The Nebraska Information Technology Commission: An Examination of Statutory Compliance and the Project Review Process

Performance Audit Section

Legislative Audit and Research Office

November 2007

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*Prepared by*
Don Arp, Jr.
Angela McClelland

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Key Findings & Recommendations

Legislative Performance Audit Committee Report

The Nebraska Information Technology Commission: An Examination of Statutory Compliance and the Project Review Process

The Nebraska Information Technology Commission (NITC) provides strategy, planning, project proposal review, and expertise on information technology issues affecting state government. One of NITC's main duties is to issue recommendations regarding the feasibility of certain information technology projects to the Governor and the Legislature. At the direction of the Legislative Performance Audit Committee (Committee), the Legislative Performance Audit Section (Section) conducted a performance audit of NITC, focusing on compliance with the Information Technology Infrastructure Act (Act), the project review process, and the sufficiency of NITC's authority to deal with project weaknesses.

Section Findings

The Act places a number of operational requirements on NITC, including, most significantly: strategic planning for information technology investments; development of standards and guidelines; and the review and recommendation of proposals from state agencies that request new funding for information technology projects.

> Finding: NITC complies with the Act's requirements to the best of its ability; however, some portions of the Act are unclear.

The Act establishes a goal of coordination of information technology projects.

> Finding: NITC has met this goal when possible, but its ability to coordinate these projects is hindered by the lack of comprehensive information about state government information technology projects.

The Act requires NITC to review and make funding recommendations for certain information technology projects, specifically, those for which the submitting agency would need "new or additional funding." In addition, a typical project review process consists of three basic elements: a project proposal; expert review of the proposal; and a selection decision.

> Finding: NITC's review process contains the typical elements of a review process and is sufficient to identify the strengths and weaknesses of proposed projects. However, the projects that NITC is not authorized to review (those using existing general funds or other funding sources) may pose the same risks to cost, feasibility, and suitability associated with the projects NITC reviews.

> Finding: Project weaknesses can be resolved during the review process through communication with the agency that submitted the project proposal; but if such efforts are unsuccessful, NITC's only recourse is to give the project a low priority for funding. While a low rating may prevent some projects from progressing, it may have no effect on projects that are mandated by state or federal law.

The Act authorizes NITC to review only the planning stage of information technology projects, not the development and implementation phases. The latter are commonly considered the highest risk phases of a project because it is during these phases that costly problems such as scheduling delays, cost overruns and technical glitches may occur.

> Finding: NITC has opportunities during its review process to both identify the strengths and weaknesses in *the plans* for a proposed project and take action to address the concerns. However, NITC has no authority to review the actual development and implementation of the project, which leaves the state vulnerable to potentially costly problems.

Section Recommendations

➢ The Committee should consider the policy question of whether it is satisfied with NITC's responsibility as an advisory body.

➢ The Section recommends that the Committee should consider the policy question of whether it would be advantageous to have NITC review state agency information technology projects regardless of their funding sources.

➢ The Committee should consider the policy question relating to NITC authority to coordinate the state's information technology projects.

➢ Regardless of the policy decision concerning NITC's authority, the Committee should consider introducing legislation to clarify the extent to which it expects NITC to have an impact on mandated information technology projects.

➢ The Committee should consider whether NITC should be authorized to provide on-going oversight of information technology projects during their development and implementation.

➢ Regardless of NITC's role in coordinating information technology projects, the Committee should consider introducing legislation to require that pertinent information on all state information technology projects be maintained in a thorough, comparable format.

➢ NITC should work with the Committee to introduce legislation to resolve ambiguities in statutory language and either clarify or delete undefined terms.

Legislative Performance Audit Section
Legislative Audit and Research Office   **November 2007**

II. Performance Audit Section Report

The Nebraska Information Technology Commission: An Examination of Statutory Compliance and the Project Review Process

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CONTENTS

INTRODUCTION

The Nebraska Information Technology Commission (NITC) provides strategy, planning, project proposal review, and expertise on information technology issues affecting state government. One of NITC's main duties is to issue recommendations regarding the feasibility of certain information technology projects to the Governor and the Legislature.

