr>
<th>Stratum Information</th>
<th>N/A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finite Population Correction Factor Used</td>
<td>Yes</td>
<td>42,253.72</td>
<td>N/A</td>
<td>N/A</td>
<td>1,785,376,854</td>
<td>N/A</td>
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</tbody>
</table>

#### Sum of Errors Squared

<table>
<thead>
<tr>
<th>Stratum Information</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population Units</td>
<td>21,431.74</td>
<td>N/A</td>
<td>N/A</td>
<td>459,319,479</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Population Dollars</td>
<td>6,480.20</td>
<td>N/A</td>
<td>N/A</td>
<td>41,992,992</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Population Mean</td>
<td>38,680.10</td>
<td>N/A</td>
<td>N/A</td>
<td>1,496,150,136</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Sample Units</td>
<td>6,250.00</td>
<td>N/A</td>
<td>N/A</td>
<td>39,062,500</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Sample Dollars</td>
<td>45,535.60</td>
<td>N/A</td>
<td>N/A</td>
<td>2,073,490,867</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Sample Mean</td>
<td>6,180.50</td>
<td>6,180.50</td>
<td>38,198,580</td>
<td>38,198,580</td>
<td>38,198,580</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>2,985,240.63</td>
<td>66,305.04</td>
<td>835,701,426</td>
<td>42,789,937,156</td>
<td>835,701,426</td>
<td>7</td>
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</table>
### Ratio Estimation Evaluation Worksheet

<table>
<thead>
<tr>
<th>Stratum</th>
<th>Standard Error Per Transaction</th>
<th>Stratum Population Count = N</th>
<th>Standard Stratum Error</th>
<th>Standard Stratum Error Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales: Stratum 1</td>
<td>4.31373881</td>
<td>9,160</td>
<td>39,514</td>
<td>1,561,344,144.22</td>
</tr>
<tr>
<td>Sales: Stratum 2</td>
<td>27.09767547</td>
<td>4,331</td>
<td>117,360</td>
<td>13,773,377,219.15</td>
</tr>
<tr>
<td>Sales: Stratum 3</td>
<td>0.00000000</td>
<td>301</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

| SUM                      | (Sum=(F11:F13))              | 15,334,721,363.37          |
| SQRT                     | (SQRT(F15))                  | 123,833.44                 |
| Computed Precision Interval of Population With 80% Confidence | (F16 * 1.28)                 | 156,506.81                 |
| Computed Precision Interval of Population With 90% Confidence | (F16 * 1.64)                 | 203,086.84                 |

<table>
<thead>
<tr>
<th>Stratum</th>
<th>Error as Percent of Recorded Value</th>
<th>Total Recorded Value</th>
<th>Total Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales: Stratum 1</td>
<td>0.171783472</td>
<td>1,616,570.28</td>
<td>277,700.06</td>
</tr>
<tr>
<td>Sales: Stratum 2</td>
<td>0.124841178</td>
<td>5,834,174.59</td>
<td>728,345.23</td>
</tr>
<tr>
<td>Sales: Stratum 3</td>
<td>0.022210953</td>
<td>2,985,240.63</td>
<td>66,305.04</td>
</tr>
<tr>
<td>Sum</td>
<td>N/A</td>
<td>(SUM=(E22:E24))</td>
<td>1,072,350.32</td>
</tr>
</tbody>
</table>

**Combined Results**

<table>
<thead>
<tr>
<th>Confidence Interval at 80% Confidence Level for Combined Evaluation</th>
<th>Confidence Interval at 90% Confidence Level for Combined Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.78%</td>
<td>18.94%</td>
</tr>
</tbody>
</table>
### Difference Estimation Evaluation Worksheet

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>(N)</td>
<td>(Stratum N Weeks)</td>
<td>(Stratum N Weeks)</td>
<td>(I * J)</td>
<td>(K * K)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales: Stratum 1</td>
<td>4.38271585</td>
<td>9,160</td>
<td>40,146</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales: Stratum 2</td>
<td>27.16015768</td>
<td>4,331</td>
<td>117,631</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales: Stratum 3</td>
<td>0.0000000</td>
<td>301</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUM</td>
<td>(Sum=(L11:L13))</td>
<td>15,448,643,548.63</td>
</tr>
<tr>
<td>SQRT</td>
<td>(SQRT(L15))</td>
<td>124,292.57</td>
</tr>
<tr>
<td>Computed Precision Interval of Population With 80% Confidence</td>
<td>(L16 * 1.28)</td>
<td>156,506.81</td>
</tr>
<tr>
<td>Computed Precision Interval of Population With 90% Confidence</td>
<td>(L16 * 1.64)</td>
<td>203,839.82</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Stratum N Weeks)</td>
<td>(Stratum N Weeks)</td>
<td>(I * J)</td>
</tr>
<tr>
<td>Stratum</td>
<td>Mean Error</td>
<td>Stratum Population Count=N</td>
</tr>
<tr>
<td>Sales: Stratum 1</td>
<td>30.06366154</td>
<td>9,160</td>
</tr>
<tr>
<td>Sales: Stratum 2</td>
<td>168.84246154</td>
<td>4,331</td>
</tr>
<tr>
<td>Sales: Stratum 3</td>
<td>220.28252492</td>
<td>301</td>
</tr>
<tr>
<td>Sum</td>
<td>(SUM=(K22:K24))</td>
<td>1,072,944.88</td>
</tr>
</tbody>
</table>

