BEST PRACTICES FOR INFORMATION TECHNOLOGY GOVERNANCE

A REPORT FROM THE CITY AUDITOR
September 2005

Office of the City Auditor
Portland, Oregon

CITY OF

PORTLAND, OREGON

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September 13, 2005

TO: Mayor Tom Potter
Commissioner Sam Adams
Commissioner Randy Leonard
Commissioner Dan Saltzman
Commissioner Erik Sten
Matthew Lampe, Chief Technology Officer

SUBJECT: Best Practices for Information Technology Governance, Report #314B

Attached is Audit Report #314B on Best Practices for Information Technology Governance. The report outlines 20 best practices that contribute to the successful management of information technology resources and the way they align with and support organizational objectives.

Many of the practices discussed are significant initiatives which may be implemented incrementally. We have not addressed the degree to which BTS and the bureaus have implemented these practices.

The successful implementation of an Information Technology Governance framework requires a coordinated effort between BTS and the bureaus. We believe this report will be a useful guide for all managers who work with information technology within our City.

Gary Blackmer

GARY BLACKMER
City Auditor

Audit Team: Drummond Kahn
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Attachment

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Introduction

The objective of this audit is to identify practices that can guide and support the management of information technology (IT) resources. We learned that many organizations are facing the challenge of effectively delivering IT services and products that support and add value to their varied business processes. We found that implementing a set of sound business practices is the key to delivering IT services that meet customer needs. The framework for implementing many of the practices we identify in this report is often referred to as "Information Technology Governance."

Research shows that successful IT organizations possess the following six key characteristics.

- Senior management supports information technology.
- Information technology is an important consideration but does not drive the organization's operational strategies.
- The information technology department understands the operations of its customers.
- The information technology department and its customers work together as partners.

> **"Fundamentally, IT governance is concerned about two things: IT's delivery of value to the business and mitigation of IT risks."**
>
> *Board Briefing on IT Governance,*
> IT Governance Institute

- The information technology department has a sound rationale for project priorities.
- The information technology department demonstrates leadership.

The practices identified in this report help foster and develop these characteristics.

Methodology

In order to compile the best practices, we reviewed literature on management, governance, IT service structures, and internal controls. We collected literature from various sources including academic databases and private and public sector technology publications. We also relied on the research and publications of the U.S. Government Accountability Office, Gartner, Inc. and the framework of the IT Governance Institute's leading research publication *Control Objectives for Information and Related Technology* (CobiT).

We identified cities whose IT departments are noted as leaders in IT or who implement innovative IT practices and interviewed their staff. We also interviewed IT professionals in local organizations, including Multnomah County, Metro, and the Oregon Health & Sciences University. Studying organizations that function in different businesses and sectors helped us gain insight into how IT departments meet their organization's technology and organizational requirements.

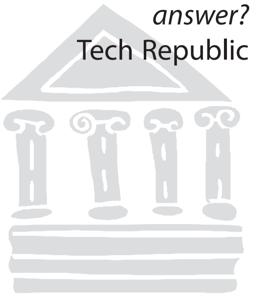
We developed this guide for organizations with an internal IT service department. We hope that both the IT department and their customers will find this guide beneficial.

We conducted our work in accordance with generally accepted government auditing standards.

Five areas of information technology governance

"…IT governance is at least as important as any piece of infrastructure or any application – perhaps more so in an environment where the CIO has to do more with less."

IT Governance: Is it the answer?
Tech Republic



Information technology governance is a framework for implementing policies, business processes, and internal controls to effectively support all the services that an IT department provides. IT governance seeks to improve the value of bureau business operations, rationally prioritize project requests, measure the IT department's performance. IT governance recognizes that for IT to truly add value to the bureaus, both the bureaus and the IT departments must be accountable for IT investments.

The IT Governance Institute, a leading researcher in the development and application of IT governance objectives since 1998, considers the implementation of IT governance an ongoing process. IT governance requires organizational change and new processes: cooperation, collaboration and communication are necessary to achieve results.

The following best practices are divided among five IT Governance "focus" areas. The IT Governance Institute outlined these five IT Governance focus areas after studying market predictions and other analyses produced by leading IT researchers.

Strategic IT Alignment

Strategic IT alignment ensures that IT services and investments meet business objectives that are outcomes of strategic planning. Information technology is "aligned" when IT management allocates resources and undertakes projects in coordination with the bureaus' strategic plans and business objectives and the City's strategic vision. Strategic IT alignment is only possible when bureaus have strategic plans and specific business objectives in place.

