INVITATION TO COMMENT

DISCUSSION PAPER

MATERIALITY CONSIDERATIONS FOR ATTESTATION ENGAGEMENTS INVOLVING ASPECTS OF SUBJECT MATTERS THAT CANNOT BE QUANTITATIVELY MEASURED

August 15, 2019
Comments are requested by October 31, 2019

Prepared by the AICPA for comment from persons interested in auditing and attestation issues.
Comments should be addressed to Sherry Hazel at sherry.hazel@aicpa-cima.com.
CONTENTS

Explanatory Memorandum

Purpose of This Discussion Paper ................................................................. 4
Why the AICPA Is Issuing This Invitation to Comment ...................... 4
Guide for Respondents ............................................................................. 5
Comment Period ......................................................................................... 5

Discussion Paper

Materiality Considerations for Attestation Engagements Involving Aspects of Subject Matters That Cannot Be Quantitatively Measured .......................................................... 7
Introduction

This memorandum provides background to the Invitation to Comment and the Discussion Paper *Materiality Considerations for Attestation Engagements Involving Aspects of Subject Matters That Cannot Be Quantitatively Measured*.

Purpose of This Discussion Paper

CPAs have been issuing reports related to financial statements for over 100 years. In response to the profession’s evolution to issuing reports related to subject matters other than historical financial statements or elements thereof, the AICPA issued the first attestation standards in the 1980s to provide guidance to practitioners for performing engagements involving other subject matters. Some of those engagements, however, may present unique challenges to practitioners because of the nature of the subject matters.

Attestation engagements can be performed on a variety of subject matters, and not all aspects of those subject matters can be quantitatively (numerically) measured and evaluated. For example, when a practitioner performs a review of a narrative presentation of an entity’s sustainability information, some aspects of that presentation lend themselves to quantitative measurement (for example, greenhouse gas emissions or barrels of oil used), whereas others do not (for example, competence and education of employees or fair labor practices). When aspects of the subject matter are not quantitatively measurable, practitioners may be faced with the challenge of how to consider materiality when planning, performing, and reporting in these engagements.

To assist practitioners with this challenge, the AICPA established, through its Assurance Services Executive Committee (ASEC), a Materiality Working Group (working group) to (a) assess how practitioners consider materiality in examination and review attestation engagements involving aspects of subject matters that cannot be quantitatively measured and (b) develop nonauthoritative guidance to assist practitioners with making professional judgments regarding materiality in such examination and review engagements. Based on the working group’s efforts, the AICPA staff has prepared this discussion paper to highlight the challenges that practitioners may face when making professional judgments about materiality in such engagements and to provide its views on the ways in which practitioners might address those challenges.

Why the AICPA Is Issuing This Invitation to Comment

The AICPA is consulting on its progress in developing nonauthoritative guidance on materiality considerations for attestation engagements involving aspects of subject matters that cannot be quantitatively measured. Examples of such attestation engagements include system and organization control (SOC) examinations, examinations or reviews of sustainability information, and examinations or reviews of compliance with contractual or other requirements. The AICPA particularly seeks input from those with practical experience in such attestation engagements, including preparers of subject matter presentations, practitioners performing an examination or
review engagement on such presentations, investors and other users of such subject matter information, and regulators.

**Guide for Respondents**

The AICPA is seeking feedback on the issues discussed in this paper. When developing your feedback, please answer the following questions:

1. Does the discussion paper identify the most significant challenges that practitioners may face when considering materiality in examination or review attestation engagements involving aspects of subject matters that cannot be quantitatively measured? Are there other challenges that should be addressed? If so, please specify them.

2. Is the discussion paper helpful to assist practitioners considering materiality in these types of attestation engagements? If not, what changes would you propose? Please be as specific as possible.

3. Is the discussion paper, including the examples provided and the terminology used, clear and easy to understand? If not, please provide specific recommendations or other examples for improvement.

4. Are you aware of other resources that could assist practitioners with addressing materiality in these types of attestation engagements?

Comments are most helpful when they refer to specific paragraphs, make specific suggestions for proposed changes, and include the reasons for the suggestions. When you agree with the observations in this paper, it would be helpful for the working group to be made aware of this view, as well.

Please send responses to Sherry Hazel at Sherry.Hazel@aicpa-cima.com no later than October 31, 2019.

**Comment Period**

The comment period for this invitation to comment ends on October 31, 2019.
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THE CHALLENGES OF DETERMINING MATERIALITY IN AN ATTESTATION ENGAGEMENT INVOLVING ASPECTS OF SUBJECT MATTERS THAT CANNOT BE QUANTITATIVELY MEASURED

1. Materiality considerations affect engagement planning, engagement performance, and ultimately, the practitioner’s opinion or conclusion. In an examination engagement, the practitioner expresses an opinion about whether the subject matter is in accordance with (or based on) the criteria, in all material respects; in a review engagement, the practitioner expresses a conclusion about whether the practitioner is aware of any material modifications that should be made to the subject matter for it to be in accordance with the criteria.

