NUMBER

64

Conducting Needs Assessments for New Recordkeeping Systems

By Geof Huth

2003





The University of the State of New York
The State Education Department
New York State Archives
Government Records Services
Albany, New York 12230
http://www.archives.nysed.gov

THE UNIVERSITY OF THE STATE OF NEW YORK

Regents of The University

ROBERT M. BENNETT, CHANCELLOR, B.A., M.S.	Tonawanda
Adelaide L. Sanford, Vice Chancellor, B.A., M.A., P.D.	Hollis
DIANE O'NEILL McGIVERN, B.S.N., M.A., Ph.D.	Staten Island
SAUL B. COHEN, B.A., M.A., Ph.D.	New Rochelle
James C. Dawson, A.A., B.A., M.S., Ph.D.	Peru
ROBERT M. JOHNSON, B.S., J.D.	Huntington
Anthony S. Bottar, B.A., J.D.	North Syracuse
MERRYL H. TISCH, B.A., M.A.	New York
GERALDINE D. CHAPEY, B.A., M.A., Ed.D.	Belle Harbor
Arnold B. Gardner, B.A., LL.B.	Buffalo
Harry Phillips, 3rd, B.A., M.S.F.S.	Hartsdale
JOSEPH E. BOWMAN, JR., B.A., M.L.S., M.A., M.Ed., Ed.D.	Albany
LORRAINE A. CORTÉS-VÁZQUEZ, B.A., M.P.A.	Bronx
Judith O. Rubin, A.B.	New York
James R. Tallon, Jr., B.A., M.A.	Binghamton
MILTON L. COFIELD, B.S., M.B.A., Ph.D.	Rochester

President of The University and Commissioner of Education

RICHARD P. MILLS

Chief Operating Officer

RICHARD H. CATE

Deputy Commissioner for Cultural Education

CAROLE F. HUXLEY

Acting Assistant Commissioner and Director of Operations

CHRISTINE WARD

Chief, Government Records Services

ROBERT W. ARNOLD

The State Education Department does not discriminate on the basis of age, color, religion, creed, disability, marital status, veteran status, national origin, race, gender, genetic predisposition or carrier status, or sexual orientation in its educational programs, services and activities. Portions of this publication can be made available in a variety of formats, including braille, large print or audio tape, upon request. Inquiries concerning this policy of nondiscrimination should be directed to the Department's Office for Diversity, Ethics, and Access, Room 530, Education Building, Albany, NY 12234.

Table of Contents

Introduction
Differences Between Types of Analyses
Why Conduct a Needs Assessment?
Case Studies
Without a Needs Assessment: Attendance Problems at Cypress Creek 4
With a Needs Assessment: Imaging Success at Shelbyville 5
Steps in a Needs Assessment
I. Define the Problem
II. Decide on a Needs Assessment or a BPA
III. Develop a Request for Proposals (RFP)
IV. Conduct a Needs Assessment or BPA
V. Identify a Solution
VI. Make the Case for Implementing the Solution
VII. Implement Changes
Case Studies
Without a Needs Assessment: Lampwick's Dilemma
With a Needs Assessment: Financing Efficiency
When a Needs Assessment May Not Be Necessary
Evaluating the Necessity of a Needs Assessment
If Submitting an LGRMIF Grant Application
Final Thoughts

For More Information and Assistance	<u>)</u>]
Appendix A: Steps in a Needs Assessment or Business Process Analysis (BPA) 2	2
Appendix B: Generic Outline for a Request for Proposals (RFP)	4
Appendix C: Generic Outline for a Needs Assessment and Feasibility Study 2	7
Appendix D: Generic Outline for a Business Process Analysis (BPA)	C
Appendix E: Glossary of Needs Assessment Terms	31

Introduction

Every year, hundreds of local governments and state agencies in New York develop and implement new recordkeeping systems. Many of these systems will work and serve their users well, but others will be failures that will waste the time and money of the organizations implementing them. To increase the chances that a new recordkeeping system will succeed, the New York State Archives encourages local governments and state agencies to conduct a needs assessment and feasibility study before implementing any large new recordkeeping system.

A recordkeeping system can be any paper, electronic, micrographic, or hybrid system designed to create, store, and manage records. Examples of recordkeeping systems include an imaging system for land records in a county clerk's office; a software system that tracks school district personnel changes, vacations, and seniority; and a geographic information system (GIS) that maintains geographic data in electronic form. The system itself is not merely composed of hardware and software; the system also includes the people, data, policies, procedures, and continuing support that make it possible and keep it running. Bear in mind that no recordkeeping system, whether paper or electronic, can ever function without trained and dedicated personnel.

This booklet gives general advice on when and how to conduct a needs assessment for implementing a new recordkeeping system. For more detailed advice, be sure to contact your State Archives Regional Advisory Officer (RAO). Asking the State Archives for additional help is especially important if you represent a local government that is developing a Local Government Records Management Improvement Fund (LGRMIF) grant application.

Differences Between Types of Analyses

A needs assessment is a detailed report that analyzes a records-related problem and determines the best solution to that problem. A needs assessment should not assume that the technology a government wants is necessarily what it needs. The goal of a needs assessment is to provide an analysis of a current recordkeeping system and the records series involved, identify problems, evaluate possible solutions (both procedural and technological), and recommend the best solution to the problem. Sometimes a needs assessment addresses very specific questions, such as whether to eliminate certain steps in a work process or what portion of a backfile of records an organization should convert to another format.

Usually associated with a needs assessment, a **feasibility study** analyzes the ability of an organization to acquire, implement, and maintain a new technology. Such a study must look at the cost of technology over the long run, not just at acquisition costs; you must consider the continuing cost of training, support, and upgrades. A feasibility study may identify a number of possible scenarios, ranging from the most expensive to more modest solutions. This allows an organization to choose a solution that fits its budget yet still makes improvements to its system. An outline of key elements in a generic needs assessment and feasibility study is contained in Appendix C, "Generic Outline for a Needs Assessment and Feasibility Study."

Closely related to a needs assessment is a **business process** analysis (BPA), which examines and describes a work process in order to design an improved process that may or may not use technology. A BPA focuses primarily on workflow and policy issues, and is generally used when the root cause of a problem is unknown. A BPA will always include a detailed narrative of the work processes involved, along with one or more flowcharts that visually represent those processes. An outline of key elements in a generic BPA is contained in Appendix D, "Generic Outline for a Business Process Analysis (BPA)."