### Combined Results

<table>
<thead>
<tr>
<th>(L17/K26)</th>
<th>(L18/K26)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confidence Interval at 80% Confidence Level for Combined Evaluation</td>
<td>Confidence Interval at 90% Confidence Level for Combined Evaluation</td>
</tr>
<tr>
<td>14.83%</td>
<td>19.00%</td>
</tr>
</tbody>
</table>
CALIFORNIA ELECTRONIC DATA REQUEST

We are requesting electronic data for the periods MM/DD/YYYY through MM/DD/YYYY for California transactions. The following is a list of fields we typically request for sales data and accounts payable data. This is an example and fields may differ by taxpayer. If your system has additional fields that would be beneficial for the examination, please include those fields as well. The data should include an appropriate record retrieval field (a field which will allow access to a hard copy of the record).

### Sales Data Fields-Sales Invoice Information

<table>
<thead>
<tr>
<th>Company/Division/Branch Codes</th>
<th>Bill to Customer Zip Code</th>
<th>Taxable / Exempt Flag</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales Order Number</td>
<td>Ship to Customer Number</td>
<td>GEO / Juris Codes</td>
</tr>
<tr>
<td>Sales Invoice Number</td>
<td>Ship to Customer Name</td>
<td>Currency</td>
</tr>
<tr>
<td>Sales Invoice Date</td>
<td>Ship to Customer Street Address 1</td>
<td>Invoice Gross Total</td>
</tr>
<tr>
<td>Fiscal Period</td>
<td>Ship to Customer Street Address 2</td>
<td>Invoice Freight Total</td>
</tr>
<tr>
<td>Fiscal Year</td>
<td>Ship to Customer City</td>
<td>Invoice Tax Total</td>
</tr>
<tr>
<td>Invoice Type</td>
<td>Ship to Customer County</td>
<td>Line Item Number</td>
</tr>
<tr>
<td>Sales Channel Table Code</td>
<td>Ship to Customer State</td>
<td>Unit Sales Price</td>
</tr>
<tr>
<td>Bill to Customer Number</td>
<td>Ship to Customer Country</td>
<td>Quantity Purchased</td>
</tr>
<tr>
<td>Bill to Customer Name</td>
<td>Ship to Customer Zip Code</td>
<td>Extended Price Amount</td>
</tr>
<tr>
<td>Bill to Customer Street Address 1</td>
<td>Method of Delivery</td>
<td>Line Item Tax Amount</td>
</tr>
<tr>
<td>Bill to Customer Street Address 2</td>
<td>FOB Status</td>
<td>Product - Item Group</td>
</tr>
<tr>
<td>Bill to Customer City</td>
<td>Customer Purchase Order Number</td>
<td>Product - Item Code</td>
</tr>
<tr>
<td>Bill to Customer State</td>
<td>Customer Sellers Permit Number (Resale #)</td>
<td>Product - Item Description</td>
</tr>
</tbody>
</table>

### Accounts Payable Data Fields-Accounts Payable Information

<table>
<thead>
<tr>
<th>Company/Division/Branch Codes</th>
<th>Vendor Invoice Date</th>
<th>Tax Flag on Purchase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document Number</td>
<td>Vendor Number</td>
<td>Currency</td>
</tr>
<tr>
<td>Document Date</td>
<td>Vendor Name</td>
<td>Line Item Number</td>
</tr>
<tr>
<td>Posting Date</td>
<td>Vendor Street Address 1</td>
<td>GL Distribution Amount</td>
</tr>
<tr>
<td>Fiscal Period</td>
<td>Vendor Street Address 2</td>
<td>Freight Amount</td>
</tr>
<tr>
<td>Fiscal Year</td>
<td>Vendor City</td>
<td>Tax Amount (Paid to Vendor)</td>
</tr>
<tr>
<td>Document Type</td>
<td>Vendor State</td>
<td>Total Invoice Amount</td>
</tr>
<tr>
<td>Voucher Number (If Applicable)</td>
<td>Vendor Zip Code</td>
<td>Tax Accrued</td>
</tr>
<tr>
<td>Voucher Date (If Applicable)</td>
<td>Vendor Tax Coding</td>
<td>Shipped to Location or Branch</td>
</tr>
<tr>
<td>Batch Number (If Applicable)</td>
<td>GL Account Number w/all Sub Accounts</td>
<td>GEO / Juris Codes</td>
</tr>
<tr>
<td>Batch Date (If Applicable)</td>
<td>GL Account Description w/all Sub Accounts</td>
<td>Link to Source Document</td>
</tr>
<tr>
<td>Vendor Invoice Number</td>
<td>Purchase Order Number</td>
<td>Line Item Description</td>
</tr>
</tbody>
</table>

### CONTROL TOTALS:
The following check figures are needed for verification and validation purposes:

1. Total for each numeric field in each file.
2. Total number of records for each file provided.

### DATA FORMAT:
Please provide the data in a delimited text file format. The preferred delimiters are pipe “|” or tilde “~”. Use double quote text qualifiers where appropriate. Other data formats may be accepted with the approval of CDTFA staff. If multiple files are provided, please use the same data layout for each file.