2. In an attestation engagement, the attestation standards define a misstatement as “the difference between the measurement or evaluation of the subject matter by the responsible party and the proper measurement or evaluation of the subject matter based on the criteria.” Misstatements (including omissions) can be intentional or unintentional, qualitative or quantitative. In certain engagements, a misstatement may be referred to as a deviation, exception, or instance of noncompliance. Misstatements are generally considered to be material if, individually or in the aggregate, they could reasonably be expected to influence relevant decisions of intended users that are made based on the subject matter.

3. Considering materiality when misstatements in certain aspects of the subject matter cannot be quantified is typically more difficult and less straightforward than when misstatements in subject matters can be quantified. In an audit engagement, for example, the subject matter is the historical financial statements or an element thereof. Misstatements in financial statement amounts can be quantified. Generally accepted auditing standards provide guidance on an auditor’s evaluation of misstatements in historical financial statements using both quantitative and qualitative factors. When examining financial statement amounts, many auditors set materiality by choosing a benchmark, such as net income, revenues, or net assets (for example, 5% of net income), and applying a specific percentage to the benchmark selected based on consideration of various factors.

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1 Paragraph .03b of AT-C section 205, Examination Engagements. That paragraph also acknowledges that a practitioner may also express an opinion on whether the responsible party’s assertion is fairly stated, in all material respects. All AT-C sections can be found in AICPA Professional Standards.

2 Paragraph .03b of AT-C section 210, Review Engagements. That paragraph also acknowledges that a practitioner may also express a conclusion on whether the practitioner is aware of any material modifications that should be made to the responsible party’s assertion in order for it to be fairly stated.

3 Paragraph .10 of AT-C section 105, Concepts Common to All Attestation Engagements.

4. Misstatements in note disclosures that accompany historical financial statements are not always quantitatively measurable (for example, the nature and extent of disclosures about related parties). Depending on the note disclosure, an auditor assessing misstatements in such disclosures may consider primarily qualitative factors. Even in this situation, however, the auditor has the benefit of considering materiality in the context of the quantitative determination of financial statement materiality.

5. Attestation engagements, however, can be performed on a variety of subject matters, and many aspects of those subject matters cannot be quantitatively measured and evaluated. Subject matters of commonly performed attestation engagements include the following:

   ● Description of a system and controls of a service organization, when those controls are relevant to user entities' internal control over financial reporting (SOC 1®)\(^5\)

   ● Description of a system and controls of a service organization relevant to security, availability, processing integrity, confidentiality, and privacy (SOC 2®)

   ● Information about sustainability matters, such as economic, environmental, social, and governance performance, presented in various ways, such as in a sustainability report, in a schedule or statement of greenhouse gas (GHG) emissions information, or as a presentation of one or more sustainability indicators or sustainability metrics (sustainability information)

   ● Compliance with the terms of a contract, law, or regulation

6. Only certain aspects of those subject matters, however, lend themselves to quantitative measurement or evaluation (for example, percentage of system downtime, metric tons of GHG emissions, number of instances of noncompliance); many other aspects do not (for example, the nature and extent of disclosures about an entity's sustainability efforts, disclosures included in a description of an entity's internal control system, or instances of noncompliance). Such subject matters may present challenges for practitioners when considering materiality in these engagements.

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\(^5\) In 2017, the AICPA introduced the term system and organization controls (SOC) to refer to the suite of services practitioners may provide relating to system-level controls of a service organization and system or entity-level controls of other organizations. Formerly, SOC referred to service organization controls. By redefining that acronym, the AICPA enables the introduction of new internal control examinations that may be performed (a) for other types of organizations, in addition to service organizations, and (b) on either system-level or entity-level controls of such organizations.
7. Because the attestation standards were written to be applicable to a wide variety of subject matters, they do not provide detailed guidance on considering materiality for specific subject matters. This discussion paper focuses on the challenges surrounding materiality considerations when aspects of such subject matters cannot be quantified.

**REQUIREMENTS OF THE ATTESTATION STANDARDS**

8. In both examination and review engagements, the practitioner is required to consider materiality when planning, performing, and reporting on the engagement. For an examination engagement, the practitioner is required to do the following:

- Consider materiality for the subject matter when establishing an overall engagement strategy.  

- Reconsider materiality for the subject matter if the practitioner becomes aware of information during the engagement that would have caused the practitioner to have initially determined a different materiality.

- Identify and assess the risks of material misstatement as the basis for designing and performing further procedures whose nature, timing, and extent are responsive to the assessed risks of material misstatement and allow the practitioner to obtain reasonable assurance about whether the subject matter is in accordance with (or based on) the criteria, in all material respects.

- Form an opinion about whether the subject matter is in accordance with (or based on) the criteria, in all material respects. When forming that opinion, the practitioner should evaluate (a) the practitioner’s conclusion regarding the sufficiency and appropriateness of evidence obtained and (b) whether uncorrected misstatements are material, individually or in the aggregate.