Recently, high-cost and problematic information technology projects have been brought to the Legislative Performance Audit Committee's (Committee's) attention, leading the Committee to ask questions about NITC and the project proposal review process.

The Committee directed the Legislative Performance Audit Section (Section) to conduct a performance audit of NITC. The Committee directed the Section to answer the following questions:

1) Does NITC comply with relevant portions of the Information Technology Infrastructure Act (Act)?
2) Is the NITC technology project review process sufficient to identify strengths and weaknesses in proposed projects?
3) Does the Act provide NITC with sufficient authority to address significant weaknesses identified during the review process for proposed projects?

Section I of this report provides an overview of NITC. Sections II through IV answer the specific questions posed for this audit. Section V contains our findings and recommendations.

This audit was conducted in accordance with generally accepted government auditing standards for performance audits. The methodologies used are described briefly at the beginning of Sections II through IV, with further detail included in the appendix.

We appreciate the cooperation and assistance of NITC members and staff during the audit.

SECTION I: The Nebraska Information Technology Commission

In the 1990s, as information technology became a more important, and costly, part of state government operations, policymakers recognized an increasing need for improved planning and management of state technology investments.[1] In response, the Legislature adopted the Information Technology Infrastructure Act (Act) in 1996.[2] Originally, the Act was intended primarily to help state government prepare for the century date change (commonly known as Y2K);[3] however, it was also intended to facilitate the management of state information technology resources after the century date change project was completed.[4]

Creation of NITC

The original Act did not include NITC, which was created the following year by executive order.[5] Among other duties, the order directed the commission to develop a strategic information technology plan and present recommendations on criteria for allocating state information technology resources to the Governor and Legislature.

In 1998, the Legislature placed NITC in statute with the passage of LB 924. The bill retained the Commission's basic duties established in the executive order, emphasizing efficiency, cost-effectiveness, and coordination of state government information technology resources.[6]

The Act includes legislative findings and intent language reflecting the Legislature's recognition of the increasing importance of information technology in providing government services and the need to assure the "most cost-effective use of state appropriations" in funding information technology projects.[7] To accomplish this, the Act sets forth both broad goals and specific requirements for NITC.

In general, the Act's goals for NITC are to plan and coordinate state-funded information technology projects. NITC is required to accomplish these goals by, among other things: (1) developing a statewide strategic plan for information technology investments;[8] (2) adopting standards and guidelines for the planning and management of state-owned and state-supported information technology and infrastructure;[9] and (3) reviewing and making recommendations about state agency proposals requesting new funding for information technology projects.[10] The Act also authorizes NITC to oversee development of large information technology projects, called "enterprise" projects.[11]

Organization

NITC consists of nine voting members. Eight governor-appointed members, serving four-year terms, represent education, communities, and the general public, and the Governor or his designee (currently the Lieutenant Governor) serves as Commission Chair.[12] In addition, although not required in statute, the Governor recently requested that a state senator serve as a non-voting member.[13]

The Act requires NITC to create a Technical Panel and authorizes it to create other advisory councils as needed. NITC's current advisory groups include the Education Council, State Government Council, Community Council, and the eHealth Council.[14] These advisory groups provide NITC with input on issues concerning their specific areas of expertise.

NITC receives administrative support from the Department of Administrative Services and the Nebraska Educational Telecommunications Commission.[15] The Office of the Chief Information Officer, part of the Department of Administrative Services, provides NITC's primary support and has four full-time employees assigned to support NITC operations.[16]

Funding

NITC is funded with a portion of the state's cigarette tax revenue.[17] According to the Office of the Chief Information Officer, NITC receives approximately $1.9 million in tax revenue and interest annually.

Notes

[1] Neb. Rev. Stat. §§ 86-513(d) and 86-521.

[2] Neb. Rev. Stat. §§ 86-501 to 86-530. The Legislature adopted the Act with the passage of LB 1190 (1996).

[3] LB 1190 (1996), Introducer's Statement of Intent.

[4] Section 5(1)(c) and (d) of LB 1190 (1996) and Legislative History, LB 1190 (1996), remarks by Sen. Curt Bromm, March 27, 1996, pgs. 14264 and 14289.

[5] Executive Order 97-7.