Value Delivery

The IT department demonstrates value to the bureaus when it completes projects as specified, on-time, and within budget. The IT department also delivers value by meeting customer expectations for basic IT services such as e-mail and internet access. To deliver value, IT expenditures and the return on IT investments need to be managed and evaluated.

> **"IT governance is also a continuous life cycle, which can be entered at any point."**
>
> *Board Briefing on IT Governance*
> **IT Governance Institute**

Risk Management

Internal controls and policies enable the IT department to assess and control the many risks related to IT projects.

Resource Management

The IT department needs to manage its resources to optimize resource value. Staff, customers, vendors, hardware, software and relationships are resources that need to be managed.

Performance Measurement

Performance measurement demonstrates how well the IT department accomplishes its objectives and identifies under-performing areas. Performance measurement allows for continual organizational improvement.

BEST PRACTICES

Within each area of IT Governance key activities and processes contribute to the successful management of resources, including the way they support and match organizational goals. The following sections describe twenty common best practices. They are presented within the five governance areas.

Professional literature suggests “best practices” have evolved from experience and lessons learned. A list of the best practices can be found in Appendix A.

Strategic IT Alignment

Strategic IT alignment ensures that IT services and investments meet business objectives that are outcomes of strategic planning. Information technology is "aligned" when IT management allocates resources and undertakes projects in coordination with the bureaus' strategic plans and business objectives and the City's strategic vision. Strategic IT alignment is only possible when bureaus have strategic plans and specific business objectives in place.

BEST PRACTICES . . . .

1. Use an IT advisory board to oversee IT strategy and policy decisions.
2. Base IT decisions on bureau and City-wide strategic plans.
3. Position the IT director as a strategist who resolves business issues with information technology.
4. Ensure that IT customer service managers possess excellent communication and interpersonal skills.
5. Inform bureau managers on the rationale behind IT policies and of emerging technologies.
6. Monitor and report on the progress of the IT strategic plan.

1. Use an IT advisory board to oversee IT strategy and policy decisions.

An IT advisory board should be in place and responsible for City-wide strategic IT planning and IT policy. To make effective decisions with the IT director, the board must understand the City's vision and the bureaus' business objectives, and possess an adequate understanding of the current technological environment in which the bureaus' operate. The board should include bureau management staff and external community partners.

2. Base IT decisions on bureau and City-wide strategic plans.

IT should exist to support bureau and City-wide goals. A decision to use specific technologies should arise from well identified strategy and operational needs—including the identification of users and customers—and a thoughtful risk analysis. Changes in a bureau's strategy or a change in Council's priorities may require updates to the IT department and/or bureau strategic plan.

" 'This is not just an IT initiative . . . you should assemble some sort of council or IT strategy committee when coming up with a governance model. . . Typically it should be senior-level management from business groups that represent IT's user base."

Models of IT Governance, Processor.com

"Although IT can operate without consulting other people in the organization, it should not operate in this fashion. An authoritarian approach could be a contributing factor leading to another round of decentralization, because IT will reinforce the belief that it is not responsive to the needs of the organization."

Centralizing Information Technology in a Distributed System (Again?), Wayne Brown, Heald College

"IT management must be knowledgeable about senior management's strategic and tactical thinking . . .IT people must be present when business strategies are debated."

Eight Imperatives for the New IT Organization, Sloan Management Review

3. Position the IT director as a strategist who resolves business issues with information technology.

The IT director is a communicator, educator and relationship builder with strong IT experience. The IT director acts as a bridge between the IT department and the bureaus. The IT director should be embraced as a member and full participant of the executive management team.

4. Ensure that IT customer service managers possess excellent communication and interpersonal skills.

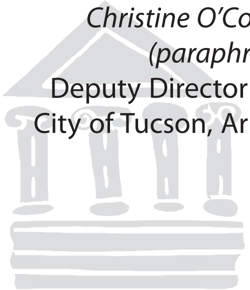
IT customer service managers must understand and communicate the strategic objectives of both the IT department and the bureaus. They need the skills to articulate and balance the wants, needs, capabilities and limitations of both the bureaus and the IT department. The customer service managers are the key players for managing expectations and resources between the bureaus and IT. Knowledge of bureau business processes, and customer service and project management skills are crucial for IT customer service managers.

"To be truly customer driven, the IT product developer must understand customers' business needs, as well as the functionalities and capabilities required to meet these needs."