For a review engagement, the practitioner is required to consider materiality when doing the following:

- Planning and performing the review engagement, including when determining the nature, timing, and extent of procedures.

- Forming a conclusion about whether the practitioner is aware of any material modifications that should be made to the subject matter in order for it to be in accordance with (or based on) the criteria. When forming that conclusion, the

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6 Paragraph .16 of AT-C section 205.
7 Paragraph .17 of AT-C section 205.
8 Paragraph .18 of AT-C section 205.
9 Paragraph .59 of AT-C section 205.
practitioner should evaluate (a) the practitioner’s conclusion regarding the sufficiency and appropriateness of the review evidence obtained and (b) whether uncorrected misstatements are material, individually or in the aggregate.  

9. A practitioner’s professional judgments about materiality are made in light of engagement facts and circumstances, but they are not affected by the level of assurance; that is, for the same intended users, materiality for an examination engagement is the same as it is for a review engagement because materiality is based on the information needs of intended users and not on the level of assurance.  

PRACTITIONER’S PERCEPTION OF THE COMMON INFORMATION NEEDS OF INTENDED USERS AS A GROUP

10. The attestation standards state that the practitioner’s consideration of materiality is affected by the practitioner’s perception of the common information needs of intended users as a group. However, the attestation standards do not provide further guidance about what constitutes a practitioner’s perception of the common information needs of intended users. For this reason, there may be differing views about what actions, if any, need to be taken to inform a practitioner’s perception of the common information needs of intended users as a group.

11. Understanding what to do to inform this perception is further complicated by the nature of attestation engagements. In an audit of historical financial statements, understanding the primary intended users and the decisions they make based on financial statements is usually well understood. FASB Concepts Statement No. 8, Conceptual Framework for Financial Reporting, identifies investors, lenders, and other creditors, as a group, as the primary users of financial statements prepared in accordance with standards promulgated by FASB.

12. As discussed in paragraph 5, however, attestation engagements are performed on a broad array of subject matters; because of this diversity, it is not always possible to identify intended users as a group for all attestation engagements. In addition, for any given subject matter, there may be a variety of intended user groups, and the types of decisions they make based on the subject matter may vary widely. For example, intended users of an entity’s annual sustainability report could include the entity’s investors, suppliers, and customers as well as other users.

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10 Paragraph .14 of AT-C section 210 and paragraph .42 of AT-C section 210.
13. The attestation standards do not require a practitioner to identify intended users in a general-use report. When developing a perception of the common information needs of intended users as a group for purposes of making professional judgments about materiality, a practitioner may assume that intended users

   a. have a reasonable knowledge of the subject matter and a willingness to study the subject matter with reasonable diligence,

   b. understand that the subject matter is measured or evaluated, and examined or reviewed, to appropriate levels of materiality and have an understanding of any materiality concepts included in the criteria,

   c. understand any inherent uncertainties involved in measuring or evaluating the subject matter, and

   d. make reasonable decisions on the basis of the subject matter taken as a whole.13

14. When an attestation report is restricted to specified parties, the attestation standards require, among other things, that the practitioner identify, in a separate paragraph of the practitioner’s report, the specified parties to whom use of the report is intended, either by naming them, referring to a list of those parties, or identifying the classes of parties.14 While discussing the identities of the specified parties with management, a practitioner may also obtain an understanding of the types of decisions such specified parties are likely to make based on the subject matter.15

15. The attestation standards do not require a practitioner to perform specific procedures to inform the practitioner’s perception of the common information needs of intended users. However, understanding intended users, and how they are likely to make relevant business decisions based on the subject matter, may assist the practitioner in making professional judgments about materiality throughout the engagement. The attestation standards clarify that, unless the engagement has been designed to meet the particular information needs of specific users, the possible effect of misstatements on specific users, whose information needs may vary widely, is not ordinarily considered.

16. When informing the perception of the common information needs of intended users as a group, the practitioner may do one or any combination of the following:

15 The term management is used in this guidance to mean the responsible party.
• Discuss the purpose of the attestation engagement and the intended users of the report with management (or the engaging party, if different) during engagement acceptance as well as the types of decisions intended users are likely to make based on the subject matter. In some cases, management may be aware of intended users’ expectations about materiality.

• Consider previous knowledge obtained about intended users when performing attestation engagements on similar subject matters.

• Consider whether information about certain aspects of the subject matter presentation is likely to be more important to intended users.

• Consider information included in criteria, such as information about intended users and the types of decisions they are likely to make based on the subject matter. The criteria may also discuss the concept of materiality in the context of the preparation and presentation of the subject matter and thereby provide a frame of reference for the practitioner’s consideration of materiality in the engagement. For example, in a SOC 2 examination, the AICPA guide Reporting on an Examination of Controls at a Service Organization: Relevant to Security, Availability, Processing Integrity, Confidentiality, or Privacy (SOC 2®) and the Description Criteria discusses proposed intended users and the ways in which they are likely to use the information in the SOC 2 report when making relevant decisions.