### NOTES:
Regulation 1698 provides the authority to the CDTFA to obtain data in the requested format. A complete copy of Regulation 1698 can be found at: www.cdtfa.ca.gov
**Population Reconciliation**

**Accounts Receivable Example**

<table>
<thead>
<tr>
<th>STEPS</th>
<th>DESCRIPTION</th>
<th>FILE NAME</th>
<th>RECORDS</th>
<th>LINES</th>
<th>EXTENDED PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEP 1</td>
<td>Data provided by TP and Validated to Control Totals</td>
<td>AR1</td>
<td>138,077</td>
<td>30,683,799.56</td>
<td></td>
</tr>
<tr>
<td>STEP 2</td>
<td>Ship-To Locations to exclude.</td>
<td>AR2a_ShipToLocOut</td>
<td>11,266</td>
<td>3,360,352.46</td>
<td></td>
</tr>
<tr>
<td>STEP 3</td>
<td>Subtotal</td>
<td>AR2</td>
<td>126,811</td>
<td>27,323,447.10</td>
<td></td>
</tr>
<tr>
<td>STEP 4</td>
<td>Taxed Items to exclude.</td>
<td>AR3a_TaxedItemsOut</td>
<td>12,144</td>
<td>2,916,630.09</td>
<td></td>
</tr>
<tr>
<td>STEP 5</td>
<td>Subtotal</td>
<td>AR3</td>
<td>114,667</td>
<td>24,406,817.01</td>
<td></td>
</tr>
<tr>
<td>STEP 6</td>
<td>Customers to exclude.</td>
<td>AR4a_CustomersOut</td>
<td>39,206</td>
<td>12,048,114.46</td>
<td></td>
</tr>
<tr>
<td>STEP 7</td>
<td>Subtotal</td>
<td>AR4</td>
<td>75,461</td>
<td>12,358,702.55</td>
<td></td>
</tr>
<tr>
<td>STEP 8</td>
<td>Rolled to Unique Level</td>
<td>AR5_UnqRoll</td>
<td>25,860</td>
<td>12,358,702.55</td>
<td></td>
</tr>
<tr>
<td>STEP 9</td>
<td>Exclude Net Credit Items.</td>
<td>AR6a_NetCreditValueItems</td>
<td>1,506</td>
<td>-475,425.87</td>
<td></td>
</tr>
<tr>
<td>STEP 10</td>
<td>Exclude Net Zero Items.</td>
<td>AR6b_NetZeroValueItems</td>
<td>723</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>STEP 11</td>
<td>Sampling Frame</td>
<td>AR6</td>
<td>23,631</td>
<td>12,834,128.42</td>
<td></td>
</tr>
</tbody>
</table>

**Unique Sample Unit = Customer Number + Invoice Number + Invoice Date**

---

**Population Reconciliation**

**Accounts Payable Example**

<table>
<thead>
<tr>
<th>STEPS</th>
<th>DESCRIPTION</th>
<th>FILE NAME</th>
<th>RECORDS</th>
<th>LINES</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEP 1</td>
<td>Data provided by TP and Validated to Control Totals</td>
<td>AP1</td>
<td>60,587</td>
<td>85,611,348.80</td>
<td></td>
</tr>
<tr>
<td>STEP 2</td>
<td>Vendors to exclude.</td>
<td>AP2a_VendOut</td>
<td>9,653</td>
<td>11,483,524.38</td>
<td></td>
</tr>
<tr>
<td>STEP 3</td>
<td>Subtotal</td>
<td>AP2</td>
<td>50,934</td>
<td>74,127,824.42</td>
<td></td>
</tr>
<tr>
<td>STEP 4</td>
<td>Tax Accrued purchases to exclude.</td>
<td>AP3a_TaxAccruedOut</td>
<td>15,237</td>
<td>30,561,964.50</td>
<td></td>
</tr>
<tr>
<td>STEP 5</td>
<td>Subtotal</td>
<td>AP3</td>
<td>35,697</td>
<td>43,565,859.92</td>
<td></td>
</tr>
<tr>
<td>STEP 6</td>
<td>Rolled to Unique Level</td>
<td>AP4_UnqRoll</td>
<td>21,775</td>
<td>43,565,859.92</td>
<td></td>
</tr>
<tr>
<td>STEP 7</td>
<td>Exclude Net Credit Items.</td>
<td>AP5a_NetCreditValueItems</td>
<td>297</td>
<td>-203,086.48</td>
<td></td>
</tr>
<tr>
<td>STEP 8</td>
<td>Exclude Net Zero Items.</td>
<td>AP5b_NetZeroValueItems</td>
<td>123</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>STEP 9</td>
<td>Sampling Frame</td>
<td>AP5</td>
<td>21,355</td>
<td>43,768,946.40</td>
<td></td>
</tr>
</tbody>
</table>

