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# Assessing Evidence Reliability In Performance Audits

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**NSAA**  
April 14, 2008

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## Session Objectives

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- To obtain a basic understanding of assessing the reliability of evidence in performance audits under *Government Auditing Standards*
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## Agenda

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- Background
- Steps for assessing evidence reliability
- Testing information systems controls

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## Level of Assurance (7.03)

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Performance audits that comply with GAGAS provide reasonable assurance that the evidence is sufficient and appropriate to support the auditors' findings and conclusions

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## Sufficient, Appropriate Evidence (7.56)

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**Sufficiency** is defined as a measure of quantity of evidence used for addressing the audit objectives and supporting findings and conclusions

**Appropriateness** is defined as a measure of quality of evidence that encompasses the relevance, validity, and reliability of evidence used for addressing the audit objectives and supporting findings and conclusions

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## Relevance, Validity, and Reliability (7.59)

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- **Relevance** - the extent to which evidence has a logical relationship with, and importance to, the issue being addressed.
  - **Validity**-- the extent to which evidence is based on sound reasoning or accurate information.
  - **Reliability**-- the consistency of results when information is measured or tested and includes the concepts of being verifiable or supported.
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## Audit Planning (7.07)

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Auditors **must** plan the audit to reduce audit risk to an appropriate level for the auditors to provide reasonable assurance that the evidence is sufficient and appropriate to support the auditors' findings and conclusions

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## Audit Risk (7.05)

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The possibility that the auditors' findings, conclusions, recommendations, or assurance may be improper or incomplete, as a result of factors such as evidence that is not sufficient and/or appropriate, an inadequate audit process, or intentional omissions or misleading information due to misrepresentation or fraud.

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## Concept of Significance (7.04)

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Significance is defined as the relative importance of a matter within the context in which it is being considered, including quantitative and qualitative factors, such as:

- the magnitude of the matter in relation to the subject matter of the audit,
  - the nature and effect of the matter,
  - the relevance of the matter,
  - the needs and interests of an objective third party with knowledge of relevant information, and
  - the impact of the matter to the audited program or activity
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## Sufficiency and Appropriateness of Evidence (7.57-7.58)

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- In assessing evidence, auditors should evaluate whether the evidence taken as a whole is sufficient and appropriate for addressing the audit objectives and supporting findings and conclusions.
  - The concepts of audit risk and significance assist auditors with evaluating the audit evidence.
  - Professional judgment assists auditors in determining the sufficiency and appropriateness of evidence taken as a whole.
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## Why Do We Care About Evidence Reliability? (7.64)

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- When auditors use information gathered by officials of the audited entity as part of their evidence, they should determine what the officials of the audited entity or other auditors did to obtain assurance over the reliability of the information.
  - The auditor may find it necessary to perform testing of management's procedures to obtain assurance or perform direct testing of the information.
  - The nature and extent of the auditors' procedures will depend on the significance of the information to the audit objectives and the nature of the information being used.
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## Computer-Processed Information (7.65)

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- Auditors should assess the sufficiency and appropriateness of computer-processed information regardless of whether this information is provided to auditors or auditors independently extract it.
  - The nature, timing, and extent of audit procedures to assess sufficiency and appropriateness is affected by:
    - the effectiveness of the entity's internal controls over the information, including information systems controls, and
    - the significance of the information and the level of detail presented in the auditors' findings and conclusions in light of the audit objectives.
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## Identifying Sources of Evidence and the Amount and Type of Evidence Required (7.39)

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- In audit planning, the auditor should:
  - identify potential sources of information that could be used as evidence, and
  - determine the amount and type of evidence needed to obtain sufficient, appropriate evidence to address the audit objectives and adequately plan audit work.

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## Identifying Sources of Evidence and the Amount and Type of Evidence Required (7.40)

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- If auditors believe that it is likely that sufficient, appropriate evidence will not be available, they may revise the audit objectives or modify the scope and methodology and determine alternative procedures to obtain additional evidence or other forms of evidence to address the current audit objectives.
- Auditors should also evaluate whether the lack of sufficient, appropriate evidence is due to internal control deficiencies or other program weaknesses, and whether the lack of sufficient, appropriate evidence could be the basis for audit findings.

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## Planning Considerations

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- Clearly define audit objective(s).
  - Identify potential sources of information that could be used as evidence.
  - For information that will be used for addressing the audit objectives and supporting findings and conclusions, consider the relevance, validity, and availability of the information.
    - Will the information achieve (or help achieve) your audit objective(s)?
    - Is the information valid for your purposes?
    - Will/can the information be made available to you, and in what format?
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## Planning Considerations

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- If you believe that it is likely that sufficient, appropriate evidence will not be available, revise the audit objectives or modify the scope and methodology
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## Planning Considerations

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- Define specific elements of the information needed to achieve the audit objective(s) .
- Obtain a copy of the information.
  - For data files, get electronic version if possible.
- Determine what is known about the reliability of the evidence
  - As appropriate, perform initial testing of the evidence
  - Review existing information about the evidence and the system or process that produces it.