MATERIALITY CONSIDERATIONS DURING PLANNING

17. The practitioner is required to exercise professional judgment and maintain professional skepticism when planning and performing an attestation engagement, including when considering materiality for the engagement. The practitioner should consider materiality — both quantitatively and qualitatively — when planning the engagement. The practitioner’s consideration of materiality during planning may affect the nature, timing, and extent of procedures to be performed. The following paragraphs discuss some of the unique challenges that practitioners may face and present thoughts that may assist practitioners performing these types of engagements.

Identifying and Evaluating Aspects of Subject Matter That Cannot Be Quantitatively Measured

18. When the subject matter of an attestation engagement is a narrative presentation (for example, a description of a system in a SOC 2 examination), certain aspects of the

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17 Paragraphs .43 and .45 of AT-C section 105.
18 As used in this document, the aspects of the subject matter can be considered similar to elements of the financial statements (such as assets, liabilities, income, or expenses), which are the economic phenomena to which
presentation can be quantitatively measured, whereas others cannot be. For those aspects that cannot be quantitatively measured, other ways to identify and evaluate misstatements in the presentation are necessary. For instance, a practitioner may determine that misstatements in a narrative presentation consist of one or more of the following:

- **Inclusion of misleading or inappropriate information** (for example, information that obscures the information required by the criteria)

- **Omission of information required by criteria** (for example, inadequate or incomplete information)

- **Changes to disclosures made in a previous period without reasonable justification**

- **Misstatements of fact**

19. As an example, assume the trust services criteria related to privacy is the criteria, and management has failed to describe a principal commitment involving compliance with the European Union’s General Data Protection Regulation. Because such information could reasonably be expected to influence the decisions of intended users, the practitioner may conclude that the omission of such information is material to the description.

20. A practitioner may consider the following to identify and evaluate misstatements in a narrative presentation:

- **Developing certain expectations about the content of the subject matter presentation, based on the practitioner’s understanding of subject matter and the criteria used to evaluate it.** In a SOC 2 examination, for example, the practitioner would expect the description of the subservice organization’s system to include appropriate disclosures required by the criteria. For example, if a subservice organization’s controls are necessary, alone or in combination with the service organization’s controls, for a service organization to achieve its service commitment and system requirements (that is, its system objectives) based on the applicable trust services criteria, and the service organization elects to use the inclusive method, the practitioner would expect to see the subservice organization’s controls disclosed in the description. In addition, the practitioner would consider the appropriateness of the nature and extent of related disclosures based on the significance of the subservice organization’s controls to the achievement of the entity’s system objectives.

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criteria are applied in preparing the financial statements. For nonfinancial subject matter engagements, aspects of the subject matter may be very diverse and include, for example, natural resources, employees, customer relationships, the entity’s strategy or the entity’s governance, management, risk management, and internal controls (for example, logical or physical security controls).
b. Considering qualitative factors (refer to the following section for qualitative factors).

c. Considering whether information about certain aspects of the subject matter addressed in the description is likely to be more important to intended users. Examples include the following:

i. Recent national media coverage about the scarcity of replacement air bags may cause the practitioner to consider criteria-required disclosures related to a supplier’s control around the availability of its products likely to be more significant to intended users of a report of a car manufacturer whose air bags for a specific line of vehicles have recently been recalled than criteria-required disclosures related to the supplier’s controls around confidentiality.

ii. Because personal health information (PHI) is frequently targeted by hackers, the practitioner may consider criteria-required disclosures related to security included in a report on the entity’s security, availability, and confidentiality controls likely to be more significant to intended users of the report when the report is for a manufacturer of medical devices that uses PHI, rather than when the report is for a wholesaler of surgical garments.

21. A draft of a narrative presentation that contains misstatements (such as omissions of certain disclosures that the practitioner expected or insufficient or inappropriate disclosures about matters required by the criteria) may prompt the practitioner to discuss the misstatements with management. This discussion ordinarily would be held as early as possible to enable management to revise the presentation. In addition, the misstatements in the draft may cause the practitioner to conclude that it will be necessary to obtain more persuasive evidence about one or more of the significant disclosures identified during planning to determine whether the nature and extent of related disclosures in the final subject matter presentation are appropriate.

Considering Materiality for Aspects of Subject Matter That Can Be Quantitatively Measured

22. Even when the subject matter of an attestation engagement is primarily nonfinancial, such as a narrative presentation or an examination of internal control, certain aspects of subject matter may be quantitatively measured. For example, when evaluating control effectiveness in an internal control examination, the number of control deviations (which could be the result of a control deficiency) can often be quantified.