**Unique Sample Unit = Vendor Number + Invoice Number + Invoice Date**
Following is a list of statistical sampling reference materials that were used in drafting language for this chapter of the Audit Manual:

- California Department of Tax and Fee Administration’s Statistical Sampling Instructor’s Guide
- California Department of Tax and Fee Administration *Study Notes for Sampling and Testing Techniques as Applied to the Sales Tax Audit* (John Gee and Robert Gustafson, January 1964)
- *Statistical Sampling for Audit and Control* (T.W. McRae, 1974)
- *Handbook of Sampling for Auditing and Accounting* (Herbert Arkin, 1974)
- *Sampling Manual for Auditors* (Institute of Internal Auditors, 1967)
- *Supplement to the Sampling Manual for Auditors* (Institute of Internal Auditors, 1970)
- *IRS Statistical Sampling Handbook* (November 1988)
TAX AUDITING 0401.05

[Note: This is not a revision of the entire section 0401.05 and is only modifying the references to a section of the AM that has changed. The rest of the section will be updated in a future revision.]

Sampling and projection techniques may be used by taxpayers to determine the amount of overpayment of tax liability using criteria similar to the techniques used by auditors (AM sections 0405.20 and Chapter 13). If sampling and projection techniques are not appropriate for some or all of the transactions, the amount of the refund will be determined on an actual basis.

The preferred method of sampling is statistical sampling, as described in Chapter 13 of this manual. Claims for refund using statistical sampling methods must meet the CDTFA’s established standards for statistical sample evaluation. If statistical sampling is not feasible, non-statistical sampling procedures, as discussed in this chapter, may be considered.

Once the taxpayer has filed a claim for refund and has requested or suggested determining the amount of refund by means of sampling, the claim will be assigned to an auditor who will contact the taxpayer to determine if sampling is feasible and, if so, develop a mutually agreeable sampling plan. The auditor may choose to consult a Computer Audit Specialist (CAS) on the sampling plan.

During the course of an audit, conducted on an actual or sample basis, the auditor may detect both underpayments and overpayments. It is very important that the underpayments and overpayments (credit offsets) be treated equally. When an audit is done on a sample basis, both overpayments (in certain situations) and underpayments need to be taken into account and treated the same when examining sample items, analyzing the sample results, and projecting the resulting errors to the population being tested. Any allowable credit offsets resulting from the sample should be a part of the calculation of the percentage of error to be applied to the population. See section 1303.25(i) for additional discussion of tax overpayments (credit offsets) in the sampling plan.
 ROLE AND RESPONSIBILITIES OF COMPUTER AUDIT SPECIALIST 0403.12

The goal of the Computer Audit Specialist (CAS) program is to provide specialized technical support and assistance to field auditors in dealing with electronic records and in the design, implementation and analysis of statistical samples. By leveraging the advanced electronic data analysis techniques and tools used by the CAS, field audits can be performed more accurately and efficiently. The CAS enables auditors and taxpayers to make more informed decisions regarding the population to be tested, sample size, stratification levels, sample representativeness, statistically proper handling of unusual sample units, sample evaluations, etc.

The CAS serves in a consulting capacity and is required to be consulted on all audits where:

- A previous sales tax audit exceeded 300 hours and large volumes of electronic data will be utilized in the current audit;
- A previous special tax and fee audit exceeded 100 hours and large volumes of electronic data will be utilized in the current audit;
- The special tax and fee audit involves a cigarette and tobacco products distributor, the emergency telephone user surcharge, motor vehicle fuel supplier, or diesel fuel supplier account;
- There are large volumes of electronic data;
- A prior audit was performed with a CAS;
- Assistance is needed by the auditor to obtain usable data.

The CAS may also be consulted on other complex audits at the discretion of the audit supervisor. In addition, the CAS supplies expert advice on electronic data downloads, statistical sampling procedures, and sample evaluations, as needed by auditors and field audit management.

CAS Coordination with Audit Principal or Administrators

To enhance communication between the CAS and the Audit Principal (AP) or the Administrator, the CAS team is required to do the following:

- Schedule and attend monthly meetings with the AP or Administrator to review audits with the CAS involvement and discuss their progress.
- Provide access to their Outlook calendars to the AP or Administrator of the offices they reside in and support. The CAS must keep their Outlook calendars up to date (including approved time off).
- Attend office meetings provided they are notified in advance and are available.
- Establish designated office hours (days and hours they will be in the office). Typically, in-state CAS have one regularly scheduled office day per week and out-of-state CAS have one office day on non-travel weeks. When exceptions have to be made, the CAS will give the PA advanced notice.
- The CAS must timely document their work in the system in CRM Notes for each account they are working.
- The CAS will report any delays related to their role in the audit directly to the AP or Administrator, Supervising Tax Auditor, and the auditor.
- The CAS will secure the taxpayer’s electronic data consistent with the established security policies for taxpayer’s electronic data.
General Audit Roles & Responsibilities of the CAS and Auditors

The CAS is a member of the audit team and serves as a technical consultant to the auditor(s). The CAS should be available for consultations and to attend meetings and status conferences upon the request of the Audit Supervisor, the AP or the Administrator.

