

The New Sampling Chapter in the 2009 AICPA A-133/GAS Audit Guide

Presenter: Peggy Jo Campbell, CPA
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MaherDuessel
Certified Public Accountants

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Agenda

- Purpose and nature of sampling in a single audit
- Sampling concepts interpreted for single audits
- Sample size tables, selection methods, evaluation
- Dual purpose testing
- Documentation
- Available resources

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Purpose and Nature of Sampling in a Single Audit

- Audit Objectives
 - Reporting on internal control over compliance
 - Compliance with laws, regulations, and the provisions of contracts or grant agreements pertaining to federal awards that may have a direct and material effect on each of its major programs

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Statistical vs. Non statistical Sampling

- Auditor may choose between a statistical and non statistical approach to audit sampling
- Both methods comply with auditing standards
- Non statistical sampling
 - Not required to compute the sample size using statistical theory
 - Paragraph .23 of AU section 350, Audit Sampling, clarifies that sample sizes of statistical and non statistical samples ordinarily would be comparable when the same sampling parameters are used

Sampling Concepts: Controls and Compliance

- Tests of controls (TOC) provide evidence about the effectiveness of the design, implementation, or operation of controls and policies in preventing or detecting material noncompliance
 - **Objective:** Rates of deviations from a prescribed control
- Compliance testing provides evidence about an auditee's ability to adhere to the direct and material compliance requirements of its major programs
 - **Objective:** Rates and potential magnitude of noncompliance

Attribute vs. Monetary Sampling

- Attribute sampling is recommended for both TOC and Compliance
 - TOC: Common to apply attribute sampling for TOC in a financial statement audit
 - Compliance:
 - Some populations involve monetary amounts, but focus is on evidence of compliance (yes/no)
 - Circular A-133 **does not** require auditor to
 - Opine on the fairness of the related balance or
 - Compute a precise estimates or projection of the potential error or related confidence bounds

Attribute vs. Monetary Sampling

- A-133 does require
 - Best estimate of likely questioned costs
 - If estimate >\$10,000, the auditor reports a finding and considers potential impact on audit opinion
- Attribute sampling does allow for the projection of an error
 - Demonstrated later

Procedures that May Not Involve Sampling

- Inquiry and Observation
- Analytical Procedures
- Procedures Applied to Every Item in a Population
- Individually Important Items in Compliance Tests
- Understanding Controls Over Compliance

Individually Important Items in Compliance Testing

- Items that may be large, risky, or unusual
- For example:
 - Spike in activity at beginning or end of grant period
 - Transactions processed at odd times in a cycle
 - Transactions related to sub recipients that are new to a grantee, especially newly formed entities
 - Transactions related to a prior finding
 - Specified in Compliance Supplement

Individually Important Items in Compliance Testing

- Identification of individual items is not required by A-133, but often a smart approach
- Auditor expertise and experience can often identify risky items than can chance or random selection
- Can increase efficiency and effectiveness (coverage examples)
 - 10 items covers 80% of grant expenditures
 - Supplement with scanning, sampling, or not testing

Population Considerations

- Identify and document testing objective
 - Separate objectives for tests of controls and compliance
 - Utilize OMB Circular A-133 *Compliance Supplement*
 - http://www.whitehouse.gov/omb/financial_offm_circulars/
- Execute procedures to test for completeness
 - Reconciliation to the SEFA
 - Compare to other accounting records

Population Considerations (characteristics)

- Understand the characteristics of the population
 - Remove individually important items
 - Multiple-component (discussed below)
 - Identify the sampling unit (eligibility files, expenditures, financial reports, cost transfers)
 - Each transaction or instance of the control has an equal opportunity of being selected (discussed later)
 - May be more than one type of transaction/control
 - Allowable costs—payroll vs. other than payroll

Population Consideration (multi component)

- How does each component maintain internal controls? (independently/centrally)
- Considerations for separate populations (e.g., by location, program)
- Properly identify the universe of transactions
 - Remember: Auditor's opinion is on EACH major program
 - Possible to test across major programs for controls
 - Treat each major program as a separate population for compliance testing
 - Avoid the NUCLEAR sample
 - Very, very difficult to test multiple compliance requirements with one sample
 - Address sampling for each direct material compliance requirement separately
- Clusters

Controls Testing Sample Sizes

- Required to obtain high assurance (low level of control risk)
 - 90-95% confidence
 - Plan for zero exceptions
 - Sampling requires "tolerance" for deviations (5 to 10%)
 - Significance of Control ("what could go wrong") and Inherent Risk of Compliance Requirement
 - What is potential risk to the compliance requirement
 - Complex process or judgment

Significance and Inherent Risk

- Significance (all important, but range of significance)
 - Higher "what could go wrong" risk or risk of material noncompliance
- Inherent risk of Compliance Requirement
 - Complex processing (nonroutine, judgment, manual intervention)
 - New procedure or history of deviations
 - Substantial change in procedure from prior period

Controls Testing Suggested Minimum Sample Sizes

Significance of Control and Inherent Risk (IR) of Compliance Requirement	Minimum Sample Size
	0 deviations tolerated
Very Significant and Higher IR	60
Very Significant and Limited IR Or Moderately Significant and Higher IR	40
Moderately Significant and Limited IR	25

Suggested sample sizes for populations >250

Compliance Testing Sample Sizes

- Compliance Testing for each Direct and Material Compliance Requirement
 - Determine the risk of material noncompliance (array of testing prior to compliance testing with sampling)
 - Risk assessment procedures/inherent risk assessment
 - Controls testing results—control risk assessment
 - Analytical procedures
 - Individually important items

Inputs for Compliance Sample Size Determination

- Desired level of assurance (remaining risk of noncompliance)
 - **Important Concept:** Why doesn't the level of assurance always have to be high for compliance testing?
- Tolerable exception rate
 - Tied to program materiality (e.g., 5%)
- Expected exception rate: Table assumes zero