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## Initial testing – Primarily for Data Files

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- Initial testing is a quick way to identify where problems with the information may exist.
  - The testing is usually electronic, but some initial tests can be done even on hard copy reports, if necessary.
  - Testing can be done using a variety of software packages.
- The steps of initial testing are:
  - Identify and test only those information elements needed for the audit.
  - Test for reasonableness.
  - Examples of such tests: range tests, frequencies, checking for missing data, valid dates.

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## Review of Existing Information

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- Audit planning should include evaluating whether to use the work of other auditors and experts to address some of the audit objectives (7.41-7.43)
  - Examine existing audit or quality assurance reports, studies, and documentation related to the evidence.
    - Try to obtain any related material that helps provide an understanding of the level of accuracy and completeness of the information.
    - Some sources:
      - GAO or IG reports on system controls,
      - data quality studies done by the auditee or contractors, and
      - documentation of controls or data testing
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## Review of Existing Information

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- Interview individuals knowledgeable about the evidence and the system that produces it.
    - Ask about quality practices, known problems with and limitations of the evidence, etc.
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## Preliminary Assessment of Evidence Sufficiency and Appropriateness

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- In addition to the initial testing and review of existing information, the team should evaluate these factors: (See 7.70)
  - The expected significance of the evidence to the audit objectives, findings, and conclusions.
  - The strength of corroborating evidence (or of contradictory evidence).
  - The degree of risk and/or sensitivity involved with the engagement and with use of the data.

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## Corroborating Evidence

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- Consider the extent to which corroborating evidence is likely to exist and will independently support or contradict your findings, conclusions, or recommendations.
- Corroborating evidence is independent evidence (e.g., alternative databases, expert views.)
- Its strength and persuasiveness varies, based on the facts and circumstances of each engagement.
- Consider the extent to which the corroborating evidence
  - is consistent with the "Yellow Book" standards of evidence—sufficiency and appropriateness;
  - provides crucial support;
  - is drawn from different types of sources—physical, documentary, or testimonial; and
  - is independent of other sources.

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## Example Risk/Sensitivity Considerations

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- The evidence could be used to influence legislation, policy, or a program that could have significant impact.
  - The evidence could be used for significant decisions by individuals or organizations with an interest in the subject.
  - The evidence will be the basis for numbers that are likely to be widely quoted.
  - The engagement is concerned with a sensitive or controversial subject.
  - The engagement has external stakeholders who have taken positions on the subject.
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## Example Risk/Sensitivity Considerations (cont'd)

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- The overall audit risk is medium or high.
  - The audit has unique factors that strongly increase risk.
  - Significant judgments are involved in interpreting, summarizing, or analyzing evidence.
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## Sufficiency and Appropriateness of Evidence (7.69-7.71)

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- Relative concepts, which may be thought of in terms of a continuum rather than as absolutes.
  - Evaluated in the context of the related findings and conclusions.
    - for example, even though the auditors may have some limitations or uncertainties about the sufficiency or appropriateness of some of the evidence, they may nonetheless determine that in total there is sufficient, appropriate evidence to support the findings and conclusions.
  - The steps to assess evidence may depend on the nature of the evidence, how the evidence is used in the audit or report, and the audit objectives.
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## Sufficiency and Appropriateness of Evidence (7.69-7.71)

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- Evidence is sufficient and appropriate when it provides a reasonable basis for supporting the findings or conclusions within the context of the audit objectives
  - Evidence is not sufficient or not appropriate when it
    - Carries an unacceptably high risk that it could lead to an incorrect or improper conclusion
    - Has significant limitations
    - Does not provide an adequate basis for addressing the audit objectives or supporting the findings and conclusions
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## Sufficiency and Appropriateness of Evidence (7.69-7.71)

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- Evidence has limitations or uncertainties when the validity or reliability of the evidence has not been assessed or cannot be assessed, given the audit objectives and the intended use of the evidence.
- When the auditors identify limitations or uncertainties in evidence that is significant to the audit findings and conclusions, they should apply additional procedures, as appropriate.

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## Sufficiency and Appropriateness of Evidence (7.69-7.71)

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Possible Additional Procedures include:

- seeking independent, corroborating evidence from other sources;
- redefining the audit objectives or limiting the audit scope to eliminate the need to use the evidence;
- presenting the findings and conclusions so that the supporting evidence is sufficient and appropriate and describing in the report the limitations or uncertainties with the validity or reliability of the evidence, if such disclosure is necessary to avoid misleading the report users about the findings or conclusions; or
- determining whether to report the limitations or uncertainties as a finding, including any related, significant internal control deficiencies.