Auditors are responsible for making decisions regarding the audit approach; however, the CAS may offer suggestions pertaining to electronic records and statistical sampling. As such, the development of an audit plan for an audit utilizing a CAS requires a coordinated effort between the CAS and the auditor with the following principles in mind:

- Request records and data that are relevant to the audit.
- Ensure the transaction data is material to the audit.
- Consider the nature of transactions and the ease with which data can be accessed and analyzed.
- Ensure timely communication between the CAS and the auditor throughout the development of the audit plan and the audit process.

If there is any concern or disagreement between the CAS and the auditor regarding the audit plan or methodology, the CAS should bring these concerns to the attention of the AP or Administrator, Audit Supervisor and the CAS Supervisor. There should be no discussion of concerns in front of the taxpayer.

The CAS’s analysis, evaluation and understanding of the taxpayer’s electronic records, and processing of the data will be documented by the CAS in CRM Notes for inclusion in the audit verification comments. The CAS’s documentation should include a detailed log and reconciliation of how the target population(s) was achieved from the original population provided and the taxpayer’s data layout.

Pre-Audit Conference

On accounts where a CAS consultation is required, the lead auditor should contact and meet with the CAS before scheduling the pre-audit conference with the taxpayer. See AM section 0401.08 for more information on the Pre-Audit Conference. At or prior to the pre-audit conference, the auditor will provide the taxpayer a copy of Publication 147, What to Expect in a Computer Assisted Audit or will instruct the taxpayer how to locate it on the public website.

The CAS will attend the pre-audit conference(s) with other CDTFA representatives, the taxpayer and their representative along with the taxpayer’s appropriate Information Technology (IT) staff. The pre-audit conference must include an explanation and a discussion of the following issues and documents relating to the CAS involvement in the audit.

- Publication 147, What to Expect in a Computer Assisted Audit
- Availability and access to records
- What data fields/elements are maintained in the taxpayer’s database
- How data is stored in the taxpayer’s computer system
- Checklist for electronic data
- Electronic data transfer process
- Security of taxpayer data
- Validation and reconciliation of data
- Relevant sampling issues
- Timeframes for furnishing and reviewing records
Work to be performed by the CAS, including work to be performed at the taxpayer’s location.

The CAS, auditor and taxpayer should work together to establish reasonable timeframes for the taxpayer to furnish the data requested and the CAS to process the data. The auditor is responsible for following up with the taxpayer to ensure all requested data is provided. The Checklist for Electronic Data will be provided to the taxpayer by the CAS to ensure that all requested data is provided.

The CAS should work with the taxpayer’s IT staff to achieve a thorough understanding of the taxpayer’s electronic books and records. Whenever possible, the CAS should review the extraction query written by the taxpayer for the requested data to ensure the data provided will be complete, correct and unfiltered.

At the pre-audit conference, the taxpayer should be encouraged to perform their own data validation(s) and reconciliation(s) due to their knowledge and expertise with their accounting system. This will minimize the auditor and the CAS time required to complete this task.

**Initial Data Analysis**

After data is provided by the taxpayer, two key steps must be completed before the data can be used for audit purposes:

1. **Validation** – This refers to reconciling control totals and record counts related to data files provided for use in the audit. Validation is the responsibility of the CAS.

   Depending on the volume of data and number of data files, this may take up to several days by the CAS. The auditor will be contacted immediately via email when the initial validation work is complete. If the data is successfully validated, the CAS will provide the auditor with the necessary data files to complete the reconciliation. If the data cannot be validated, the CAS will inform the auditor and audit supervisor so appropriate action may be taken to secure the necessary electronic records.

   In the event the CAS cannot complete the validation process timely, notification will be made immediately to the auditor and auditor supervisor.

2. **Reconciliation** – This refers to the audit procedure of tracing amounts to the books and records to verify the data provided by the taxpayer accurately represents the amounts recorded in the books and records. The taxpayer and the auditor should come to a consensus that the electronic data received is an accurate and complete representation of the transactions requested.

   While the CAS will provide guidance and assistance as needed to the auditor and the taxpayer regarding the reconciliation of data, it is the auditor’s responsibility to ensure the data is verified for accuracy and completeness. Reconciliation of the data to the records must be done before pulling samples and documented in the AWP.

**Sampling and Testing**

After the electronic data is validated and reconciled, the auditor and the CAS will work in a concerted effort with the taxpayer regarding sampling characteristics, such as:

- Population
- Sample size
- Accounts of interest
- Sample units
- Cost centers
- Locations
• Divisions of interest
• Eliminated transactions
• Handling of credits and offsets (which method will be used)
• Handling of missing invoices

Should agreement not be possible, the auditor will make the final decision on and be responsible for the sampling characteristics and the sampling methodology. Should agreement be reached and based on the sampling plan, the CAS will complete and provide the necessary documents and/or schedules to the auditor for inclusion in the audit working papers.

