# COUNTYWIDE RISK ASSESSMENT AND AUDIT PLAN

## SUMMIT COUNTY, OHIO

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## CONTENTS

# INDEPENDENT ACCOUNTANTS' REPORT ON APPLYING AGREED-UPON PROCEDURES

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Summit County, Ohio
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We have performed the procedures enumerated below which were provided through the “Request for Proposals” from the Internal Audit Department of Summit County, Ohio to assist you in performing a Countywide Risk Assessment. This engagement to apply agreed-upon procedures was performed in accordance with standards established by the American Institute of Certified Public Accountants. The sufficiency of the procedures is solely the responsibility of the Internal Audit Department of Summit County, Ohio. Consequently, we make no representation regarding the sufficiency of the procedures described below for the purpose for which this report was requested or for any other purpose.

We performed the agreed-upon procedures in conjunction with the Internal Audit Department of Summit County, Ohio. The agreed-upon procedures are as follows:

- Define and identify the audit population
- Define the risk factors
- Develop various questionnaires used to help identify potential risks to the County
- Develop a rating and weighting scale
- Develop a Risk Assessment Model
- Staffing Recommendations for the Internal Audit Department
- Develop an Audit Plan

We were not engaged to, and did not perform an audit, the objective of which would be the expression of an opinion on the adequacy of the accounting procedures in place throughout Summit County, Ohio. Accordingly, we do not express such an opinion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

This report is intended solely for the use of Summit County’s management. However, we understand that this report is a matter of public record and its distribution is not limited. Other parties to whom the report may be provided should be advised of the procedures and of the specific purposes for which the procedures were performed.

Bruner · Cox, LLP

May 2, 2003

## I. INTRODUCTION

The Summit County Audit Committee recognized the importance and the impact that an effective audit strategy and audit plan can have on meeting certain countywide goals, objectives and the mission of the Internal Audit Department. An audit plan would benefit the County by providing the following:

- An identifiable basis for the role of the Internal Audit Department and justification for obtaining budgetary funds and approval.
- Prioritizing departmental audits on an ongoing basis.
- Permitting an efficient allocation of limited resources.
- Opportunities to identify inefficiencies or uneconomical practices.
- A flexible basis for managing audit personnel.
- Opportunities to identify ways to maximize revenues and/or cost savings.
- Eliminating potential for overlapping audits within departments and with other auditing entities.

As a result, the Audit Committee charged the Internal Audit Department with the task of developing a countywide audit plan. Traditionally, audits performed would have been selected primarily on a rotating basis. However, this has proven not to be the most efficient or the most cost effective audit strategy. Therefore, the Internal Audit Department, with the assistance of Bruner-Cox LLP (collectively the Risk Management Team) developed a "Risk Assessment Model" to identify areas which pose the greatest risk and liability to the County.

Risk Assessment is a process used to assign a number or score to potential audit areas based upon specific risk factors related to an auditee's operations, internal controls, and liability to the County. Examples of specific risk factors used to formulate the risk assessment model and audit plan include the dollar amounts of budgeted expenditures, complexity of transactions, time since the last audit and compliance with laws and regulations. The complete list of risk factors and the assessment process is described in this report.

The development of an audit plan, using the risk assessment model as an integral component, is a dynamic process. The Internal Audit Department will have the opportunity to provide current information about departments for use in the risk assessment process on an on-going basis. The risk factors and scoring process will be reviewed and refined periodically as needed.

## II. PRINCIPLES FOR THE RISK ASSESSMENT AND AUDIT PLAN DEVELOPMENT

In order to provide practical guidance and an authoritative framework for the development of the risk assessment model and audit plan, the Risk Management Team utilized the following principles:

- Consideration is given to unique situations and circumstances (i.e., special audits) which would supersede scheduled audits with higher risk scores.

- The approach to developing an audit plan recognizes that audit resources of personnel and dollars are limited, which prohibits 100% audit coverage each year. This limiting factor is inherent in the concept of utilizing a risk assessment model to help prioritize audits.

- The audit plan takes into consideration work performed by other auditors. These audits may be mandated by grant provisions, State and Federal Agencies, or special audits.

- The risk assessment criteria used in the ranking of the audit universe places an emphasis on perceived or actual knowledge of the department's system of internal controls.

- The audit plan is developed with an understanding that there are inherent risks and limitations associated with any method or system of prioritizing audits. The risk factors and scoring process will be periodically evaluated and modified in order to improve the audit plan.