In this booklet, the term "needs assessment" will often be used to mean any formal assessment process, whether a needs assessment, a feasibility study, or a business process analysis.

Why Conduct a Needs Assessment?

A needs assessment can both ensure that you make the best use of the resources you have and enable you to develop a new recordkeeping system that will successfully address the problems you want to solve. You may view a needs assessment as a bureaucratic hurdle that must be overcome, but a well-done needs assessment and feasibility study can help you to

- make informed technology choices based on your documented needs and your ability to implement and maintain a technology
- avoid costly mistakes
- address records management issues directly when designing new systems
- provide information and analysis to help you write fundable grant applications

For example, in the early days of imaging, over half the projects failed because of incomplete planning, lack of support, inadequate resources to maintain the system, and poor understanding of the technology and where it could best be used. A needs assessment can keep you from making similar errors.

A needs assessment can also provide a local government with the foundation for a sound implementation grant. The findings of a needs assessment project must provide justification and analysis for local governments developing an implementation grant by identifying technical and business requirements, as well as specifications for hardware and software. In addition, a feasibility study must specify the resources required to implement and sustain the system. Therefore, a grant based on the recommendations of a quality needs assessment has an increased likelihood of funding. Conversely, a poor needs assessment can jeopardize a local government's ability to receive an implementation grant.

Without a Needs Assessment:

Attendance Problems at Cypress Creek

The Cypress Creek Central School District was having trouble maintaining accurate attendance information. Staff spent too much time producing and distributing lists of absent, tardy, or suspended students. Something had to change: the cost of time and paper was unreasonable, yet the school needed to collect and distribute this information daily.

Certain that technology had a role to play in the solution, the school district contacted a software vendor that specialized in software for school districts. Globex Computing Corporation introduced the district to its attendance-tracking software program, which seemed to address all of the district's concerns. In the Globex system, each teacher takes attendance on a portable digital assistant (PDA) and attaches that small computer to a docking station to upload the data into the district's central database. The system then automatically tracks attendance for each student and can run reports of students who are absent, tardy, or possibly truant. The district was impressed by Globex's software demonstration but decided to pilot the system before investing too much money.

The district purchased two dozen PDAs and Globex software licenses. The district chose teachers from various departments in its high school to participate in the pilot project, and over the summer a trainer introduced these teachers to the PDAs and the software product. Soon after the training, the district information technology department began work with Globex to customize the system to work in the school district. At that point, both the school and Globex discovered that the software could not work with the district's system of rotating schedules. The software worked on the assumption that each class would occur at the same time each day of the week. But the district's schedule rotated classes within the school day, so that each class would appear during a different period depending on the day.

The district's first steps were logical: examine technological solutions, train a team of people to pilot and test the program, customize the system to meet needs, and use a pilot project to contain costs. But the district's implementation plan was almost certainly doomed to failure because it didn't initially call for a serious needs assessment. The district never considered whether changes in scheduling procedures could have improved the situation; it didn't even compare its needs and situation against the capacity of the software.

With a Needs Assessment:

Imaging Success at Shelbyville

Someone in the business office of Shelbyville City School District decided it was time for the district to begin to use imaging to help manage its records, but the district's records management officer (RMO) had a better idea. She decided to hire a records management consultant familiar with document imaging to help the school district evaluate imaging as a tool. The consultant studied the work processes of the school district, evaluated whether imaging could improve those processes, and then recommended that the district implement imaging over the course of several years to support different work processes.

However, many people in the district did not want to conduct or pay for a needs assessment at all. Their point of view was that the district knew what it wanted to do and should do it; they believed that the time to start scanning records was right away. To address this dissent and to ensure success of the project, the RMO involved relevant staff from the start by including them in the team working with the records management consultant. This ensured that district staff participated in the development of the needs assessment and became committed to the program they had helped develop.

Using both its own funds and money from grants, the district began to implement imaging for a number of records series. After the needs assessment, the district discovered that a records series from outside the business office was actually its highest imaging priority. Following the results of the needs assessment, the district decided to hire a firm to scan a selected portion of its records of graduated students. Originally the district expected to buy scanners and conduct the imaging in-house, but the needs assessment showed that it was best to image these records at the end of their life cycle, and that it was also cheaper and more efficient to hire a firm to do the scanning. Once the scanning was complete, the district cut in half the time it took staff to look up and make a copy of older student records. The district then focused on imaging payroll records, producing even more impressive time savings. Although many in the district had originally seen a needs assessment as an unnecessary hurdle, after completing the study they saw the process as enormously helpful.

Steps in a Needs Assessment

There are a number of steps your organization should take when planning, conducting, and implementing the findings of a needs assessment. For a brief overview of these steps, see Appendix A, "Steps in a Needs Assessment or Business Process Analysis (BPA)."

I. Define the Problem

The first step in any needs assessment is to examine and document the problem you hope to resolve. By carefully documenting the problem, you develop a clear understanding of it and are better prepared to develop viable solutions. Keep in mind that you must have a specific problem to address. Wanting to add technology, for instance, just "because it will be better" will not help you in the long run.

II. Decide on a Needs Assessment or a BPA

A business process analysis (BPA) and a needs assessment are similar studies with different emphases. BPAs are broader and more extensive in scope, and provide recommendations that are focused on changes to management and policy as well as on technology implementation. Needs assessments focus on determining the need for a specific technology and on identifying system requirements. However, a good needs assessment will contain some elements of a BPA, and will recommend the business process changes that are needed to implement a specific technology most effectively. Similarly, a BPA that recommends implementation of a technology will also include needs assessment information. Work with your RAO to determine which type of study will suit your purposes. Below are some tips for making your choice.

Consider a BPA when

- the problem you are trying to solve arises from inefficient or archaic business processes or organizational problems that technology alone cannot solve
- you do not have a good sense of how to solve a problem
- your organization has considered a technological solution before it has determined the root cause of the problem it is trying to solve

Consider a needs assessment when

- you have a good grasp of the cause of a problem, but are uncertain whether the technology you are considering is appropriate or whether your government can support it
- you have selected a technology to solve your problem, but need more specific assistance in determining how the technology will be implemented, in selecting appropriate products, and in matching the application to your needs and abilities
- you are interested in exploring the viability of a new technology, such as GIS

If the BPA is likely to recommend a technology, select a consultant who has some expertise in that technology. Since BPAs tend to be more complex than needs assessments, you should generally hire an outside consultant to develop a BPA.