Form CDTFA-472, *Use of Sampling in Auditing*, will be used by the auditor (the CAS will assist when necessary) to document the sample selection methodology.

After the electronic data is verified and reconciled, at the request of the auditor, the CAS will:

• Filter the electronic data for selecting the sample or accounts of interest.
• Design statistical sampling plans for appropriate areas of the audit.
• Perform other computer assisted audit procedures as needed.

See AM Chapter 13, section 1304.00 and 1306.00, for more information on sample selection and evaluation of sample results.

**Exit Conference**

(a) As a general rule, the CAS’s work will be completed long before the exit conference. Presence of a CAS at the exit conference is not mandatory; however, the AP or Administrator, or Supervising Tax Auditor may request the CAS attend when beneficial.
USE OF TEST BASIS

[Note: This is not a revision of the entire section 0405.20 and is only modifying the reference to a section of the AM that has changed. The rest of the section will be updated in a future revision.]

(m) Timing — The auditor must take care to be aware of timing differences between the date of a transaction and the date it is recorded by the taxpayer. For example, paid bills are frequently recorded when paid rather than on the date of the invoice. See section 1303.25(e) for a discussion of installment payments.
AUDITS OF SALES SUBJECT TO USE TAX

[Note: This is not a revision of the entire section 0408.12 and is only modifying two items to align with Chapter 13 of the Audit Manual that has changed. The rest of the section will be updated in a future revision.]

In determining the party liable for the assessment of use tax, the auditor should not presume the use tax will be assessed in the future audit of a purchaser due to the size of the entity or audit history, and may assess use tax against the seller. To avoid a duplicate assessment of use tax on the same transaction, the auditor should complete Form CDTFA-1164, Memorandum of Possible Tax Liability, as provided in AM section 0408.18 and make a notation whether use tax was assessed on the seller/purchaser. The auditor sends a copy of the form to both taxpayer files. In addition, the auditor may preclude the duplicate assessment of use tax by using Form CDTFA 503-C (paper version) or Form CDTFA -503-C1 (electronic version), Statement of Property Purchased Without Payment of California Use Tax.

Generally, in a simultaneous audit of the seller and purchaser, the use tax is assessed in the audit of the purchaser. However, the auditor should verify tax is not being assessed in the audit of the seller to avoid double taxation of the transaction.

When an auditor determines there is a potential use tax liability, the auditor must determine whether use tax on a transaction was already paid by a different taxpayer. Auditors can determine whether use tax was already paid by examining:

- ABC Letters (CDTFA 503 series) – used to verify payment of use tax by out-of-state sellers
- Utilize the system screens to determine if the purchaser is registered with the CDTFA (New Manager, Search Manager, Search tab) and if any use tax was remitted (Account springboard, Financial tab, Returns sub-tab. Select the link for each return in the audit period then select the link for Form 401-A2 to see details on line 2 of each return.)
- Audit Archive or the system – digitalized copies of working papers available on the network
- California state income tax return (to verify purchaser reported purchases subject to use tax on their income tax return)
- XYZ Letter

While these steps must be taken to ensure tax is not asserted more than once on a single transaction, the auditor must also maintain the confidential nature of CDTFA's information and not disclose to the taxpayer that the other party is under audit or that the CDTFA intends to examine the records of the other party. To ensure confidentiality, the auditor should only comment in the audit work papers that “tax has otherwise been paid.” A reference to the permit number is acceptable because it does not imply an audit is being conducted. However, no further information should be noted, other than the permit number.

Out-of-state retailers are required to register and collect use tax on sales made to customers in this state if they are “engaged in business” in this state. If the out-of-state sellers cannot be found in the system, it is likely they are not registered with the CDTFA and the auditor is to prepare a CDTFA-1164, Audit Memorandum of Possible Tax Liability, form as provided in AM section 0408.19.

Following are examples of transactions in which auditors need to verify whether use tax was paid by or assessed in the audit of the corresponding purchaser or seller.

Example 1: Audit of a registered out-of-state seller discloses a questioned ex-tax sale to an unregistered purchaser.

After exhausting the examination steps above (for example, allowing the seller to send XYZ
letters), the auditor should disallow the questioned ex-tax sale if it cannot be determined that use tax was paid or the transaction was not subject to tax.

**Example 2:** Audit of the purchaser discloses a questioned ex-tax purchase from a registered out-of-state seller.

When the auditor establishes the seller is registered with the CDTFA with a seller’s permit or a certificate of registration for use tax, the auditor should use the system (New Manager, Search, Search) (Account springboard, Financial, Returns. Select the link for each return in the audit period then select the link for Form 401-A2 to see details on line 2 of each return) to determine whether the questioned transaction occurred during an audit of the seller.