23. In an internal control examination, a practitioner may consider materiality during planning by following a process such as the following:

a. Identifying the risks that threaten the achievement of the entity’s objectives.
b. Assessing the likelihood and magnitude of those risks that threaten the achievement of the entity’s objectives.

c. Understanding the processes and controls the entity has designed, implemented, and operated to mitigate those risks to an acceptable level based on the control criteria.

d. Designing tests of controls that focus on controls necessary to mitigate the risks that threaten the achievement of the entity’s objectives.

e. Developing a materiality threshold for evaluating control deviations. Although there is no requirement in the attestation standards to develop a threshold below which deviations would be considered immaterial, doing so may assist a practitioner in the development of appropriate procedures and in the evaluation of the results of the procedures.

CONSIDERATION OF QUALITATIVE FACTORS

24. A variety of qualitative factors may be considered when planning and performing the engagement and evaluating the materiality of a misstatement. The attestation standards list the following factors, which may be considered regardless of the subject matter:

- The interaction among, and relative importance of, various aspects of the subject matter, such as numerous performance indicators
- The wording chosen with respect to subject matter that is expressed in narrative form, for example, the wording chosen does not omit or distort the information
- The characteristics of the presentation adopted for the subject matter when the criteria allow for variations in that presentation
- The nature of a misstatement, for example, the nature of observed deviations in the operation of a control when the responsible party asserts that the control is effective
- Whether a misstatement affects compliance with laws or regulations
- In the case of periodic reporting on a subject matter, whether the effect of an adjustment affects past or current information about the subject matter or is likely to affect future information about the subject matter

• Whether a misstatement is the result of an intentional act or is unintentional

• Whether a misstatement is significant with regard to the practitioner’s understanding of known previous communications to users, for example, in relation to the expected outcome of the measurement or evaluation of the subject matter

• Whether a misstatement relates to the relationship between the responsible party and, if different, the engaging party, or its relationship with other parties

In addition to these factors, depending on the subject matter of the engagement, the inherent uncertainty of the subject matter may also be considered.

25. The practitioner may consider one or more of these factors during planning and performance. During planning, for example, the practitioner may discuss the relevance of each qualitative factor with management as part of the practitioner’s consideration of materiality. The following paragraphs present examples of how some of these qualitative factors may affect the practitioner’s consideration of materiality for certain aspects of subject matters that are not quantitatively measurable. The examples assume that the criteria used to evaluate the subject matter are suitable in the specific circumstances of the engagement.

Significance of Aspects of the Subject Matter

26. Considering qualitative factors helps the practitioner identify aspects of subject matter that may be more significant to intended users. Depending on the facts and circumstances of the engagement, this may also enable the practitioner to tailor the nature, timing, and extent of additional procedures to identify potential misstatements in such aspects.

27. If the practitioner’s perception of the needs of intended users causes the practitioner to believe that users are likely to consider specific aspects of the subject matter more important than other aspects, that perception may inform the practitioner’s professional judgments about materiality. For instance, when certain information is deemed to be more important to intended users based on the industry or sector in which the entity operates, misstatements in such information may be deemed more significant. For example, disclosures related to controls over data privacy and protection may be more significant to intended users of a report for a social media entity than to intended users of a report for an industrial products manufacturer and wholesaler.
28. In another example, assume that management of a wholesale produce distributor makes certain claims regarding its food safety, employee retention, and employee turnover procedures in a subject matter presentation. Claims about food safety are likely to be important to intended users of the report because deficiencies in food safety procedures could have serious consequences on human health and result in noncompliance with relevant food and drug regulations. Therefore, a practitioner may consider a misstatement in the distributor’s claims about food safety procedures more significant to intended users than a misstatement related to other aspects of the subject matter (that is, the claims about employee turnover and retention).

Communications and Trends

29. When evaluating the materiality of a misstatement, a practitioner may consider known communications to intended users about the subject matter. As an example, assume a producer of baked goods claims to retailers and the general public that its baked goods are 100% organic. As a result of procedures performed, the practitioner determined that a single ingredient of the baked goods did not meet the specified criteria for organic products. That misstatement might represent a small proportion of the subject matter taken as a whole (that is, when considered in relation to all the ingredients in the product). However, because the producer’s claim that its baked goods are 100% organic is likely to influence consumers’ decisions, the practitioner might conclude that even a numerically small quantitative misstatement is likely to be material to intended users.

Relationship of Parties

30. A practitioner may consider whether a misstatement relates to the relationship between management and other parties. Disclosures that involve related parties may be of particular interest to intended users; a practitioner may consider misstatements in such disclosures differently than misstatements in disclosures that involve unaffiliated parties. As an example, assume that management makes certain claims about the entity’s compliance with published privacy practices. If, through examination procedures, the practitioner identified an instance of unauthorized sharing of the email addresses of a limited number of customers with a related party for use when marketing the related party’s products, the

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20 As used in this document, a claim is a statement about one or more aspects of the subject matter made by the responsible party. In contrast, as defined in the attestation standards, an assertion is a declaration about whether the subject matter (as a whole) is in accordance with criteria. For example, in a report on contractual compliance, a responsible party may make a number of disparate claims related to individual contractual requirements; however, the responsible party’s assertion is about whether the entity is in compliance with the contract (taken as a whole).
practitioner may consider the related party relationship a significant factor in assessing the root cause of the misstatement and whether the misstatement is material.