III. Develop a Request for Proposals (RFP)

Unless you are conducting a needs assessment in-house, you will need to produce a request for proposals (RFP). An RFP is a formal document that outlines the particular services and products you are looking for and tells prospective vendors precisely how to develop a formal response or bid. The RFP process helps you explain to vendors what skills they must have to be considered for the project. The process also helps ensure uniformity in the format of vendors' responses, so you can more easily compare the quality and cost of different proposals.

The RFP must contain as much detail as possible, including information on the scope and objectives of the project, the records management issues to be addressed, a description of the current recordkeeping system, and a list of what the vendors must provide at the end of their service. Make sure that you write into the RFP that the vendor must submit, at the end of the project, a certain number of copies of a full needs assessment following a structure you have outlined and a process you have specified. You can even require the needs assessment to propose more than one possible solution.

If you are developing an RFP for GIS services, also refer to the "Guidelines for Developing an RFP for a GIS Needs Assessment" which are available on the State Archives' website (www.archives.nysed.gov).

A good RFP will increase your chances of eliciting intelligent, reasoned bids that will be easy to compare. For details on how to

structure an RFP, see Appendix B, "Generic Outline for a Request for Proposals (RFP)."

IV. Conduct a Needs Assessment or BPA

Decide Who Will Conduct the Needs Assessment

Before you conduct a needs assessment, you must decide who will actually produce it. Most needs assessments are conducted by consultants who are records managers and information technology specialists who have a good knowledge of the type of records and information involved and who understand the possible technological and human solutions to the problems common to these systems. However, in some cases, competent records management and managerial staff in your office can conduct a needs assessment. The choice is yours, but the more technologically sophisticated your solution, the more likely it is that you should take advantage of the services of a professional familiar with the applicable technologies.

It is extremely important, however, that any consultant you hire is qualified to conduct the work specified in the RFP. Some technologies, such as GIS, require very specialized expertise. Document imaging needs assessments also require a good knowledge of the technology, as well as sophisticated analytical skills. The State Archives has developed lists of consultants in various specialty areas such as GIS, business process analysis, document management, and micrographics, and these are available on the State Archives' website. But since these lists do not serve as an endorsement of any consultant, the State Archives advises organizations to investigate the past work of consultants thoroughly by examining their résumés, reviewing previous needs assessments they have developed, and interviewing former clients. For detailed advice on how to find and work with a consultant, refer to State Archives Publication #44, Records Management Consultants for Local Governments.

Collect Information on the Current Situation

One of the first steps in developing a needs assessment is to collect information on the current situation and how it affects your organization. Be sure to interview recordkeeping system users for their views on the system and its limitations, identify the primary problems, and decide which problems you may ignore if you cannot solve all the issues involved.

You can also collect information on how the situation affects customers, citizens, and other government agencies. Interview or survey customers who interact with, but are not direct users of, the

recordkeeping system. Discuss the situation with other government agencies that interact with the system. Identify your service goals for a new system and how the current system fails to match up with these.

Determine the cost of the current system so you can decide if it is too expensive and so you can compare the cost of this system to any system proposed in the future. Costs include personnel time, information conversion (via microfilming, scanning, or migrating), and storage.

Catalog the recordkeeping requirements of the records in the system, which you will need to know when designing a replacement system. Recordkeeping requirements might include the retention periods for the records, the level of accuracy and reliability demanded of the records, and the security of the system.

Research Possible Solutions

Often the last step in a needs assessment is to conduct research on possible solutions to the problem. You might begin by talking to colleagues, searching the Internet, or reading about other solutions to the problem in records management journals. You might even attend relevant State Archives workshops to collect information on specific technologies like GIS, imaging, or electronic document management systems. You might also investigate technological and administrative solutions that others in your situation have tried. Your Regional Advisory Officer may be of assistance in this area, and can direct you to organizations that have addressed similar issues.

V. Identify a Solution

After you have determined possible solutions to your problem, you must evaluate them to choose the best solution. Some possible solutions may not be appropriate because they do not address all of your needs for a recordkeeping system, because they maintain data in proprietary formats making it difficult to migrate electronic data to newer systems, or because they will not integrate easily into your technological platform.

This step includes identifying, testing, and evaluating possible solutions to the problem against service goals. You should also estimate the capabilities and limitations of possible technological solutions and verify that the new system will support your organization's needs. Another option is to consider alternate designs, such as full-scale, mid-range, and minimal implementation scenarios. In such cases, you would develop a set of solutions: one that does

everything you want the system to do but which also costs the most, one that addresses only the bare minimum of your needs but with little cost, and a third that falls somewhere between these two. Then managers in your organization can evaluate and choose from these solutions based on the funding and staff time available.

A formal written needs assessment may provide you with more than one possible solution. These solutions could consist of different levels of implementation (as described above), or totally different solutions (such as microfilming versus imaging). In such a case, you will need to combine the information presented in the needs assessment with your knowledge of the needs and abilities of your organization and decide what is the best solution for your situation.

Always maintain the right to review and approve a needs assessment before the entire project is completed. If the consultant's recommendations are unclear, or are based on inaccurate information or assumptions, insist that the needs assessment be revised. Question and discuss any recommendations that appear to conflict with State Archives guidelines or best practices before accepting or paying for the needs assessment, and consult with your RAO before accepting any needs assessment.

VI. Make the Case for Implementing the Solution

Always present a needs assessment to your governing body or executive officer (commissioner, town supervisor, mayor, etc.) for formal approval. Any new technology or application will require ongoing resources to support maintenance, system upgrades, and staff training; your organization must therefore be willing to accept these ongoing costs for a recommended technology or application to be viable.

A local government may also make the case for implementation as part of an LGRMIF grant application. Any LGRMIF grant application for implementing a new recordkeeping system must either include copies of the relevant needs assessment or explain in detail why a needs assessment is not necessary. (For more detail on the latter, see the following sections of this booklet.) In addition, include evidence of your local government's willingness and ability to fund this new system in the future. Grant reviewers are unlikely to provide funds for implementation projects if there is no evidence that a government is willing or able to support a technology.