- The risk assessment factors used in selecting audits are designed in conjunction with the objectives of auditing County departments. In general, these audits would include one or more of the following:

    - Operational Audits
    - Financial Audits
    - Compliance Audits
    - Information Systems (IS) Audits
    - Internal Control Reviews
    - Special Projects
    - Follow-up Audits

## III. AUDIT POPULATION

The first step in developing the audit plan and the risk assessment model was to establish an audit population representing the total population of potential audits. The Risk Management Team identified the primary audit population as County departments utilizing County Resolution 2002-778, which is for the 2003 Operating Budget. Based on the Resolution, forty departmental units were identified. The Risk Management Team also recognized that other potential audit segments maybe defined in the future as the risk assessment process evolves over time. Examples of these other potential audit segments are:

- Organizational units within a department such as a division or a unit.
- A transaction cycle or items common “horizontally” across a universe, such as payroll, contract compliance issues, personal service contracts, or grants.
- Individual financial statement accounts such as fixed assets or cash receipts/cash disbursements.
- Special audits or agreed-upon procedures.

## IV. AUDIT PRIORITIZATION AND SELECTION

### Objective

The objective of the process of risk assessment is to identify and prioritize potential audit areas which pose the greatest risk and liability to the County. This process provided a tool to assign available audit personnel for the purpose of reducing the risk and liability exposure through findings and recommendations. In order to obtain a priority listing of potential audit areas, the Risk Management Team utilized the risk assessment model to rank each of the potential audit areas.

### Process

In developing the risk assessment model and audit plan, the Risk Management Team agreed that risk is the potential for loss to a department due to error, fraud, inefficiency, failure to comply with statutory requirements, or actions which may have a negative effect on the County. Risk is a synonym for all the adverse outcomes that the County wishes to avoid. Risk is a function of the probability that such consequences will occur, their magnitude, and their imminence.

The Risk Management Team recognizes that risk assessment is a process of assigning a number or score to potential audit areas based upon specific risk factors related to a department’s operations. Risk assessment is typically undertaken to focus attention on significant audit areas, to allocate scarce audit resources to the most important audit areas, and to help with key audit prioritizing decisions such as audit frequency, intensity and timing. The Risk Management Team utilized a systematic risk assessment approach. This approach separates the risk into individual risk factors, which were assessed individually, then combined into an overall score reflecting a department’s risk potential. Some of the benefits of the systematic approach to risk assessment are:

- The process and basis for decisions can be documented.
- Training is enhanced since staff can study the model and processes that are documented.
- Review and consultation are facilitated.
- Decisions which are based upon documentation may be easier to explain and justify.
- A direct link can be provided between the administrative structure and budget of the internal audit department.
- New data can be more easily incorporated into the analysis as it becomes available.
- Consistency may be enhanced since it may be easier to set operational guidelines for quantitative risk assessment methods.
- Quantitative judgments of risk can be incorporated to help ensure the appropriate intensity and frequency of auditing the departments. This will help reduce the possibility of over-auditing or under-auditing the departments.

## Risk Factors

The individual risk factors used to evaluate the potential audit areas were selected by the Risk Management Team from professional literature and other governmental audit plans reviewed. Risk factors were selected on the basis of relevance with respect to the nature and objectives of the audits and the reporting environment in which the County operates. The nine risk factors are as follows:

- Budgeted Expenditures
- Financial Exposure
- Off CAFR Funds
- Number of Staff
- Compliance With Laws and Regulations
- Public Exposure
- Management Experience
- Complexity of Transactions
- Time Expired Since Last Audit

The Risk Assessment Team then developed detailed definitions and guidelines for each risk factor, which are presented on Attachment B, to aid in the risk evaluation process.

## Questionnaires

Based on the risk factors, questionnaires were developed and sent to County elected officials and senior staff members summarized as follows:

| | |
|---|---|
| Elected Officeholders | 18 |
| Senior Staff Members | 97 |
| Total Questionnaires sent | 115 |

See Attachment E for a copy of the questionnaire. Each potential response on the questionnaire was given a value ranked in order of the possible risk. The lower score represented a low level of risk (i.e., a very low exposure) and the highest score represented the highest level of risk (i.e., a very high exposure). See the risk factors and scores associated with the questionnaires on Attachment A.

The responses received from the questionnaires were tabulated by department and averaged by the employees' responses for various risk factors and documented on the risk calculation worksheet (see Attachment C).