[6] Neb. Rev. Stat. § 86-513.

[7] Neb. Rev. Stat. § 86-513.

[8] Neb. Rev. Stat. § 86-513(1)(a).

[9] Neb. Rev. Stat. §§ 86-516(5) and (6).

[10] Neb. Rev. Stat. § 86-516(8).

[11] Neb. Rev. Stat. § 86-529.

[12] Neb. Rev. Stat. § 86-515(1) through (3).

[13] Governor Dave Heineman appointed Senator Philip Erdman to be the first legislative representative March 15, 2005. (NITC Meeting Minutes, March 15, 2005, http://www.nitc.state.ne.us/nitc/meetings/minutes/nitc_minutes31505.html, accessed June 6, 2007.) The current legislative representative is Senator Mick Mines.

[14] NITC added the eHealth Council in February 2007. As of this writing, NITC has not appointed members to the eHealth Council. The Technical Panel is created in Neb. Rev. Stat. § 86-521. The advisory councils are allowed for in Neb. Rev. Stat. § 86-516(7).

[15] Neb. Rev. Stat. § 86-515(5).

[16] Employee information provided by NITC, March 16, 2007.

[17] Neb. Rev. Stat. § 86-527. Although the Act provides for other sources of income, NITC has not recently received money from any sources other than the cigarette tax.

SECTION II: NITC's Statutory Compliance

In this section, we report the results of our evaluation of whether the Nebraska Information Technology Commission (NITC) complies with relevant portions of the Information Technology Infrastructure Act (Act). In conducting this analysis, we reviewed the Act, NITC standards and guidelines, and relevant documents. We also interviewed NITC members and administrative personnel.

As noted in Section I, the Act contains both broad goals and specific requirements for NITC. Following is a discussion of NITC's compliance with both, beginning with the specific statutory requirements. At the end of this section, we also identify two minor technical problems with the Act, which complicate NITC's compliance.

Information Technology Infrastructure Act Requirements

The Act places a number of operational requirements on NITC.[1] Most significantly, it requires NITC to: (1) develop a statewide strategic plan for information technology investments; (2) adopt standards and guidelines for the planning and management of state-owned and state-supported information technology and infrastructure; and (3) review and make recommendations about proposals from state agencies that request new funding for information technology projects. In addition, the Act provides for, but may not technically require, oversight of large projects that affect multiple agencies. We found that NITC complies with these requirements.

Finding: NITC complies with the relevant portions of the Information Technology Infrastructure Act.

Strategic Planning

Finding: NITC annually publishes a statewide technology plan, as required by the Act.

The Act requires NITC to create and update annually a statewide technology plan. Although the Act does not specify what should be included in the plan, it states the Legislature's intent that the plan guide state investments in information technology.[2] NITC annually publishes the plan and states that it is the "primary mechanism by which the NITC addresses its goal of promoting effective planning, management and accountability regarding the state's investments in information technology."[3] In its plan, NITC sets out statewide information technology goals such as supporting the statewide telehealth network, community information technology planning and development, and state government efficiency.[4]

Standards and Guidelines

The Act also requires NITC to adopt standards and guidelines for the planning and management of state-owned and state-supported information technology and infrastructure.[5] NITC and its advisory

groups have developed a large body of procedures and standards concerning various aspects of information technology, including project administration and technical standards for state agencies to consider when developing information technology projects.[6]

Review of Agency Proposals

Finally, the Act requires NITC to review proposals from state agencies that request new funding for information technology projects. NITC's advisory groups—the Technical Panel and usually either the Government Council or the Education Council—review each proposal to determine its strengths and weaknesses. The Technical Panel and the relevant Council submit written comments to NITC; the Council also submits preliminary prioritization recommendations. In turn, NITC prioritizes the proposed projects and makes final recommendations to the Governor and Legislature before each budget cycle.[7] We discuss the review process in greater detail in Section III of this report.