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## Preliminary Assessment: Sufficiently Reliable

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- Sufficiently Reliable - preliminary assessment provides sufficient assurance that
  - the likelihood of significant errors or incompleteness is minimal and
  - the use of the evidence would not lead to an incorrect or improper conclusion.
- Some problems or uncertainties about the evidence may exist, but they would be minor, given the audit objective(s) and intended use of the evidence.
- Use evidence

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## Preliminary Assessment: Not Sufficiently Reliable

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- Not Sufficiently Reliable - preliminary assessment shows that
  - significant errors or incompleteness exist in some or all of the key elements of the evidence, and
  - using the evidence would probably lead to an incorrect or improper conclusion.
- Take appropriate actions, but do not test further

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## Preliminary Assessment: Undetermined Reliability

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- A decision that the reliability of the evidence is undetermined should be made when results of the preliminary assessment are inconclusive.
  - The review of some of the related information or initial testing raises questions about the evidence's reliability.
  - The related information or initial testing provides too little information to judge reliability.
  - The time or resource constraints limit the extent of the examination of related information or initial testing.
- Determine whether to perform additional work to determine reliability.

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## Deciding on mix of additional work

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- Using the results of the preliminary assessment (keeping in mind anticipated significance of the evidence to the audit objectives, findings, and conclusions, any risk/sensitivity of using the evidence, and corroborating - or conflicting - evidence), determine the most appropriate mix of additional work needed to assess the reliability of the data.
- The mix could include one or more of the following:
  - Pulling and tracing a selection of the data to/from source documents.
  - Work targeted at specific internal control areas related to possible data weaknesses, including related information systems controls.
  - Advanced electronic testing.

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## Deciding on mix of additional work (cont'd)

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- Consider whether there is sufficient evidence in the form of source documents
  - When evidence of an entity's initiation, recording, or processing of data exists only in electronic form, the ability of the auditor to obtain sufficient audit evidence only from source documents would significantly diminish
  - Optional procedures
    - Use interviews to obtain related information
    - Corroborating evidence obtained earlier
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## Determine Potential Errors or Inconsistencies

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- Identify the types of errors or inconsistencies that could occur in the evidence and their effect on the findings, conclusions, and recommendations
  - Extent of desired reliability may differ for each type of error or inconsistency
    - e.g., finding might be more sensitive to invalid records that omitted records
  - Potential errors or inconsistencies depend on the use of the evidence data in the auditor's report
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## Potential Errors or Inconsistencies- Performance Audits

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- evidence inappropriately includes records that should be excluded
- evidence inappropriately excludes records that should be included
- evidence include valid records that contain inaccurate information

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## Designing Tests of Potential Errors or Inconsistencies

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- Tests should be designed to detect errors or inconsistencies in the evidence that could be significant to the audit objectives
- Nature and extent of tests may vary depending on the type of potential error or inconsistency

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## Selecting Items for Testing

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- Representative sampling
    - each item has a chance to be selected
    - results can be projected to the population
  - Nonrepresentative selection
    - test items with a relevant characteristic
    - results cannot be projected to the population; additional procedures should be applied to untested population, if significant
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## Direction of Testing

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- The direction of testing is dependent on the potential errors or inconsistencies being tested
    - valid - trace from data to supporting information
    - complete - trace from independent population of items that should be included in data to the data
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## Overall Assessment of Evidence (7.68)

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- Auditors should determine the overall sufficiency and appropriateness of evidence to provide a reasonable basis for the findings and conclusions, within the context of the audit objectives.
  - Auditors should perform and document an overall assessment of the collective evidence used to support findings and conclusions, including the results of any specific assessments conducted to conclude on the validity and reliability of specific evidence.
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## Considerations for Performing the Overall Assessment

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- Conclusion based on results of testing performed
  - Not attesting to reliability of information overall, but only determining the sufficiency and appropriateness of the evidence used in the audit
  - Use the results of the additional testing along with those from the preliminary assessment to determine the level of reliability of the data.
  - Bring all appropriate parties, including management, to the table for this decision.
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## Audit Reporting (8.15)

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- Auditors should describe in their report limitations or uncertainties with the reliability or validity of evidence if
  - the evidence is significant to the findings and conclusions within the context of the audit objectives, and
  - such disclosure is necessary to avoid misleading the report users about the findings and conclusions.

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## Audit Reporting (8.15)

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- As discussed in chapter 7, even though the auditors may have some uncertainty about the sufficiency or appropriateness of some of the evidence, they may nonetheless determine that in total there is sufficient, appropriate evidence given the findings and conclusions.
- Auditors should describe the limitations or uncertainties regarding evidence in conjunction with the findings and conclusions, in addition to describing those limitations or uncertainties as part of the objectives, scope, and methodology.
- Additionally, this description provides report users with a clear understanding regarding how much responsibility the auditors are taking for the information.