If a department had more than one employee respond to the questionnaire, the Risk Management Team used the following formula to calculate the average of the employee responses:

$$\frac{\text{Sum of all employee questionnaire responses for each risk factor}}{\text{Number of departmental responses}} = \text{Average employee responses as noted on the risk calculation worksheet}$$

**Interview Process**

The Risk Management Team recognized the need and importance of gaining a better understanding of the County departments and their operations. As a result, the Risk Management Team developed general and detailed questionnaires which were utilized in conducting interviews with elected office holders, department heads, and staff members.

The Risk Management Team used the following guidelines regarding the questionnaires during the interview process:

> **Elected Office Holders/Department Directors**: The general questionnaire was used during the interviews.
>
> **Deputy Directors or Senior Staff:** The general and detailed questionnaires were used during the interviews.
>
> **Staff Members:** The detailed questionnaires were used during the interview process. If the staff member's title or job description warranted, the general questionnaire was also used.

See Attachments F and G for copies of the general and detailed questionnaires used in the interview process.

The Risk Management Team, through the interview process, gained sufficient understanding of the departments and their operations to evaluate the employee questionnaire responses. For each average employee response tabulated on the risk calculation worksheet, the Risk Management Team evaluated each department by the risk factors using the following guidelines:

- If the Risk Management Team agreed with the average of the employee responses, then the risk factor on the risk calculation worksheet was denoted with a matching score on the Risk Management Team's response line.

- If the Risk Management Team had additional information and determined the exposure to a particular risk factor was greater or lower than the average employee responses, then a different score was denoted on the Risk Management Team's response line.

- The Risk Management Team recognized that it had insufficient data and background to reevaluate the management experience risk factor. As a result, a low risk exposure was denoted for each Department. The Risk Management Team recognizes the importance of management experience and will continue to evaluate it as a risk factor on an ongoing basis.

The Risk Management Team evaluated each department by the individual risk factors as noted on the risk calculation worksheet. The Risk Management Team then calculated the average score for each risk factor as follows:

$$\frac{\text{(Average of employee responses from the questionnaires)} + \text{(Risk Management Team's response based on the interview process)}}{2} = \text{Average risk factor score}$$

See Attachment C for the sample risk calculation worksheet that was used for the Risk Management Team's responses and evaluation.

## Weighting Process

The Risk Management Team also recognized the necessity to account for the relative measure of importance between each of the risk factors and the resultant impact on the overall risk score for each audit. A "weighting" factor was derived by having each evaluator perform a comparison of each specific risk factor with all the other risk factors.

The Risk Management Team used the following formula to calculate the Risk Factor Weight as a percentage:

$$\frac{\text{The Risk Factor Weight (score)}}{\text{The sum of all the Risk Factor Weights (scores)}} = \text{The Risk Factor Weight as a percentage (score)}$$

The weighting of each risk factor is reflected on the Risk Factor Definitions and Guidelines worksheet on Attachment B. In addition, the effect of the weighting factor is evident in Risk Assessment Model as shown on Attachment D.

**Risk Assessment Model**

The audit areas in the audit population were then ranked based upon highest to lowest total risk scores, thereby producing an audit priority listing. However, consideration is given to unique situations and circumstances (i.e., preliminary reviews, special audits) which would supersede scheduled audits with higher risk scores. The audit population and their overall risk scores are illustrated on the Risk Assessment Model illustrated on Attachment D.

## V. THE PROCESS OF DEVELOPING THE AUDIT PLAN

Once the audit population was risk rated utilizing the risk assessment model, the Risk Management Team addressed the following issues in order to complete the audit plan:

- Risk Assessment
- Types of Audits
- Audit Frequency
- Audit Intensity
- Audit Timing
- Internal Audit Department Staffing

**Risk Assessment**

The individual departments within the audit population were risk rated using the process described in Sections III and IV and will be evaluated on an ongoing basis by the Director of Internal Auditing. Input from the Internal Audit staff, the Audit Committee, and management was taken into account. Special emphasis should be placed on the following:

- An accurate audit population listing must be continually updated and maintained.

- The importance of updating and maintaining relevant risk factors. Upon the completion of the preliminary reviews, additional risk factors may be added to the model (i.e., effectiveness of Internal Controls).

- Obtaining current and relevant information on contractors, grants and County departments related to the risk factors. Internal Audit staff will complete a Risk Calculation Worksheet at the completion of an audit or as new information on an auditee becomes available.