VII. Implement Changes

The final step is to implement your chosen solution. Develop a timeline, an implementation plan, and a hardware and software design for the new records system if these were not included in the needs assessment. Also develop at least some general guidelines for maintaining the system in the future. After these are in place, you can begin the work of installing the new system, training users, adding data, and maintaining the system.

CASE STUDY

Without a Needs Assessment:

Lampwick's Dilemma

The Town of Lampwick was having trouble accessing records in many of its departments. Staff had some difficulty tracking down active and inactive records, town residents occasionally complained about the time it took town employees to find records or complete transactions, and the town supervisor wanted to reduce paper records as much as possible. So the town decided that the best course of action would be to hire a consultant to conduct a broad needs assessment to address these interrelated issues.

The town hired a software consulting firm that, fortunately, focused on records management problems rather than on technology alone. The firm spent a number of days interviewing department staff and evaluating records, and it prepared a good needs assessment that outlined the specific access issues in each town department. The firm's major recommendations to the town were to use microfilm to reduce the bulk of inactive paper records and to automate current records by scanning records as they were received into an electronic document management system. The town paid the firm for its work—and that was the end of the project. Why didn't the town follow up on the needs assessment and implement its conclusions?

There were many problems in this otherwise good needs assessment, all of them stemming from the fact that the town never formally reviewed the document before accepting and paying for it. Although the firm's recommendations were essentially valid, the needs assessment did not include a feasibility study. The firm never took into account the town's ability to pay for the recommended system, probably because the firm was unfamiliar with the cost constraints of municipal government. Although the

town could see the value in an electronic document management system, it felt overwhelmed by the prospect of paying for and maintaining such a system, and the needs assessment only sketched out the process for implementing such a complex and expensive system. Additionally, the town began with the idea that reducing paper alone was a reasonable records management goal, but often organizations that focus on eliminating paper miss the bigger picture. Finally, the needs assessment probably had too wide-ranging a focus; a project focused on one department or one set of records would have been more likely to succeed.

The town decided that it would review any needs assessment in the future before accepting it. This policy would ensure that the town could identify problems and then require changes in the report to ensure it met the town's needs and was something the town could implement.

CASE STUDY

With a Needs Assessment:

Financing Efficiency

The Department of Services decided that its purchasing processes were inefficient and required a huge overhaul, possibly by implementing new technology. As a first step the agency hired a professional records management consultant to develop a detailed needs assessment. First, the consultant documented the existing processes through interviews with staff and developed a flowchart of work processes along with a narrative description of those processes. Next, he studied the technology infrastructure in the agency as a whole and of the purchasing process in particular.

The consultant's needs assessment recommended a four-phase solution that would allow the agency to make changes at whatever rate it could afford, with the easier changes taking place first. In the first phase, the consultant recommended combining two multipage forms into a single-page form, eliminating duplicate filing systems and the production of a monthly list of bills for each bureau and regional office. These simple changes ridded the agency of duplicative and unnecessary work, immediately improving the efficiency of the bureau of finance.

In phase two, the agency upgraded the finance bureau's file server and workstations and began to use e-mail (rather than interdepartmental mail) to transfer completed purchase orders to the finance bureau. The agency had to pay some additional costs in this phase, but the improvements in service far outweighed these modest costs.

The Department of Services has yet to address phase three (replacing its accounting software with a more robust package that better fits its needs) or phase four (implementing a wide-area network to link all regional offices with the central office and implementing an electronic forms processing solution). But now the agency has a plan to continue to improve its purchasing procedures as it saves time. Without a serious needs assessment, the agency would still be producing and handling too much paper and wasting far too much time.

When a Needs Assessment May Not Be Necessary

Although a needs assessment is often a valuable analytical tool, there are a number of situations in which a full needs assessment may not be necessary. Below is an explanation of such situations. You must keep in mind, however, that none of the examples below is an absolute; whether or not a needs assessment is necessary in your specific situation will depend on the particulars of your needs, abilities, and technical infrastructure.

An existing cooperative arrangement is already in place.

If a county has developed a cooperative geographic information system (GIS) infrastructure that serves the county government and all other local governments within its borders, one of the villages within that county would not need to conduct a needs assessment prior to implementing a GIS. However, the village government would still need to determine its goals for GIS and ensure that its GIS solutions would fit the technological infrastructure and rules developed by the county.

A needs assessment already exists for similar agencies or operations.

If a statewide association has developed a needs assessment or specification for systems to support the operations of similar county departments across the state, that could take the place of a formal needs assessment. Although no department is required to follow this needs assessment, it would be much simpler for a department to use this needs assessment and its specifications rather than develop its own from scratch. The department would, however, have to demonstrate that the findings of this needs assessment are up to date, and that they apply to the particular needs of its county.

A state or federal control agency has defined system requirements and acceptable technologies for a particular application.

The Federal Emergency Management Administration (FEMA) defines system requirements for software to be used in the National Fire Incident Reporting System (NFIRS) and issues a list of software packages that meet those requirements. Since the federal government has defined standards for these recordkeeping systems, there is no need for a fire district interested in incident-reporting software to conduct a needs assessment to determine its recordkeeping needs. A fire district would still need to evaluate competing software packages to determine which would best meet its needs, funding ability, and computing platform, but this is a simple process that does not require a complete needs assessment.

Professionally accepted approaches have already been used.

A town clerk's office wants to purchase a "town clerk's software package" that automates many of the licensing and other functions of the office. These packages are widely used across the state, have been proven to save time and effort, are simple to operate, support functions that are generic across the state, and generally function well in most existing computing environments. In such a situation, the town would need to determine which package provides the precise functionality needed, which is easiest to use, what support the vendor provides, and what the costs are, and then use that information to choose a software package. A needs assessment would be unnecessary, given the widespread use and general ability of these software packages to solve these particular problems.

Relevant professional standards exist.