If the transaction does occur within an audit period of the seller, then the auditor should determine if any use tax assessment was made against the seller. This can be done by:

- Contacting the auditor of the seller directly and/or
- Reviewing the audit in the Audit Archive

If it is determined use tax was assessed in the audit of the seller, the auditor should comment “tax has otherwise been paid.” If the transaction does not occur within an audit period the auditor should exhaust the steps above to determine if use tax was otherwise reported by the seller (for example, allowing the taxpayer to send ABC letter). If use tax was not reported by the seller, then the auditor should assess use tax against the purchaser.

**Example 3:** A block sample used to test sales subject to use tax in an audit of a registered out-of-state seller.

A questioned ex-tax sale of $1,000 was found in the audit of the registered out-of-state seller and determined to be taxable. The auditor of the seller noted that the purchaser is registered with the CDTFA and the transaction was included within the audit period of the purchaser. The auditor of the seller contacted the auditor of the purchaser and determined a block sample was performed on ex-tax purchases with the following results:

- Population – 5,500 transactions (includes the $1,000 transaction questioned above)
- Block test period – one quarter (invoices were readily available)
- Projected error of $65,000

The auditor of the seller should allow the questioned ex-tax sale. The transaction was included within the audit period of the purchaser and tax was projected on that population of sales. The questioned ex-tax sale does not need to be one of the sample items selected in the test. As long as the projection of error reasonably covers the questioned transaction, the auditor should allow the questioned ex-tax sale because the tax was ultimately assessed against the purchaser.

**Example 4:** A statistical sample used to test sales subject to use tax in the audit of the purchaser.

A questioned ex-tax purchase of $1,500 was found in the audit of the purchaser and determined to be taxable. The auditor of the purchaser noted the seller was registered at an out-of-state location, and the transaction fell within the audit period of the seller. The purchaser did not issue an exemption certificate or resale certificate to the seller. The auditor of the purchaser contacted the auditor of the seller and determined a stratified statistical sample was performed on ex-tax sales with the following results:

- Strata 1 ($0.00 - $999.99) – Projected error of $175,000
• Strata 2 ($1,000 - $4,999.99) – Projected error of $348,000
• Strata 3 ($5,000 - $19,999.99) – No projection of error (No errors found in sample)
• Strata 4 ($20,000+ Actual Basis) - $233,000

The auditor of the purchaser should allow the questioned ex-tax purchase. The transaction was included within the audit period of the seller and tax was projected on the strata containing the questioned transaction. The questioned ex-tax purchase does not need to be one of the sample items selected in the strata. As long as the projection of error reasonably covers the questioned transaction, the auditor should allow the questioned ex-tax purchase.

Note: If there was no projection of error made for Strata 2, the auditor of the purchaser should not allow the questioned ex-tax purchase (unless other evidence points to the contrary) because under those circumstances it is likely that tax was not assessed in the audit of the seller.
BAD DEBTS INCURRED BY LENDERS ON PURCHASED ACCOUNTS RECEIVABLE

[Note: This is not a revision of the entire section 0419.17 and is only modifying the portion that discusses statistical sampling to align with the revisions being made for Chapter 13. The rest of the section will be updated in a future revision.]

Regardless of the method used, the claimant should retain and have available for review, election agreements on each account being claimed as a bad debt even if sampling is being used. In addition, prior to beginning verification of the deduction or claim for refund, when sampling is being used, all claimants should be informed that it might later be necessary to expand the size of the sample to ensure a representative sample is taken so the accuracy of the deduction or claim for refund is assured. A claimant must be able and willing to provide documentation to support all transactions included in the deduction or claim for refund, regardless of accessibility, with the exception of credit card issuers, as discussed below. Transactions must be disallowed for claimants, other than a credit card issuer, that are not capable and willing to provide supporting documentation, even in cases where the claimant purports to have documentation but cannot provide copies because they are not readily accessible.

1. **Actual Basis:** The lender provides a listing of accounts on an actual basis and computes the amount of the allowable bad debt loss on each account on a transaction-by-transaction basis. The information included in the listing must include the items in Appendix 2 of Regulation 1642, *Bad Debts*. Under this method, the lender computes the claimed bad debt loss for sales and use tax purposes on an actual basis and the auditor verifies the accuracy of the lender’s listing. Auditors should utilize statistical sampling techniques to verify the accuracy of the lender’s claimed refund. Auditors must follow the guidelines for performing a statistical sample set forth in AM Chapter 13, *Statistical Sampling*. Additional guidance related to sampling refund populations is located in AM Chapter 13, Section 1305.10.

2. **Statistical Sampling:** The lender provides a listing of the bad debt accounts written off per their books but they have not computed the allowable bad debt loss as described in Regulation 1642(d). The amount listed may include non-taxable elements such as taxes, vehicle license and registration fees, interest, late fees, repossession fees, etc. The auditor must perform a statistical sample of the transactions to compute the allowable portion of the bad debt loss. Team members must follow the guidelines for performing a statistical sample set forth in AM Chapter 13. Additional guidance related to sampling refund populations is located in AM Chapter 13, Section 1305.10. The lender must provide a listing for the sample that computes the allowable portion of the bad debt on a transaction-by-transaction basis in accordance with Regulation 1642(d). The auditor must verify the accuracy of the sample data.