**Types of Audits**

The risk assessment factors used in selecting audits are designed in conjunction with the objectives of auditing County departments. In general, these audits would include one or more of the following:

- **Operational Audits**
  Operational audits, also known as performance or managerial audits, are aimed at assessing an operation's administrative efficiency and effectiveness. An operational audit measures and evaluates administrative control against standards set by Management; including long-range plans, budgets, and operating policies and procedures. Although financial data continues to be the base of reference, operational audits look beyond the figures to provide assistance toward improving operations and adding value.

- **Financial Audits**
  These audits review accounting and financial transactions to determine if commitments, authorizations, and receipt and disbursement of funds are properly and accurately recorded and reported. This type of audit also determines if there are sufficient internal controls over cash and other assets and that adequate process controls exist over the acquisition and use of resources. Unlike external financial audits, internal financial audits do not prepare or express professional opinions on the financial statements fairness.

- **Compliance Audits**
  These audits determine if entities are complying with applicable laws, regulations, policies and procedures. Examples include federal and state laws, grant provisions, and contract terms. Recommendations usually require improvements in processes and controls used to ensure compliance with regulations.

- **Information Systems (IS) Audits**
  These audits review the internal control environment of automated information processing systems and how people use these systems. The audits usually evaluate system input, output; processing controls; backup and recovery plans; system security; and computer facilities. These audits may review existing, as well as, developing systems

- **Internal Control Reviews**
  These audits focus on the components of the County's major business activities, such as payroll and benefits, cash handling, inventory and equipment, physical security, grants and contracts, and financial reporting.

- **Special Projects**
  Special projects consist of projects undertaken with a specific but limited scope. Generally, these projects are undertaken to obtain information used to analyze a specific activity that has occurred or is contemplated. Information may be used to determine whether audit work is warranted or feasible. Special projects may involve accounting, compliance, program results, efficiency, or other matters.

- **Follow-up Audits**
  These audits are done to follow up on the status of corrective actions taken by management in response to recommendations in a previous audit report. Follow-up audits are usually done between 6 to 12 months after the original audit.

**Audit Frequency**

In many organizations, it is assumed that all units in the audit population would be audited at least once within three to five years. The general opinion is that the departments with greater risk potential should be audited more frequently. The actual audit frequency can be determined in two ways:

- **Fixed Frequency**

  A fixed frequency policy is based on the implicit assumption that there are natural frequencies associated with audit units. This approach would simply schedule audits based on the risk potential of the departments using a fixed schedule. Many internal audit departments follow this approach, although frequencies may be adjusted periodically. It may be argued, however, that if the departments "learn" the fixed frequency, they may be motivated to perform at peak levels only at or near the audit dates. In addition, to the extent that the frequencies are imperfect, some departments could be consistently over-audited, while others could be consistently under-audited.

- **Conditional or Varying Frequency**
  Under a conditional or varying audit frequency approach, all units are monitored continuously or at specified intervals for signs of increases or decreases in risk exposure. The Internal Audit Department will continue to monitor the departments activities through the ongoing risk assessment process. Audits could then be prioritized and scheduled based on the department's risk exposure.

Another factor in determining the frequency of departmental audits is the cost of performing an audit. The Internal Audit Department will evaluate both the risk potential and the cost of reducing the risk through auditing. For example, the more a department is audited, the less opportunity there will be for potential losses to occur (i.e., due to waste, or error) and as a result, the overall risk potential can be reduced. However, at the same time, the more frequently a department is audited, the more audit costs are incurred.

**Audit Intensity**

The departments with greater risk should be audited more intensely, however, audit intensity may be a complex function of time, samples, sizes, and internal controls. The extent of audit testing is usually directly related to an assessment of the department's risk exposure. The higher the risk, the more extensive the audit testing needs to be and vice versa. However, even though a department may have a high degree of risk, a strong system of internal controls can reduce the department's exposure to a low or moderate level. Accordingly, the need to conduct detailed audit tests could be reduced to an appropriate level.

## Audit Timing

No internal audit department has the resources to audit all of its auditable units simultaneously. Therefore, a key audit decision is the timing of the audit. In the absence of other considerations, the departments with more risk potential should be audited before the departments with less risk. Unfortunately, direct application of such simple logic is rarely possible, since a variety of constraints intervene, such as limited availability of the appropriate audit personnel at a given point in time, personnel development considerations, management requests, department considerations, etc.

There are three main alternatives for scheduling audits: fixed, random or conditional timing.

- **Fixed Timing Policy**
  A fixed timing policy is based on the assumption that there are fixed times best suited to conduct specific audits (i.e., reviewing or testing procedures during property tax collections). As mentioned earlier, if the departments know the timing of audits, they may prepare for the audit, giving an inaccurate impression of their effectiveness or efficiency.