Use the Gartner Internal Service Company Model to Maximize IT Shared Service Performance, Gartner

"It is important to remember that the formal strategic plan is a moving target. We concentrate on the plan's implementation and making sure that the departments are driving the IT function."

Christine O'Connor, (paraphrased)
Deputy Director of IT,
City of Tucson, Arizona



5. Bureau managers understand the rationale behind IT policies and are periodically informed of emerging technologies.

The IT director is responsible to see that bureau managers understand the IT department's strategic plan and the rationale behind citywide IT standards, rules and policies. Periodic updates on current and emerging technologies allow bureau managers to consider emerging technologies when developing bureau-specific IT plans.

6. Monitor and report on the progress of the IT strategic plan.

The strategic plan should be evaluated every twelve to eighteen months. Top management should act on the results of the evaluation and update the strategic plan as goals are achieved or strategies change.

"…CEOs in both the public and private sectors are demanding to see some Return on Investment (ROI) from IT investments. That can only happen when technology delivers what business units need across the enterprise."

Establishing Frameworks,
public CIO

Value Delivery

The IT department demonstrates value to the bureaus when it completes projects as specified, on-time, and within budget. The IT department also delivers value by meeting customer expectations for basic IT services such as e-mail and internet access. To deliver value, IT expenditures and the return on IT investments need to be managed and evaluated.

BEST PRACTICES

7 Focus on optimizing bureau business strategies and IT investments.

8 Wherever possible, standardize common applications across bureaus and use off-the-shelf software.

9 Use consistent and methodical processes when consolidating or re-engineering systems or services.

10 Make the Help Desk's effectiveness a priority.

11 Ensure that IT costs and cost recovery methods are transparent and clearly communicated.

12 Use project management, change management and project review processes.

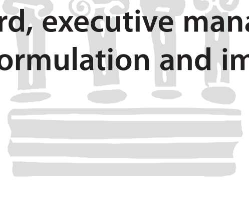
13 Consider service level agreements (SLAs) a formal contract between the IT department and the bureaus, and report on performance metrics specified in the SLA.

7. Focus on optimizing bureau business strategies and IT investments.

To maximize the value that IT can add to a bureau, the IT department needs to shift from its fundamental role of supporting basic IT functions to assisting its customers in the evaluation and uptake of new technologies. Improving its competencies in financial management, product development and customer relationship management will facilitate this shift. Figure 1 shows the stages and accompanying characteristics of IT organizations as they shift from a basic competency focus to a strategic focus. A strategic focus requires a shift from viewing IT as an expenditure to be minimized to viewing IT as a valuable resource and service center.

8. Wherever possible, standardize common applications across bureaus and use off-the-shelf software.

Standardized applications create economies of scale because the costs for maintenance, software updates, training and custom programming requests are shared among bureaus and knowledge bases are broadened. Off-the-shelf software requires minimal programming and maintenance which frees technical staff to support and develop the necessary customized applications.



> **"IT governance is the organizational capacity exercised by the Board, executive management and IT management to control the formulation and implementation of IT strategy and in this way ensure the fusion of business and IT."**

IT Governance and Its Mechanisms,
Information Systems Control Journal

Figure 1. **Evolutionary Stages in the Development of Value Driven IT Organizations**

	DEFENSIVE	REACTIVE	RESPONSIVE	**STRATEGY FOCUSED**
COSTS	IT expenditures are externally budgeted, often as share of revenue.	Service level agreements and charge back systems are employed.	Unit costs and demand are quantified and managed.	**Technology investment decisions are informed by business strategy.**
QUALITY	Quality focus is exclusively on system availability.	Quality focus is on systems availability and response time.	Quality is managed to negotiated service level agreements.	**Availability and reliability are no longer an issue.**
AGILITY	Delivery schedules are constrained by resources and internal priorities.	Resource allocation is driven by politics.	Methods are applied to reduce development cycle time.	**Broad focus is on time to market and competitive advantage for the business.**
INNOVATION	Creative budgeting and accounting are used to defend against outsourcing.	Technologies are used in innovative ways to reduce IT costs.	Role of technology in business strategy is considered.	**Technology is embedded in the firm's value proposition.**

Source: Adapted from "Enabling the Strategy-focused IT Organization," R.S. Gold. Volume 4, 2002, Information Systems Control Journal.