Uncertainty

31. When making judgments about materiality, a practitioner may consider the inherent uncertainty of the subject matter. The practitioner may perform additional procedures that focus on obtaining evidence about the quality of the measurement process, whether errors in the process have been identified, and whether the nature and extent of related disclosures are sufficient. The attestation standards for prospective financial information state that materiality is judged in light of the expected range of reasonableness of the information; therefore, intended users would not expect prospective financial information to be as precise as historical financial information. Likewise, a practitioner may assume that intended users of attestation reports dealing with inherently uncertain subject matters would ordinarily expect such information to be less precise than subject matters that are more consistently measured.

32. As an example, assume an entity makes certain claims about its GHG emissions. As discussed in the AICPA Guide Attestation Engagements on Sustainability Information (Including Greenhouse Gas Emissions Information) (sustainability guide), estimating GHG emissions is subject to a high level of inherent uncertainty that may sometimes exceed quantitative materiality. Paragraph 5.17 of the sustainability guide provides examples of matters that create or increase uncertainty in GHG emissions measurement. When measurement uncertainty is high in an examination engagement, the sustainability guide indicates that the practitioner should use professional judgment to evaluate whether the various aspects of the measurement process (for example, measurement techniques, assumptions, and conversion factors) give rise to an increased risk of material misstatement. If so, the practitioner should tailor additional procedures to respond to the identified risks. The practitioner also should consider whether additional disclosures related to the existence of the measurement uncertainty, together with a quantification of the uncertainty (such as the range of reasonable values for the measure), are necessary to provide meaningful information to intended users of the subject matter regarding the point value reported. When high measurement uncertainty is identified in a review engagement, the sustainability guide states that the practitioner should place increased focus in those areas of measurement uncertainty arising from the various aspects of the measurement process in which the practitioner believes there are increased risks that the sustainability information may be materially misstated.

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21 Paragraph .A25 of AT-C section 305, Prospective Financial Information.
EVALUATING WHETHER IDENTIFIED MISSTATEMENTS ARE MATERIAL

33. When the practitioner identifies a misstatement during the engagement, the practitioner evaluates whether the misstatement is material in order to form the following:

   a. In an examination engagement, an opinion about whether the subject matter is in accordance with the criteria, in all material respects

   b. In a review engagement, a conclusion about whether the practitioner is aware of any material modifications that should be made to the subject matter in order for it to be in accordance with the criteria

34. In a SOC 2 engagement, for example, a practitioner may identify a deficiency (misstatement) that results in the failure to achieve a specific criterion; however, even if a specific criterion was not met, the entity may achieve its service commitments and system requirements because other identified controls were operating effectively, in all material respects. The practitioner uses professional judgment to evaluate the effect of the deficiency on control effectiveness taken as a whole, that is, on whether controls were suitably designed and operating effectively to provide reasonable assurance that the entity’s service commitments and system requirements were achieved based on the applicable trust services criteria, in all material respects.

35. When evaluating whether a misstatement is material, a practitioner may follow a process similar to the following:

   ● Consider the expectations or thresholds, if any, established during planning or risk assessment. If the practitioner has been able to establish thresholds, the practitioner compares the results of the procedures to the expectations or thresholds established during planning. For example, the nature and frequency of deviations from quantitative thresholds established during planning would be considered when evaluating the materiality of any resulting misstatement.

   ● Consider whether the misstatement results in the failure to meet one or more specific criteria; that failure may be indicative of a material misstatement of the subject matter taken as a whole.

   ● Consider qualitative factors. The preceding section, “Consideration of Qualitative Factors,” lists factors that could be useful and presents several examples that illustrate how consideration of qualitative factors may affect the practitioner’s evaluation of materiality.
• Consider the effect of the misstatement on the subject matter, taken as a whole. In a compliance report, an entity’s objective might be to comply with all requirements set forth in a contract. In another example, a deficiency in a general information technology control that affects multiple applications may have a more pervasive impact on the effectiveness of internal control than a misstatement that relates only to a specific application.

ACCUMULATING AND AGGREGATING MISSTATEMENTS

36. In an examination, the practitioner should accumulate uncorrected misstatements identified during the engagement (other than those that are clearly trivial) for the purposes of evaluating whether they are material, individually or in the aggregate, when forming the practitioner’s opinion.22 In a review, the practitioner should evaluate whether uncorrected misstatements are material, individually or in the aggregate, when forming the practitioner’s conclusion.23

37. Misstatements of subject matters that rely on qualitative measurements cannot be aggregated as easily as misstatements of amounts can be (for example, dollars). Evaluating the aggregate effect of uncorrected individually immaterial misstatements of qualitative subject matter involves determining whether there are any commonalities among them.