- **Random Timing**
  Under this policy the timing of audits is unpredictable or random. Since the departments cannot guess when they will be audited, it is argued that they would be motivated to maintain their controls and procedures at reasonable levels.

- **Conditional Audit Timing**
  Under a conditional audit approach audits are scheduled when departments exhibit an increase in risk exposure as a result of deterioration of controls or performance. The risk exposure is monitored on an “ongoing” basis through the risk assessment process.

## Internal Audit Department Staffing

As mentioned earlier, no internal audit department is of a sufficient size to carry out all the necessary audits simultaneously, or even within the time span of one fiscal year. A fundamental principle of internal audit administration is that the internal department be of a sufficient size and capability to address the areas of concern to management, with an adequate frequency, over a reasonable time horizon of three to five years. If risk factors reflect management concerns, then they can be used as a basis for establishing the department size required to address the most important audit units (i.e., those with the highest risks or those with the highest risk/audit cost payoffs).

Based on the risk factors and the audit costs, the Risk Management Team prepared an analysis of the Internal Audit Department staffing requirements. At present, the Internal Audit Department staffing levels are as follows:

| | |
|---|---|
| Director | 1 |
| Deputy Director | 1 |
| Senior Auditor | 1 |
| Auditor | 1 |
| Executive Assistant | 1 |
| Total Department Staff | 5 |

Based on the audit plan, the Internal Audit Department would first perform a preliminary internal audit review of every department. With the present staff, the preliminary internal audit reviews and the comprehensive internal audits as defined in Section VI would be completed as follows:

| | Approximate Time |
|---|---|
| Preliminary Internal Audit Reviews | 1.5 years |
| Comprehensive Internal Audits | 5.0 years |
| Total Planning Horizon (Cycle) | 6.5 years |

This of course assumes that each department would be audited at least once during the planning horizon.

However, professional literature and standards typically assume that all departments would be audited at least once within a three to five year planning cycle. Based on this standard, Bruner-Cox LLP recommends a department with a staff of seven to nine. The additional staff members would be classified as staff auditors. The additional staff would allow the Internal Audit Department to complete the preliminary internal audit reviews and comprehensive internal audits within the three to five year planning cycle as follows:

| | Approximate Time |
|---|---|
| Preliminary Internal Audit Reviews | 1.0 years |
| Comprehensive Internal Audits | 3.0 years |
| Total Planning Horizon (Cycle) | 4.0 years |

See attachments H and I for the estimated time schedules for the preliminary internal audit reviews and the comprehensive internal audits.

## VI. AUDIT PLAN

After completing the risk assessment model and careful evaluation of the issues noted in Section V, the Risk Assessment Team recommends the following:

- **Preliminary Internal Audit Reviews:** These reviews would be completed on every department, within the audit population, as noted in the risk assessment model. The objective of the reviews is to determine if the departments are conducting their financial and business processes under an adequate system of internal controls and proper policies and procedures.

  The objectives of the preliminary internal audit reviews are:

  - Document client processes and procedures
  - Evaluate internal controls
  - Perform policies and procedures overview
  - Perform a general overview of the physical environment and security of the facilities, data, records, and departmental personnel
  - Identify audit issues and provide recommendations

- **"On Going" Evaluation of the Risk Assessment Model:** Upon the completion of the Preliminary Internal Audit Reviews additional risk factors can be used to evaluate the audit population. This would allow the Internal Audit Department to focus resources and ensure staff is assigned to the highest priority assignments for maximum efficiency.

- **Special Projects and Audits:** In addition to the preliminary reviews and ongoing risk assessment, the Internal Audit Department will complete special projects and/or audits on an "as needed approach". These special projects or audits can supersede scheduled audits with higher risk potential depending on their nature, scope and timing.

- **Comprehensive Internal Audits:** Comprehensive internal audit programs will be developed in conjunction with the preliminary internal audit reviews. The Internal Audit Department will focus their resources in departments or areas that expose the County to the greatest risk and liability. Depending on current staffing levels the planning cycle is five to seven years.

It is important to note that consideration was given to unique situations and circumstances (i.e., special projects or audits) which, when applied to a particular audit, would supercede scheduled audits with higher risk scores. In addition, actual audit scheduling may be affected by personnel turnover and audits requested by elected officials, department heads, the Audit Committee, special projects or unforeseen circumstances.

In keeping with the Internal Audit Department's current policy, the status of each audit will be conveyed to the County Audit Committee on a regular basis.