Standards come in two varieties: de jure standards, which are actual standards formally approved by a standards-making body like ANSI; and de facto standards which are guidelines that serve as a standard, although not formally developed or approved as such. The

Department of Defense has developed specifications for what it calls a records management application (RMA), a document management system that identifies retention periods for, automates disposition of, and destroys obsolete electronic records in the system. Although this standard (DoD 5015.2-STD) formally applies only to the installations within the Department of Defense, it has become a de facto standard throughout the country and is supported by the National Archives and Records Administration. If your state agency or local government is interested in implementing an RMA, you could accept this de facto standard as the outline of your business needs and forgo development of a full needs assessment. However, you would still need to choose an applicable software product that meets this standard, verify that the software will function within your computing environment, and ensure that your organization has the resources to support this software.

Another organization similar to yours can serve as a reasonable benchmark for your project.

Your school district wants to investigate the feasibility of using imaging as a tool for maintaining personnel records. In the course of research, you discover that a nearby school district of a similar size and with similar issues has successfully implemented such a system and has worked out all the problems your district expects to face. Even in the absence of a formal needs assessment, the fact that this other school district has already addressed all the necessary system requirements and worked out the problems means that its example might serve as a reasonable solution to your district's issues. Your district would still need to verify that the other district's solution is adequate to suit your own needs, will work in your computing environment, and addresses the recordkeeping and other requirements of your district.

The relevant technology is already in place in your organization.

One office of a large state agency has had a networked imaging solution in place for a number of years, the internal and external users understand and are comfortable with the system, and the system works well. If another office decides to implement imaging as a solution, it would not need to conduct a needs assessment to determine if imaging would work in its specific situation. The office could, instead, expand the same imaging system or use a parallel system, knowing that the imaging system will work on the agency's network, that there is a cadre of trained staff in the agency who could serve as trainers, and that the one office's recordkeeping

needs are similar enough to the first's to serve as a reasonable guide. The second office, however, will still need to verify that imaging is a good solution for its specific problem.

The recommended solution is simple, fairly inexpensive, and obvious.

The fire department of a small city decides to collect emergency telephone calls electronically and store these on DVDs, replacing the current analog audiotape system. The cost of this solution is only a few thousand dollars, and the stability of DVDs and recording formats is known and acceptable for the retention requirements of the records involved. The solution also allows the fire department to segregate calls that require a longer retention period than routine calls, therefore reducing the overall retention requirements. This solution is so simple to investigate and consider that a full-fledged needs assessment is not necessary.

However, if you represent a local government applying for a technology implementation grant from the LGRMIF, you cannot argue that a needs assessment is unnecessary simply by stating that your situation falls within one of the categories explained above. First discuss the particulars of your situation with your Regional Advisory Officer or with technical staff in the Albany office of the State Archives. These representatives can then examine the issue with you in detail and provide advice and direction. In the grant application, you will still need to argue why it is unnecessary to conduct a needs assessment, explain your informal assessment process and findings in detail, and convince the grant review panel that your conclusions are accurate and acceptable. If you are basing your application on a model needs assessment or a supposed standard, you must show that you have verified that the needs assessment or standard you are referencing truly does apply to your particular situation, and you must provide copies of this verification along with your grant application. There are no absolutes in such a situation, and grant reviewers' opinions may differ widely from yours. Given this, if you have any inkling that a needs assessment may be necessary or may be viewed as necessary, choosing to conduct a needs assessment first is probably the best tactic.

Evaluating the Necessity of a Needs Assessment

Use the following questions to help you determine if you should conduct a needs assessment. Answering the questions in this table will not give you an unequivocal answer, but the more affirmative answers you have the more likely it is that you do not have to conduct a needs assessment. It is best to use the following questions in concert with one or more of the situations described above.

Question	Yes	No
Do you clearly understand the source of your problem and know that the proposed new system will solve this problem?		
Have you investigated other similar systems in place elsewhere and determined what problems you might face with such a system?		
Are you sure that your problem is something other than a workflow problem, and that the proposed technology alone will solve it?		
Do you have hands-on experience with the chosen technology?		
Are you sure the chosen technology will meet all business requirements?		
Will the proposed system allow you to manage retention requirements for the records?		
Is the initial cost of the system modest and fundable in the current year?		
Will your organization be able to support the estimated annual costs of running the new system?		
Do you have support for this system from management and/or your executive board?		
Do you have trained staff who can run the proposed system?		
Are you sure this new system will save money?		
Are you sure this new system will improve services?		
Are you sure you need to implement a new system immediately?		
Can you develop policies and procedures in-house for maintaining this system?		
Will this system function without problems in your current technological environment?		
Will this system meet or exceed any applicable government regulations?		
Are you certain this is the best technological solution to your problem?		
Do you have the information technology staff necessary to support this solution?		
Is this a fairly small and simple project?		
Have you identified all the problems you expect to see with the new system?		

If Submitting an LGRMIF Grant Application

When submitting an implementation grant application for a new recordkeeping system to the LGRMIF, a local government must either attach a completed needs assessment or explain in detail why such a needs assessment is unnecessary. The State Archives does not automatically require all local governments that are applying for implementation funding for a new recordkeeping system to complete a needs assessment, but the applicant will still need to convince the grant reviewers that a needs assessment is unnecessary. Whether submitting a needs assessment or explaining why one isn't needed, the grant applicant must meet a certain set of requirements.

Submitting a Completed Needs Assessment

If you are submitting a needs assessment, you have very specific requirements to meet in your grant application.

- 1. Ensure that the solution you describe in your grant application narrative matches the recommendations in your needs assessment. If these do not match, the reviewers will be hesitant to fund your grant application. If you have modified your conclusions because additional information has come to light after your needs assessment was completed, you must explain this carefully within your grant application narrative.
- 2. Submit a needs assessment that is reasonably up to date. Since technological solutions can change quickly, reviewers will be likely to question the viability of a needs assessment that is much more than a year old.
- 3. Reiterate the conclusions of the needs assessment in your grant application narrative. Do not assume that your needs assessment can replace the need for a full and complete grant narrative. Reviewers expect applicants to prove in their applications that they understand the conclusions of their needs assessments.
- 4. Explain how your local government will support the new recordkeeping system in the future. A government must be willing to accept a system's ongoing costs for that system to be a viable solution. Grant reviewers are unlikely to provide funds for implementation projects if there is little evidence that a government is willing or able to support a technology.