9. Use consistent and methodical processes when consolidating or re-engineering systems or services.

Understanding business processes, both within the IT department and among the bureaus, is the first step in consolidating systems and services. One model suggests the following steps for re-engineering or improving service delivery:

- Identify the similar and dissimilar services among all the business operations.
- Define the services that the IT department will deliver. Some processes may not be suitable for consolidation or re-engineering, or incremental redesign may be undertaken.
- Map each of the major processes required to deliver each service.
- Assign service delivery responsibilities to individuals or teams for each defined area to be consolidated or re-engineered.
- Operate under clear structures that include policies, reporting relationships, clear roles and authorities, goals and performance measures for each defined area.

> **"The agency must understand each process: who owns it, who uses it, what system(s) support it, what the integrated systems are and how frequently the process changes."**
>
> *Maximizing the Return from Asset and Service Management Systems,*
> MRO Software, Inc.

10. Make the Help Desk's effectiveness a priority.

Since the Help Desk is often the first contact point between IT and the customer, it is important that the Help Desk is responsive to customers' needs. The Help Desk's effectiveness and responsiveness builds trust between IT and the customer. Referral of Help Desk calls to analysts for additional help should be minimized, which means that the Help Desk staff needs to have high level skills in all systems within the organization.

11. Ensure that IT costs and cost recovery methods are transparent and clearly communicated.

The City's executive management should determine cost recovery policy in collaboration with the IT department and IT advisory council. The IT department should be able to explain how charges are determined, and report regularly on revenues, costs and variances.

> **"Cost recovery should be used with great care and is part of the chargeback [rate model] policy decision. Cost recovery too can be very contentious, so there needs to be a fair and transparent approach to implementation."**
>
> *Chargeback - How far should you go?*
> Gartner

12. Use project management, change management and project review processes.

Many control techniques exist to keep projects on time, on budget, and as specified. These techniques include project charters, business case requirements, Gantt charts, and scope change requests. Change and patch management controls make the process for planned changes rigorous and visible and reduce the risk that unplanned or untested changes will be made to live systems. Quality assurance provides independent verification that IT staff follows its own procedures and that top management is informed of project progress. Post-implementation reviews enable the IT department and the bureaus to improve their processes. All of these processes should be clearly supported and communicated by top management and understood and used by the IT staff and the bureaus (see also Best Practice #15).

13. Consider service level agreements (SLAs) a formal contract between the IT department and the bureaus, and report on performance metrics specified in the SLA.

Service level agreements and performance agreements are key to effective management of IT resources and good customer relationships. Good SLAs balance customer needs with the IT department's capabilities, and customer expectations with the IT department's commitments. A service level management (SLM) process should monitor customer satisfaction with services, and monitor IT performance in the service level categories. Best practices for SLAs include:

- Limited technical jargon and services expressed in business terms,
- Definitions of terminology,
- Formal approvals from all parties,
- Clear service level objectives (e.g. availability, reliability, performance) and corresponding measures,
- Nonperformance clauses defining consequences of unfulfilled commitments (i.e. warnings, escalation procedures, financial penalties),
- Limitations and customer responsibilities.

> **“A balanced SLA is a compromise between the needs, expectations and requirements of the organization (user group) and the service provision capabilities and promises of the service provider. At the same time, it must protect the service provider by limiting liability, identifying responsibilities and rationally managing user expectations.”**
>
> *Using CobiT and the Balanced Scorecard as*
> *Instruments for Service Level Management,*
> Information Systems Control Journal

Best practices for service management include:

- Designating a service level manager who is responsible for monitoring and reporting on the status and achievement of the SLA’s performance criteria,
- Conducting service level satisfaction surveys to expose customer perceptions of performance,
- Continuously evaluating SLAs to ensure the alignment of IT and bureau objectives.

Risk Management

Internal controls and policies enable the IT department to assess and control many risks related to IT projects.

BEST PRACTICES

14 Apply principles found in IT best practices guides.

15 Use policies, procedures and clear authorities to manage change.

16 Clearly define the scope of an Enterprise Resource Planning (ERP) system.

> **"The early identification of project risks and the timely taking of project control measures leads to a reduction of overall project costs."**
>
> *Risk Management in IT Projects,*
> Information Systems Control Journal

14. Apply principles found in IT best practices guides.

Governance best practices and operation controls help align IT and bureau strategies and, allow the IT department and bureaus to measure process and to control risks. Control Objectives for Information Technology (CobiT) is directed at senior management and focuses on IT organizational processes and controls that support effective service. The Information Technology Infrastructure Library (ITIL) focuses on methods that IT management can employ to achieve many of the goals outlined in CobiT. The Global Technology Audit Guide (GTAG) is directed at Boards of Directors, Audit Directors and advisory committees and provides an overview of selected information technology topics. The CobiT and ITIL frameworks are very comprehensive and may take years to incorporate into an organization. Experts recommend an incremental approach to implementing these frameworks which includes:

- Building support of executive management, the IT advisory council and the IT staff,
- Identifying major weaknesses in the IT organization and selecting concepts from each CobiT and ITIL that address those weaknesses,
- Selecting only those concepts that fit the IT department,
- Implementing the concepts and methods by starting with the elements that have the greatest ease and / or potential for success.