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## Testing Internal Control

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- The auditor should test the effectiveness of internal controls where:
  - internal control is significant to the audit objectives
  - The auditor determines to test internal controls a basis for assessing evidence reliability
  - The auditor determines it is necessary to test internal controls to obtain sufficient, appropriate evidence

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## Internal Control (7.16)

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- Auditors should obtain an understanding of internal control that is significant within the context of the audit objectives.
- For those internal controls that are significant within the context of the audit objectives, auditors should:
  - assess whether the internal controls have been properly designed and implemented.
  - plan to obtain sufficient, appropriate evidence to support their assessment about the effectiveness of those controls.

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## 5 Elements of Internal Control

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- GAO's Green Book (GAO/AIMD-00-21.3.1) and COSO
  - Control Environment
  - Risk Assessment
  - Control Activities
  - Information and Communications
  - Monitoring

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## Information Systems Controls (7.16)

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- Information systems controls are often an integral part of an entity's internal control. Thus, when obtaining an understanding of internal control significant to the audit objectives, auditors should also determine whether it is necessary to evaluate information systems controls.

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## Information Systems Controls (7.23-7.27)

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- Information systems (IS) controls
    - those internal controls that are dependent on information systems processing
    - include general controls and application controls
  - Significant to the audit objectives if necessary to obtain sufficient, appropriate evidence
  - If significant, auditors should evaluate the design and operating effectiveness of such controls by performing audit procedures
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## Evaluating IS Controls Significant to the Audit (7.24)

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- Auditors should evaluate the effectiveness of IS controls determined to be significant to the audit objectives
    - includes other IS controls that impact the effectiveness of the significant controls or the reliability of information used in performing the significant controls
  - Auditors should obtain a sufficient understanding of information systems controls necessary to assess audit risk and plan the audit within the context of the audit objectives
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## IS Control Audit Procedures (7.25)

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- Gain an understanding of the system as it relates to the information and
- Identify and evaluate the general controls and application controls that are critical to providing assurance over the reliability of the information required for the audit.

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## Factors in Determining IS Audit Procedures (7.26)

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- The extent to which internal controls that are significant to the audit depend on the reliability of information processed or generated by information systems

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## Factors in Determining IS Audit Procedures (7.27)

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- The availability of evidence outside the information system to support the findings and conclusions
  - It may not be possible for auditors to obtain sufficient, appropriate evidence without evaluating the effectiveness of relevant information systems controls
  - If information supporting the findings and conclusions is generated by information systems or its reliability is dependent on information systems controls, there may not be sufficient supporting or corroborating information or documentary evidence that is available other than that produced by the information systems

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## Factors in Determining IS Audit Procedures (7.27)

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- The relationship of information systems controls to data reliability
  - To obtain evidence about the reliability of computer-generated information, auditors may decide to evaluate the effectiveness of information systems controls as part of obtaining evidence about the reliability of the data
  - If the auditor concludes that information systems controls are effective, the auditor may reduce the extent of direct testing of data

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## Factors in Determining IS Audit Procedures (7.27)

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- Evaluating the effectiveness of information systems controls as an audit objective
    - When evaluating the effectiveness of information systems controls is directly a part of an audit objective, auditors should test information systems controls necessary to address the audit objectives
    - The audit may involve the effectiveness of information systems controls related to certain systems, facilities, or organizations
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## Planning the Internal Control Work

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- Consider the impact of the control environment, risk assessment, and monitoring controls on audit risk
  - Understand the entity's systems (including methods and records) for initiating, processing, maintaining, and reporting data
  - Consider reconciling data file totals
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## Sources of System Information

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- System documentation, including flow charts, record layouts and sample records
- Interviews

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## Evaluating Internal Controls

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- Identify control objectives
- Identify and understand relevant control techniques
- Perform walkthroughs
- Determine nature and timing of control tests
- Perform control tests
- Evaluate the results of the control tests

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## Assess Control Risk

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- Risk that significant errors or inconsistencies in the evidence that could occur will not be prevented, or detected and corrected on a timely basis by the entity's internal controls

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## GAO Levels of Control Risk for Financial Audits

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- Low - controls will prevent or detect any material misstatements
- Moderate - controls will more likely than not prevent or detect any material misstatements
- High - controls will more unlikely than likely prevent or detect any material misstatements

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## Evaluating Internal Controls

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- Determine impact of internal control testing results on the audit objectives and on the overall sufficiency and appropriateness of evidence
- Include in the audit report:
  - the scope of work on internal control, and
  - any deficiencies in internal control that are significant within the context of the audit objectives and based upon the audit work performed.

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Questions or Comments?

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