5. Indicate that you intend to follow or have followed the State Archives' GIS guidelines if applying for a GIS grant. If your needs assessment deviates from the State Archives' publication, *Local Government Geographic Information Systems (GIS)*Development Guides, you must explain why such a deviation is necessary.

Explaining Why a Needs Assessment is Not Necessary

If you have decided that a needs assessment would be redundant, you must still convince the reviewers that this is indeed the case. In lieu of a needs assessment, provide the following information in your grant application:

- Address the lack of a needs assessment directly. Do not try to avoid the subject and hope that reviewers will automatically agree with you. Instead, argue your case forcefully and convincingly.
- 2. Explain in general terms why a needs assessment is unnecessary, and provide supporting details. For instance, you could use one of the general reasons given above in the section "When a Needs Assessment May Not Be Necessary," which you could then expand upon by addressing some of the questions outlined in the section "Evaluating the Necessity of a Needs Assessment" (above).
- **3.** Explain the analysis you conducted in place of a needs assessment. This analysis could include a description of your process for choosing a particular software program, your assessment of the need for staff training, or your evaluation of vendors of software and services.
- **4.** Explain how your local government will support the new recordkeeping system into the future. This is a crucial point, whether or not you are submitting a needs assessment.

When in Doubt

If you do not know whether or not a needs assessment is necessary, then assume that it is and conduct one prior to implementation. There are a number of ways you can do this.

1. Submit a grant application to conduct a needs assessment before you submit a grant for implementation. One problem with this

- solution is that the LGRMIF has annual grant deadlines, so this step will certainly add at least a year to your project.
- 2. Use local government funds to pay for a needs assessment. If you do this, be sure to let the reviewers know that you used your own money, since this will be evidence of your government's support for records management.
- 3. Conduct the needs assessment in-house with records management or managerial personnel. This is often a good solution if you have a fairly simple project in mind. If you choose this as a solution, be sure to contact your Regional Advisory Officer for advice and direction.

Final Thoughts

In the long run, every organization must conduct some kind of careful analysis before implementing a new or changed recordkeeping system, whether or not that analysis is a formal needs assessment. There are just too many problems that may arise without such an analysis. Although no analysis is foolproof, the chances of success are much greater with the analysis than without it. And needs assessments help people see that just because a solution appears to work doesn't mean it's the right solution for them.

When you start planning for a needs assessment, keep in mind that all successful change will involve a number of people from your organization. The greater the number of points of view, the greater the chances that you will devise the best possible solution. It's best to be sure to involve people who work with the current system, as well as information technology and records management staff. All of these people bring special expertise to the table, and no consultant can ever replace your organization's internal knowledge.

Consultants can only augment and analyze that knowledge.

Finally, never think that any recordkeeping system you develop will be the last system you'll ever need. Your world, your needs, and information technology are changing all the time. So develop open systems—systems whose electronic data you can easily move to another system when the time comes. You don't want the solution that you choose today to become the dead end you have to face tomorrow.

For More Information and Assistance

The State Archives provides direct advice to state agencies and local governments on planning for and conducting needs assessments and business process analyses. The Archives also offers workshops that provide direction on records management needs assessments. The Archives has regional offices throughout the state, and each office has an expert records specialist who can visit you and provide technical advice and assistance. Archives services also include publications and workshops on a wide variety of records management topics. For further information, contact either your regional office or

Government Records Services New York State Archives State Education Department 9A47 Cultural Education Center Albany, New York 12230 (518) 474-6926 www.archives.nysed.gov

Appendix A

Steps in a Needs Assessment or Business Process Analysis (BPA)

This outline provides a list of steps to follow when developing and implementing a needs assessment or a business process analysis (BPA). The body of this booklet contains more details on each of these steps.

I. Define the Problem

The first step in any needs assessment project is to define the problem as completely as possible. Determine, to whatever degree you can, the specific problems you are facing, so you can better carry out the subsequent steps. If conducting a business process analysis (BPA), the first step is usually selecting a work process your organization wishes to improve.

II. Decide on a Needs Assessment or a BPA

Next, determine if a needs assessment or a BPA is an appropriate mechanism for evaluating your problems. Both are similar types of analyses, but your specific situation will determine what is best for your needs.

III. Develop a Request for Proposals (RFP)

After identifying your problems and determining what type of analysis you want to conduct, develop a careful and detailed request for proposals (RFP). The point of an RFP is to help you choose the best vendor to conduct your study. This step does not apply to organizations that are conducting needs assessments or BPAs in-house.

IV. Conduct a Needs Assessment or BPA

This is the central work of your project, and you can carry out the analysis either with in-house staff or with an outside consultant.

V. Identify a Solution

After completing the needs assessment process, you must consider all of your options and recommend a solution. No solution will ever be perfect, but you must ensure that the chosen solution adequately addresses your needs.

VI. Make the Case for Implementing the Solution

Often by the time you have completed a needs assessment, you still do not have the support (including funds) that you need to implement your chosen solution. Your next step is to convince your management and executive body to support the changes you've chosen. If you represent a local government, this step may also include developing a convincing LGRMIF grant to submit to the State Archives.

VII. Implement Changes

Your final step is to implement the changes you've designed. This may include developing a timeline and implementation plan for the new recordkeeping system, developing policies and procedures for system maintenance, and actually maintaining the system.

Appendix B

Generic Outline for a Request for Proposals (RFP)

A request for proposals (RFP) is a formal document that details the services or products your organization is searching for, outlines what deliverables you require, and indicates what formal requirements prospective vendors must meet. This outline provides a general idea of how a request for proposals might be organized. The State Archives does not require the inclusion of these sections in an RFP, but they provide a good indication of the type of information to include in an RFP. In addition to these guidelines, be sure to follow the rules for RFP issuance required by your organization; your legal counsel must review any RFP before you release it. If you are developing an RFP for GIS services, also refer to the State Archives' "Guidelines for Developing an RFP for a GIS Needs Assessment," which is available on the State Archives' website (www.archives.nysed.gov)

I. Scope and Objectives

Define the scope of the project (what process or system you want to put in place) and specify the objectives (what you expect the newly implemented system to achieve). For instance, the scope may be to implement an electronic document management system for one office, and your objectives may be to improve retrieval, management of records over their life cycle, and overall efficiency.