38. The practitioner is required to evaluate whether the aggregated effect of the uncorrected, individually immaterial misstatements results in a material misstatement of the subject matter taken as a whole.24

Finding the Common Denominator

39. Conceptually, misstatements can be aggregated only if they relate to some common denominator. When an individual attestation engagement addresses a wide range of subject matter aspects, it may be difficult to identify a common denominator other than the subject matter taken as a whole. For example, determining materiality is difficult for narrative presentations because there might be no common denominator — the emphasis given to aspects of the subject matter presented, adjectives used in the presentation, and the tone of the statements made are relatively subjective.

40. Identifying a common denominator might include consideration of one or more of the following:

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22 Paragraph .45 and .A47 of AT-C section 205.
24 Paragraph .59 of AT-C section 205 and paragraph .42 of AT-C section 105.
• The claims that management is making about the subject matter, which are generally a function of the criteria being used to evaluate it. There could be a single claim (for example, there are 50,000 square feet in this warehouse) or a series of integrated claims (for example, a schedule of investment returns) or disparate claims (for example, compliance with a series of unrelated compliance requirements).

• The common topics or aspects of the subject matter to which the misstatement relates. Although it may not be possible to add up qualitative misstatements, these misstatements may be grouped according to the categories, topics, claims, or aspects of the subject matter in the report. For example, in a sustainability engagement, the practitioner identified a misstatement in management’s claim relating to employment and another misstatement in management’s claim relating to diversity of the workforce. The practitioner may be able to consider these misstatements in the aggregate because they both relate to the social dimension of sustainability.

• Whether the misstatement may have an indirect effect on misstatements identified in other areas of the engagement. For example, an otherwise immaterial overstatement of an item might indirectly affect a more significant calculation that incorporates the item, causing it to fall below the required minimum threshold included in a contractual requirement. Or, the lack of a required approval for a relatively unimportant transaction might not be material in and of itself but could have implications about the effectiveness of controls over areas users might consider important, or it could have implications across the broader subject matter (for example, logical access controls).

• The specific criterion to which the misstatement relates. In the case of a SOC examination performed in accordance with AT-C section 205, for example, the practitioner usually aggregates all misstatements (deficiencies) identified during control testing by their effect on an individual criterion because the violation of a criterion may be indicative of a material misstatement.

• The type or cause of the misstatement. Understanding the root cause of a misstatement may assist the practitioner with evaluating its materiality. For example, a misstatement may be the result of a clerical employee’s failure to perform a procedure or the intentional override of a control by management. The former may or may not be considered material, whereas the latter may be considered material due to management’s intent.

41. When a common denominator is identified, the misstatements may be accumulated in a list (for example, a listing of misstatements by claim made in a narrative presentation).
42. In some situations, immaterial misstatements that otherwise do not have a common denominator may have a similar effect on the subject matter presentation taken as a whole. For example, in a narrative presentation, a practitioner might identify 10 immaterial misstatements that all relate to different aspects of the subject matter. If the effect of the misstatements is to make the subject matter presentation, taken as a whole, look better than it really is, the practitioner would consider whether the subject matter presentation could be misleading to intended users.

43. When evaluating whether the misstatements in the aggregate are material, the practitioner uses professional judgment. In a compliance examination, for example, the practitioner would evaluate (a) the nature and frequency of the noncompliance identified and (b) whether such noncompliance is material relative to the nature of the compliance requirements. Depending on those factors, a practitioner may determine that immaterial failures to fulfill two unrelated compliance requirements would not aggregate to a material misstatement. Conversely, the practitioner may conclude that they represent a material misstatement because the two requirements relate to the achievement of a common compliance objective.

DETERMINING WHETHER THE EFFECT OF MATERIAL MISSTATEMENTS IS PERVERSIVE

44. In an examination engagement, the practitioner should form an opinion about whether the subject matter is in accordance with (or based on) the criteria, in all material respects. In forming that opinion, the practitioner should evaluate

   a. the practitioner’s conclusion regarding the sufficiency and appropriateness of the evidence obtained and

   b. whether uncorrected misstatements are material, individually or in the aggregate.

45. In a review engagement, the practitioner should form a conclusion about whether the practitioner is aware of any material modifications that should be made to the subject matter in order for it to be in accordance with (or based on) the criteria. In forming that conclusion, the practitioner should evaluate

   a. the practitioner’s conclusion regarding the sufficiency and appropriateness of the review evidence obtained and

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25 Paragraph .19 of AT-C section 315, Compliance Attestation.
26 Paragraph .59 of AT-C section 205.
b. whether uncorrected misstatements are material, individually or in the aggregate. 27