Under this method, the lender provided the total write off amount for the population. It includes items not allowable under Regulation 1642. The sample is used to compute an audited allowable amount on a transaction-by-transaction basis. Thus, every transaction examined in the sample will show a difference between the audited and claimed bad debt. These differences must be evaluated using the CDTFA’s Statistical Sampling Evaluation program. When the sample evaluates well, it will be used to compute an audited allowable bad debt percentage. The allowable bad debt percentage is the audited allowable amount per the sample (computed in accordance with Regulation 1642) divided by the total bad debt claimed in the sample. The allowable bad debt percentage will be applied to the total claimed bad debt to arrive at the total audited allowable bad debt amount. If the sample differences do not evaluate well, staff should consider expanding the sample. Before expanding a sample in this situation, a Computer Audit Specialist should be consulted.
3. **Mean Allowable:** The third method is similar to the second method described above. Under this method a mean allowable bad debt per account is computed in lieu of an allowable percentage. The verification procedures the auditor must perform are identical to those described in method two above. When the sample evaluates well, it will be used to compute an audited allowable mean bad debt per account.

The mean allowable amount per account is computed by taking the allowable write off amount per the sample (computed in accordance with Regulation 1642) divided by the total number of accounts examined in the sample. The mean allowable amount per account will be applied to the total number of accounts contained in the population to arrive at the total allowable bad debt. If the sample differences do not evaluate well, the auditor must expand the sample or provide adequate comments to support the application of the results of the sample.

The alternate procedure, described below, may be used when reviewing and examining deductions or claims for refund filed by certain lenders with respect to credit card bad debts where the lenders do not maintain transaction level detail.
Total Population of Claim on Electronic Media

- Must exclude or readily identify loans that do not qualify
- Must identify loan origination date (typically date loan contract entered into)
- Must include seller’s/dealer’s name and address (city and state)
- Must include the seller’s/dealer’s California seller’s permit number
- Must include consumer’s name and address (city and state)
- Must include the following additional information:
  - Reference number – number assigned to each loan
  - Type of vehicle/property – e.g., vehicle, RV, mobile home, etc.
  - Full VIN – in case secondary verification with DMV records is required
  - Date of repossession charge off – the date charged off for income tax purposes
  - Loan number – actual loan account number
  - Charge off or loss per records – amount charged off for income tax purposes
  - Summarized number of transactions in each local tax and district tax area

Complete contract files must be available

Sample Selection

- Staff must follow the guidelines for performing a statistical sample set forth in AM Chapter 13.
- For each loan in the sample — evidence that the uncollectible portion has been charged off for income tax purposes or in accordance with GAAP. Printouts from taxpayer accounting system will suffice.
- For losses claimed under Regulation 1642(h)(3) and (i), an election agreement for each loan as required by Regulation 1642(i)(3)(A) and, if applicable, the election agreement required by either Regulation 1642(h)(3)(A) or (i)(4)(A).
AUDIT PROCEDURE

0435.20

[Note: This is not a revision of the entire section 0435.20 and is only modifying the reference to a section of the AM that has changed. It also corrects one typo. The rest of the section will be updated in a future revision.]

The MAP can be a valuable tool in streamlining the audit process. It is designed to reduce the time it takes to complete an audit and minimize the burden on taxpayers. When planning the audit, supervisors and auditors should evaluate whether the taxpayer is eligible for the use of a MAP. This evaluation should be conducted whether or not the taxpayer has already requested the use of a MAP.

It is primarily the responsibility of the auditor to determine whether a taxpayer should be considered for the MAP. However, it is the auditor's immediate supervisor who is responsible for approval of the auditor's recommendation. If the taxpayer is eligible for use of a MAP, the auditor should discuss the MAP with the taxpayer as soon as possible rather than wait for the taxpayer to request using a MAP. The date of the discussion with the taxpayer and the taxpayer's response should be documented in the system in CRM Notes. A decision that the taxpayer is not eligible should also be explained and documented in the system in CRM Notes.

(a) Preliminary Review

As part of the normal audit procedure, auditors will review the taxpayer's operations and determine whether the taxpayer meets the minimum eligibility requirements described in AM section 0435.10. This includes a facility tour (if appropriate); a review of the chart of accounts, general ledger, Federal Income Tax returns, sales journals, sales invoices, depreciation schedules, purchase invoices, sales and use tax returns, and reporting procedures; and an evaluation of the taxability of the sales and/or purchases, as well as of the taxpayer's knowledge and understanding of the tax laws applicable to the transactions being reviewed. In addition to the minimum eligibility requirements for the MAP, the taxpayer must also agree to perform a significant portion of the audit.

The auditor may also consider the use of a Computer Audit Specialist to improve audit efficiency (reduce audit hours) if the account meets the criteria outlined in AM section 1301.25.