II. Organizational Overview

Provide a brief description of your organization, giving vendors an idea of its type, size, location, and mission.

III. Records Management Issues to Address

Indicate the specific records management issues you want the proposed new system to address. These issues might include

- the need for faster and more accurate retrieval
- improved retention systems
- reduction of duplicate information
- lost or misplaced files
- inadequate records security
- reduction of printing and distribution costs

- lack of storage space
- backfile conversion

IV. Overview of Current Recordkeeping Systems and Technical Infrastructure

Detail the specifics of the recordkeeping systems under consideration (including the records involved and any recordkeeping requirements) and your organization's technical infrastructure (network type and structure, Internet access speeds, software products used, etc.). This information will allow vendors to develop solutions that will fit your current systems.

V. Deliverables

Specify precisely what deliverables your organization requires for this project. These deliverables could include such details as preparation of the sections required of any needs assessment, required project activities, cost details that must be submitted for various proposed solutions, deadlines for receipt of interim and final needs assessments, and number of copies required.

VI. Vendor Experience and Qualifications

Indicate the relevant experience, references, and financial stability required of prospective vendors.

VII. Evaluation Procedure

Explain how your organization will evaluate vendor responses to the RFP and report its decision.

VIII. Vendor Instructions

Stipulate exactly which requirements and deadlines vendors must meet, specify how vendors must communicate questions concerning the RFP, specify the requisite number of copies of the RFP, and set the deadline for receipt of vendor responses.

IX. Conditions

List any other conditions that vendors must follow. These may include how and when the RFP might be amended or canceled, how modifications to the proposal will be communicated to vendors, inspection of work performed, etc.

X. Post-RFP Activities

Summarize the process that your organization will follow after evaluating RFPs. These steps might include notification of awards, vendor communication during the project, and monitoring of the project.

XI. Proposal Requirements

List the format required of vendor responses, the receipt by specified deadlines, and the mailing address for responses.

XII. Attachments

Include any necessary attachments, such as required proposal cost summary forms, vendor certifications, etc.

Appendix C

Generic Outline for a Needs Assessment and Feasibility Study

This outline provides a general idea of how a needs assessment might be organized. The State Archives does not require the inclusion of these sections in a needs assessment, but they provide a good indication of the type of information and analysis to expect from a professional needs assessment.

I. Executive Summary

Provide a one- or two-page synopsis of the reasons for and findings of the needs assessment.

II. Current Situation and Problems

Develop a clear picture of the current situation under review, including the problems with the current recordkeeping system, technological infrastructure, and level of staffing. This section might also include process diagrams showing how the applicable work processes currently operate. The latter is especially important for a BPA, which will focus on work process issues.

III. System Requirements

Describe the requirements that any proposed system must meet. Requirements are issues that must be addressed, that cannot be changed, and that are important constraints on development of a new recordkeeping system.

A. Business Requirements

Explain what the system needs to accomplish for the organization to conduct its work.

B. Records Management Requirements

Explain the records management issues, such as what records must be captured, how long they must be retained, how they must be accessed, and whether there are certain required record formats or authenticity requirements (such as signatures).

C. Technical Requirements

Explain what the system must accomplish technically, including what other software it must interface with.

D. Federal or State Requirements

Explain the applicable governmental regulations, such as retention or privacy requirements, or requirements to conduct certain recordkeeping activities.

IV. Review of Possible Solutions

Provide a list of all solutions considered and the process used to identify and evaluate those possibilities.

A. Identify Possible Technologies and Benchmarks

Describe the process used to identify available technologies that may address the organization's needs or problems. Describe how others who have implemented similar solutions addressed the problem, the issues they faced, and their recommendations.

B. Identify Costs and Needed Resources

Identify the costs associated with the recommended solution. Define varying solutions that represent a modest, moderate, and elaborate implementation.

1. Data Acquisition or Conversion Costs

Startup costs required to input enough data into a new system to make it worthwhile.

2. Acquisition Costs

Costs associated with the implementation of a new system.

3. Ongoing Maintenance Costs

Annual costs of maintaining a new system, including software upgrades and annual maintenance fees.

4. Personnel Costs

Costs of paying personnel to maintain the system.

5. Training Costs

Costs of training personnel to use the system.

C. Identify Available Resources

Identify any resources (financial, personnel, equipment, etc.) available to run this new recordkeeping system, and identify any gaps between available and necessary resources.

V. Recommendations and Action Plan

Provide detailed recommendations for how to change the recordkeeping system, including changes in technology, policies, and procedures.

A. Explain the Specific Solution

Provide a detailed description of the solution and the steps needed to arrive at to that solution. For example, this section may include an explanation of what portion of a backfile should be converted, or process diagrams (flowcharts) of a new process.

B. Justify the Specific Solution

Explain why the recommended solution is the best possible choice. Justify it in terms of lower costs, improved performance, or cost-benefit or cost-performance analysis.

C. Implementation Plan and Timeline

Provide a detailed plan for implementing the new system, including a timeline.

VI. Appendices

Include any additional information that provides detail that supports the body of the needs assessment. Appendices can include detailed technical specifications, lists of the characteristics of records series involved, cost estimates, or a glossary of terms.

Appendix D

Generic Outline for a Business Process Analysis (BPA)

This outline provides a general idea of how a business process analysis (BPA) might be organized. The State Archives does not require the inclusion of these sections in a BPA, but they provide a good indication of the type of information and analysis to expect from a professional BPA. This outline is similar but not identical to the outline for a needs assessment report.

I. Executive Summary

Provide a one- or two-page synopsis of the reasons for and findings of the BPA.

II. Description of Existing Business Processes

Describe the existing business processes in detail through a step-bystep narrative explanation, and map the processes in detail through a series of process diagrams (flowcharts). Providing both "views" will ensure a good understanding of the processes and will help identify deficiencies in them.

III. Evaluation of Existing System

Provide a detailed evaluation of the current system, including what works well and what doesn't. Identify system deficiencies that can be solved by process changes, as well as those that can be solved by changes in technology.

IV. Recommendations for Improved Business Processes

Outline recommended improvements that can be made to the current business processes. Justify these improvements based on anticipated benefits in cost, speed, and quality. Indicate the expected project costs of making such changes, including initial procurement costs, annual maintenance fees, backfile conversion costs, and estimated annual costs. Detail an implementation strategy, including details of a phased strategy (if necessary).