> **"Research shows that organizations that use IT governance structures that reflect their situations and objectives are more successful than those that don't."**
>
> *IT Strategy and Governance: Harness Change to Encourage Alignment,*
> Gartner

15. Use policies, procedures and clear authorities to manage change.

Any change, from software modifications to unplanned departures of key staff, can cause disruptions. Policies, procedures and clearly defined authorities can help mitigate the risks associated with these disruptions. The IT organization should prioritize the development of change management policies and procedures using risk assessments to identify key weaknesses, recurring problems, and areas where losses can be high. Exploring future changes in technologies and business needs will help the IT department prepare for future risks (see also Best Practice #12).

> **"Use unplanned work as an indicator of effectiveness of IT management processes and controls. High performing IT organizations spend less than 5 percent of their time on unplanned work."**
>
> *Change and Patch Management Controls: Critical for Organizational Success,*
> Global Technology Audit Guide

16. Clearly define the scope of an Enterprise Resource Planning (ERP) system.

An ERP system integrates many departments and functions across an organization onto a single system that aims to serve many diverse needs. There are many best practices for the design and implementation of ERP systems. Some key considerations are:

> **“Those companies that stressed the enterprise, not the system, gained the greatest benefits.”**
>
> *Putting the Enterprise into the Enterprise System,* Harvard Business Review

- ERP projects should be driven and managed by the bureaus who own the applications that are to be migrated.
- In addition to the high cost of ERP software, other “hidden” costs should be considered such as data conversion, training, and integration with other systems and business processes.
- Business processes need to be clearly defined and understood before implementing an ERP. Processes that need major re-engineering add risk if configured into the ERP.
- Only business processes that optimize business performance should be configured into the ERP.
- Much consideration should be given to controls that maintain data integrity and data security because many users have access to the system.

> **While ERP applications can resolve a number of control issues associated with a fragmented legacy systems environment, not surprisingly, they can introduce new risks of their own.”**
>
> *Risk and Governance Issues for ERP Enterprise Applications,* Information Systems Control Journal

Resource Management

The IT department needs to manage its resources to optimize resource value. Staff, customers, vendors, hardware, software and relationships are resources that need to be managed.

BEST PRACTICES . . . .

17 Develop strong and broad staff competencies.

18 Manage computing assets.

19 Recognize the customer as an important resource.

> **"IT - business relationships are one of the three major resources (along with IT human resources and technology resources) that IT executives value to a firm."**
>
> *Eight Imperatives for the New IT Organization,*
> Sloan Management Review

17. Develop strong and broad staff competencies.

Assessing the skills and knowledge of IT staff regularly ensures that skill levels are adequate to achieve the organization's goals and objectives. Cross-training opportunities and annual training plans should be built into annual performance evaluations. In addition to technology skills, IT staff should also be trained in business operations knowledge and communication skills. Staffing levels and skills should also be evaluated after major organizational changes. Customer evaluations of customer service staff should be given strong consideration in performance appraisals.

"To establish joint ownership for performance management, organizations strive to construct measures jointly with their stakeholders, customers, managers, and CIO staff."

"Maximizing the Success of Chief Information Officers,"
Government Accountability Office

18. Manage computing assets.

Effectively managing IT assets requires an accurate inventory of computing hardware, systems, licenses and applications. Asset management should be addressed in the investment and operational budget and should be based on a clear understanding of technology and application software life cycles.

19. Recognize the customer as an important resource.

Clear communication with IT customers allows the IT department to predict demand for services and receive input on possible improvement to processes. Customer service satisfaction surveys and customer input are important tools for evaluating IT staff performance and identifying under-performing processes and staff.

Performance Measurement

Performance measurement demonstrates how well the IT department accomplishes its objectives and identifies under-performing areas. Performance measurement allows for continual organizational improvement.

BEST PRACTICES . . . .