46. In forming that opinion or conclusion, the practitioner evaluates the materiality of the effects of uncorrected misstatements on the subject matter and determines whether an unmodified opinion or conclusion is appropriate. In an examination engagement, if the practitioner determines that the effects of the uncorrected misstatements are material but not pervasive, the practitioner would express a qualified opinion. If the effects are both material and pervasive, the practitioner should express an adverse opinion. In a review engagement, if the practitioner determines that the effects of the uncorrected misstatements are material but not pervasive, the practitioner would express a qualified opinion. If the effects are both material and pervasive, the practitioner should withdraw from the engagement, when withdrawal is possible under applicable laws and regulations. 28, 29

47. The attestation standards state that the term pervasive describes the effects on the subject matter of misstatements or the possible effects on the subject matter of misstatements, if any, that are undetected due to an inability to obtain sufficient appropriate evidence. Pervasive effects on the subject matter are those that, in the practitioner's professional judgment

a. are not confined to specific aspects of the subject matter;

b. if so confined, represent or could represent a substantial proportion of the subject matter; or

c. in relation to disclosures, are fundamental to the intended users' understanding of the subject matter. 30

48. It is reasonable for the practitioner to consider whether the subject matter, taken as a whole, is presented in accordance with suitable criteria when determining whether a misstatement is pervasive. When determining whether a misstatement is pervasive, a practitioner may consider the effects of the material misstatement on the criterion or criteria to which it relates as well as the significance of such criteria to the subject matter taken as a whole. This determination might indicate that the material misstatement may affect a substantial portion of the subject matter and, therefore, have a pervasive effect on the subject matter of the engagement. Alternatively, a misstatement may affect multiple

28 Paragraph .72 of AT-C section 205.
29 Paragraph .53 of AT-C section 210.
criteria but be confined to a single aspect of the subject matter that does not represent a substantial proportion of the subject matter; accordingly, it might not be pervasive to the subject matter.

49. The following examples illustrate how a practitioner may consider such factors when determining whether the effect of a material misstatement is pervasive to the subject matter taken as a whole.

Example 1: In a compliance attestation examination, the practitioner was engaged to examine and opine on whether the entity had complied with requirements related to the annual reporting for grant funds. The requirements comprise the timeliness, accuracy, completeness, and approval of such reports. After performing the examination procedures, the practitioner found the following exceptions:

a. Three of the 10 reports were filed late; one of the reports was not filed.

b. Seven of the 10 reports were incomplete because the reports contained only 11 months of information. (The reports were supposed to include 12 months of information.)

c. Two of the 10 reports were not accurate because the reports included information related to the wrong grant.

d. Eight of the 10 reports were not appropriately approved.

These exceptions affect multiple aspects of the entity’s compliance with the grant reporting requirements; therefore, the practitioner concluded these misstatements were pervasive and issued an adverse opinion.

Example 2: In a SOC 1 engagement, the claims-processing application is the main system used to provide processing services to user entities.31 Many of the transactional processing control objectives included in the report depend on limiting the employees who have access to the system and the system having appropriate change management controls. As a result of performing procedures, the practitioner identified the following control exceptions:

a. Documentation did not exist to support the approval of access for 4 out of 25 randomly selected new employees.

b. Terminated employees’ access to the system was not removed for 6 out of 25 randomly selected terminated employees.

31 AT-C section 320, Reporting on an Examination of Controls at a Service Organization Relevant to User Entities’ Internal Control Over Financial Reporting, establishes requirements and application guidance for an examination of controls at a service organization that are likely to be relevant to user entities’ internal control over financial reporting, which is known as a SOC 1® examination.
c. Employees who changed roles did not have their access modified for 4 out of 4 randomly selected employees with job changes.

d. User access reviews were not performed during the examination period.

e. Developers had access to the production environment.

These exceptions resulted in the entity's failure to achieve the control objectives related to logical access and change management. In addition, after considering the impact of developers having access to the production environment on other business-process-related control objectives, the practitioner determined that the lack of monitoring controls to detect an unauthorized change to the claims-processing system also affected the achievement of several other control objectives. Thus, the failure to properly monitor or restrict developers’ access to production significantly affected the service organization’s ability to meet several control objectives. As such, the practitioner determined that the material misstatements were pervasive to the subject matter and issued an adverse opinion.

Example 3: In an examination engagement on sustainability information, the practitioner identified several misstatements relating to the reported indicators. The practitioner identified the following misstatements:

a. The total volume of water withdrawn was understated due to exclusion of one of the sources of water.

b. Total consumption of solar electricity was understated due to outdated emissions conversion data.

c. Total number of employees was understated due to the addition of a new business prior to the end of the applicable fiscal year.

The practitioner concluded that these misstatements are individually material but not pervasive to the subject matter because they relate to different aspects of the subject matter, are confined to those aspects, and do not represent a substantial proportion of the subject matter. Further, the narrative disclosures relating to these indicators do not appear to be misleading nor do they omit information that is fundamental to the intended users' understanding of the subject matter. Accordingly, the practitioner determined that the material misstatements were not pervasive to the subject matter and issued a qualified opinion, rather than an adverse opinion.