Compliance Testing Suggested Minimum Sample Sizes

Desired Level of Assurance (Remaining Risk of Material Noncompliance)	Minimum Sample Size 0 exceptions expected
High	60
Moderate	40
Low	25

Suggested sample sizes for populations >250

Sample Sizes for Small Populations

Frequency & Population Size	Sample Size
Quarterly (4)	2
Monthly (12)	2-4
Semimonthly (24)	3-8
Weekly (52)	5-9

For populations between 52 and 250 can use approximately 10% of population

Sample Selection Methods

- **Random Selection**
 - All items have equal chance of selection
- **Haphazard Selection**
 - Not careless, auditors' best effort to be random
- **Systematic Selection**
 - Every n^{th} item, with a random start

What if Initial Sample Selection is not Representative?

- Sample selected from schedule of student financial aid that did not include nontraditional students, but audit objective includes nontraditional students
- Controls sample from a population of 5 combined direct and material (DM) major programs does not include items from one of the major programs
- Sample does not include items relating to certain DM types of compliance requirements for significant CFDA numbers, grants, awards within a cluster

Consider alternative selection approaches, e.g., allocation

Deviations/Exceptions

- TOC = Deviation Compliance Testing = Exception
- Define deviations for TOC & exceptions for compliance tests
 - Assists staff auditors in properly identifying control deficiencies and instances of non-compliance during testing
 - More experienced auditors may assist in evaluating the nature and severity of the noted deficiencies/exceptions

Deviations/Exceptions

- ALL deviations/exceptions should be evaluated to:
 - Understand the likely cause
 - Determine if it should be reported
- Evaluation of deviation/exceptions may include:
 - Rate
 - Systematic nature of the issue
 - Pattern relative to past history
 - Relationship to other aspects of the audit

Deviations/Exceptions

Additional testing considerations

- Unexpected deviations/exceptions may be indicative of a larger problem
- Justify 'containment' of the deviation/exception
 - Additional audit work necessary to contain
 - Documentation should explain why the deviation/exception is not expected to be representative of other deviations/exceptions in the broader population
- Is a compliance exception indicative of a control issue?

Projection of Controls Sample Results

- What is the likely populations deviation rate given the following controls sample testing results?
 - Sample size 60 Number of deviations 2
- Can we conclude control is operating effectively since the projected deviation rate 3.3% (2/60) is less than the tolerable deviation rate of 5%?
 - No, sampling risk, planned for zero
- In evaluating potential magnitude where control involves \$ amounts see AICPA Audit Sampling Guide Chp. 3

Projection of Compliance Sample Results

- If attribute is nonmonetary OR if monetary exceptions are 100%, same as controls projection
 - Monetary example, 5% (3/60) exception rate multiplied by \$ value of population, \$50,000 (5% x \$1,000,000). This is our "best estimate" of noncompliance.
- If monetary exceptions are not 100% then use a ratio
 - \$ value of sample \$10,000
 - \$ of known questioned costs in sample \$100
 - Projection \$10,000 (1% x \$1,000,000)

Might this Represent a Finding?

Compliance Sample Results

- Sample size 60 from compliance sample size table
- Monetary projection or most likely amount of non-compliance \$5,000

Yes, need to consider “sampling risk” or margin for error

- Sample designed with expectation of zero
- The uncertainty around this result suggests an unacceptably high risk non-compliance in the population is greater than \$10,000

Dual Purpose Testing

- Common practice to utilize a single sample to achieve multiple audit objectives
 - Internal control over compliance testing
 - Compliance testing
 - Financial statement audit test of controls and transactions
- Exercise caution:
 - Different characteristics are for different objectives
 - If there are errors in internal control, compliance sample may not be adequate

Dual Purpose Testing

- Sample size designed for the dual purpose test should be the large of the samples designed for the separate tests
- Evaluate findings separately for compliance and controls
- Separate documentation for TOC and Compliance tests
 - Objectives
 - Population considerations
 - Deviations/Exceptions
 - Conclusions

Documentation

- Test objective and description of the control or compliance requirement being tested
- Description of the population tested & sampling unit, including consideration of completeness
- Definition of deviation or exception condition
- Desired confidence or assurance level, the tolerable deviation or exception rate, and the expected population deviation or exception rate

Documentation

- Importance/significance of the compliance requirement and attribute being tested and chosen sample size
- Sample selection method and selected sample items (list or description of items selected)
- An evaluation of the sample testing
 - Deviations and exceptions, known and estimated likely questioned costs
 - Projected population deviation or exception rate
 - Determination if same results support test objective

Documentation

- Any qualitative factors considered significant in making the sample selections, assessment, and judgments (e.g. multiple major programs, multiple components, clusters, or other factors)
- Summary of the overall conclusion (if not evident from the results)

Available Resources

- AICPA Audit Guide, *Audit Sampling* (2008 version)
- AICPA Audit Guide, *Government Auditing Standards and A-133 Audits* (2009 version)
- AICPA's Exposure Draft on Sampling (http://www.aicpa.org/download/auditstd/ED_Audit_Sampling.pdf)



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Contact Information

Peggy Jo Campbell
Senior Manager
Phone – 412-535-5505
Email – pjcampbell@md-cpas.com



Pittsburgh
Three Gateway Center
Six West
Pittsburgh, PA 15222
Main 412.471.5500
Fax 412.471.5508

Harrisburg
3003 North Front Street
Suite 101
Harrisburg, PA 17110
Main 717.232.1230
Fax 717.232.8230

Butler
112 Hollywood Drive
Suite 204
Butler, PA 16001
Main 724.285.6800
Fax 724.285.6875