20 Measure performance and use the results to initiate improvements and change.

> **"IT is increasing in importance for the public sector, but technology has disappeared as a priority among policy leaders. To demonstrate the value of IT, CIOs are using performance measurement to show they can deliver results and improve services."**
>
> *CIOs must measure performance now that results count,*
> public CIO

20. Measure performance and use the results to initiate improvements and change.

The IT Director can use performance measures to build credibility and show bureaus that IT delivers results and improves business processes. Performance measures can also indicate areas that need improvement. Measures should focus on business outcomes such as service levels, performance targets and customer satisfaction. Performance results need to be readily accessible to IT management and reported to customers and the governing council. Good IT performance measures:

- are developed with input from external partners, internal staff and customers,
- show the value of a service delivered or a system implemented and de-emphasize system performance statistics,
- focus on quality, process, functionality and timeliness,
- measure customer satisfaction
- are reported to customers, IT staff and executive management,
- have associated targets or goals,
- are expressed in percentages that indicate results or accomplishments rather than in raw numbers of work performed. For example, the percentage of all new development projects that were delivered on-time is more meaningful than the number of new development projects undertaken.

APPENDICES

APPENDIX A

List of 20 best practices

1. Use an IT advisory board to oversee IT strategy and policy decisions.
2. Base IT decisions on bureau and City-wide strategic plans.
3. Position the IT director as a strategist who resolves business issues with information technology.
4. Ensure that IT customer service managers possesses excellent communication and interpersonal skills.
5. Inform bureau managers on the rationale behind IT policies and of emerging technologies.
6. Monitor and report on the progress of the IT strategic plan.
7. Focus on optimizing bureau business strategies and IT investments.
8. Wherever possible, standardize common applications across bureaus and use off-the-shelf software.
9. Use consistent and methodical processes when consolidating or re-engineering systems or services.
10. Make the Help Desk's effectiveness a priority.
11. Ensure that IT costs and cost recovery methods are transparent and clearly communicated.
12. Use project management, change management and project review processes.
13. Consider service level agreements (SLAs) a formal contract between the IT department and the bureaus, and report on performance metrics specified in the SLA.
14. Apply principles found in IT best practices guides.
15. Use policies, procedures and clear authorities to manage change.
16. Clearly define the scope of an Enterprise Resource Panning (ERP) system.
17. Develop strong and broad staff competencies.
18. Manage computing assets.
19. Recognize the customer as an important resource.
20. Measure performance and use the results to initiate improvements and change.

APPENDIX B
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Federal Chief Information Officers Council: www.cio.gov

General Accounting Office: www.gao.gov

Government Information Technology Services Board: www.gits.gov

Information Systems Audit and Control Association and Foundation: www.isaca.org

Information Technology Association of America: www.itaa.org

Information Technology Resources Board: www.itrb.gov

International City/County Management Association: www.icma.org/main/sc.asp

National Association of State Chief Information Officers: www.nascio.org

Society for Information Management: www.simnet.org

RESPONSE TO THE AUDIT

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September 2, 2005

To: Gary Blackmer, City Auditor

From: Matthew Lampe, Chief Technology Officer

Re: Report on Best Practices in IT Governance

Thank you for forwarding the document.

I appreciate the broad scope of the document, as it recognizes that the true business value of IT is tied to the linking of IT strategy with the overall business strategies of the City.

From the perspective of the Bureau of Technology Services, the best practices identified in the report are sound. The implementation of many of these best practices has been a focus for Bureau of Technology Services staff; this focus has been tempered by level of effort required to support the diversity of systems, hardware, and applications for which we have assumed responsibility through the consolidation. Implementation of best practices takes resources, and thus requires that the governance process establish priorities. The Report also emphasizes the need for certain management and overhead services to achieve these best practices, such as asset management (which requires a system be developed, data researched and scrubbed, and processes established to maintain currency), the importance of consistent and methodical processes, and the importance of training resources.

A recent important step for the Bureau of Technology Services is the creation of a CTO advisory board, with many of the City's business leaders as well as outside expertise. This board will play an important role in the governance process, providing a vehicle for improving alignment of an updated IT strategic plan with business strategy of the City, even in the absence of established City and Bureau strategic plans.

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Best Practices for Information Technology Governance
Report #314B, September 2005

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Other recent audit reports:

Parks Bureau Softball: Operating agreement for the softball program should be revised as it nears self-sufficiency (#323, August 2005)

Percent for Art Program: Financial allocation process is informal, inconsistent, and may not fulfill requirements for public art (#317, August 2005)

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