V. Appendices

Include any additional information that provides detail that supports the body of the BPA. Appendices can include detailed process diagrams (flowcharts), lists of appropriate vendors for the services required, a glossary of terms, or a draft request for proposals for services related to implementation.

Appendix E

Glossary of Needs Assessment Terms

accuracy. the degree of conformity with a standard, or the degree of correctness attained in a measurement

authenticity. the verification that a record has not been altered or manipulated in any way and is what it claims to be

backfile. a set of older records that has not yet been processed or converted into a new system

backfile conversion. the conversion of an older set of records into the new standard record format in an office to increase access to the records

BPA. See "business process analysis (BPA)"

business process analysis (BPA). an intense, detailed, and logical analysis of each step in a business process to determine how best to improve the process

conversion. (1) the translation of data from one format to another (e.g., TIGER to DXF; a map to digital files); (2) data conversion when transferring data from one system to another (e.g., SUN to IBM)

cost-benefit analysis. any method for examining the cost advantages that can be realized by modifying the management of records

deliverable. a product or service that an organization requires a consultant or firm to provide as part of a contract

document management system. See "electronic document management system"

electronic document imaging. the production of digital pictures of records

electronic document management system. a computerized system that enables the creation, modification, routing, storage, retrieval, and distribution of documents in multiple electronic formats through a single interface

electronic recordkeeping system. an electronic information system that supports the collection, organization, and categorization of electronic records

feasibility study. an examination of the practicality of implementing new or modified procedures, methods, or technologies, often folded into an overall needs assessment

flowchart. a diagram that shows each step in a process through the use of a set of symbols

geographic information system (GIS). a computerized database system used to gather, manipulate, display, and analyze spatial data (including maps, three-dimensional models, and tables)

GIS. See "geographic information system (GIS)"

guidelines. recommended criteria designed to ensure the best-quality product is produced by adhering to a specified process (*See also* "standards")

imaging. the process of electronically capturing the visual appearance of documents, especially those on paper; informally called "scanning"

implementation. the actual installation and launching of a new recordkeeping system

information technology (IT). the system for managing the entire range of computing, telecommunications and information; sometimes called "information services" (IS) or "management information services" (MIS)

interface. the place at which a computer program and a human user interact; the specific layout and functionality of a screen in a computer program

IT. See "information technology (IT)"

LGRMIF. See "Local Government Records Management Improvement Fund (LGRMIF)"

life cycle. the span of time a record exists, from its creation through its useful life to its final disposition or retention

Local Government Records Management Improvement Fund (LGRMIF). a dedicated fund to improve records management and archival administration in New York State's local governments, comprised of fees collected by county clerks and the New York City Register for the recording of selected documents

microfilm. (noun) fine-grain, high-resolution photographic film capable of recording images, especially when referring to such film stored on reels (verb) to capture images of documents on such film

micrographics. the science and use of microfilm in all its forms

migration. the periodic transfer of data from one electronic system to another, retaining the integrity of the data and allowing users to continue to use the data despite changing technology; sometimes called "data migration"

needs assessment. a process that systematically examines a records management problem, evaluates options, and recommends solutions via a formal report

open architecture. the feature of an information technology system of software, hardware, or both, that ensures the system can easily be connected to devices and programs made by other manufacturers

PDA. See "personal digital assistant (PDA)"

personal digital assistant (PDA). a small, hand-held computer used to carry and update small quantities of important information

platform. a hardware or software architecture of a particular model or family of computers (i.e., IBM, Tandem, HP, etc.)

policy. a broad document that specifies a general rule for records and information management in an organization

procedure. a detailed document that specifies step-by-step rules for records and information management in an organization

process. one or more tasks that add value by transforming a set of inputs into a specified set of outputs (goods or services) for a customer

process diagram. a flowchart that outlines a business process

proprietary. (said of a computer file format) owned and controlled by a single company and therefore usually only readable in a certain software and hardware environment, and not necessarily exportable to another environment

RAO. See "regional advisory officer (RAO)"

record

(informal definition) information, in any format, that is created by an organization or received in the formal operation of its responsibilities

(legal definition for local governments in New York State) any book, paper, map, photograph, microphotograph or any other information storage device regardless of physical form or characteristic which is the property of the state or any state agency, department, division, board, bureau, commission, county, city, town, village, district or any subdivision thereof by whatever name designated in or on which any entry has been made or is required to be made by law, or which any officer or employee of any said bodies has received or is required to receive for filing

(legal definition for state agencies in New York State, plural): all books, papers, maps, photographs, or other documentary materials, regardless of physical form or characteristics, made or received by any agency of the state or by the legislature or the judiciary in pursuance of law or in connection with the transaction of public business and preserved or appropriate for preservation by that agency or its legitimate successor as evidence of the organization, functions, policies, decisions, procedures, operations, or other activities, or because of the information contained therein

recordkeeping. the creation and maintenance of reliable evidence of business transactions in the form of recorded information

records management. the systematic control of all records in an organization throughout their life cycles

records management application (RMA). an electronic document management system that includes automated retention controls as described by the Department of Defense standard DoD 5015.2-STD

records series. a group of related records (such as minutes of a board, payrolls, or purchase orders) that are normally used and filed as a unit and that normally have the same retention requirements

records retention. See "retention"

regional advisory officer (RAO). a representative of the New York State Archives who provides records management advice to local governments and state agencies in a region of the state

regulation. a rule promulgated by a government to explain how to comply with specific legislation

reliability. the authority and trustworthiness of records as evidence

request for proposals (RFP). a formal document used in negotiated procurement in which an organization communicates its requirements for a product or service and solicits preliminary bids and proposals

retention. the act of keeping records for a specific amount of time given their administrative, fiscal, legal, or historical value and use; also called "records retention"

RFP. See "request for proposals (RFP)"

RMA. See "records management application (RMA)"

security. the protection of records by controlling which users can access which documents and for what purpose

software. programs that run operations on a computer

standards. required criteria designed to ensure that the best-quality product is produced by adhering to a specified process (*See also* "guidelines")

workflow. the path that a record takes and the processes that occur as the record travels through an organization