Enterprise Project Program

Following NITC's creation in 1998, senators became concerned about large-scale state information technology projects, such as replacement of the state's accounting system with the Nebraska Information System (NIS).[8] In response, the Legislature amended the Act in 2000 to authorize NITC to oversee development of agencies' large-scale projects, referred to as "enterprise" projects—expanding its authority beyond proposal review for those projects.[9] Specifically, the amended Act states the Legislature's "intent" that "a program be created" to authorize and provide funding for enterprise projects and outlines the goals of the intended program.[10]

NITC has not officially created an enterprise project program, citing the lack of need for such a program and the absence of clear statutory authority to designate projects as enterprise projects.[11] However, on a recently reviewed project, NITC used a level of oversight usually associated with enterprise projects.

In 2006, NITC reviewed a project proposal submitted by the Nebraska Public Employees Retirement Systems (NPERS) that planned to make significant changes to its computer program, PIONEER. According to the Chief Information Officer (CIO), this project was "enterprise-like" as it presented risks associated with NPERS' critical business functions and affected the retirement accounts of all state employees.[12] However, NITC did not designate PIONEER as an enterprise project.

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Instead, NITC requested that NPERS voluntarily submit to an oversight and reporting process of the type envisioned by the Act for enterprise projects. To date, NPERS has cooperated fully. The CIO said NITC would use a similar process if an enterprise project were designated in the future.[13]

Finding: NITC has not created an enterprise project program, but this is not a violation of the Act in the strictest sense, because of ambiguities in the statutory language.

We found that NITC's actions regarding enterprise-type projects have been reasonable. While we believe that the PIONEER project does meet the statutory definition of enterprise project and should be so designated, we acknowledge that there could be some question about NITC's authority to designate such projects. In addition, we found that it is not entirely clear that the Act actually *requires* creation of an enterprise project program because it is addressed in intent language and thus may not be specifically mandated. Consequently, we believe that NITC's decision not to create such a program is not a violation of the Act.

Planning and Coordination Goals

Finding: The Act establishes a goal for NITC of coordination of information technology projects but contains no specific requirements related to that goal.

As mentioned earlier, intent language in the Act and the legislative history establish planning and coordination of information technology as NITC's broad goals.[14] We found that most of the Act's requirements, as discussed above, relate to planning and do not specifically require coordination.

Finding: NITC has taken steps to coordinate information technology projects through shared services initiatives.

However, NITC has taken steps to coordinate information technology projects when it could. For example, in 2005, in response to a request by the Governor, NITC's State Government Council developed a shared services initiative that seeks to help agencies work together to meet common information technology goals and save money.[15] Through this initiative, NITC helped a handful of state agencies provide Blackberry service to their employees and reportedly saved the state more than $28,000 compared to the cost of each agency providing the service independently.[16] It also helped coordinate license and maintenance agreements with a service provider that reportedly saved the state $500,000.[17]

Finding: NITC's ability to coordinate effectively is hindered significantly by lack of access to thorough, comparable information on all state information technology initiatives.

The shared services concept illustrates the success of coordination in certain information technology investments. However, we found that NITC's ability to coordinate effectively is hindered significantly by lack of access to thorough, comparable information on all state information technology initiatives.

Although there are two potential sources for this information, neither provides a complete, useable picture of the state's technology investments. First, according to the CIO, the data kept on the state's accounting system regarding agency information technology projects are for current operating expenses, not proposed expenditures, and

are often not organized by specific project.[18] Second, agencies are required to fill out "Agency Information Technology Plans" during the biennial budget process, which report current and proposed information technology projects. However, the CIO reports that her office is unable to compile and analyze the data because the information often lacks the itemization needed to find individual project costs.[19]

Minor Technical Issues

Finding: The Act uses two terms that are unclear and undefined.

While we found NITC to be in compliance with all of the relevant portions of the Act, two sections use terms that are unclear and undefined:

➢ The Technical Panel is required to include a member from the "project sector." The term is undefined, legislative history is unclear, and NITC staff members do not know with certainty what is meant by the term.[20]

➢ The Act requires NITC to adopt guidelines for "information sharing." Although it has not adopted such guidelines, NITC staff provided us with examples of how they share information.[21] Their use of the term seems reasonable, but without a clear definition, no compliance determination could be made.

Although NITC takes steps to comply with these sections, it is sometimes difficult to discern with certainty what is expected, thus complicating compliance.

Notes

[1] NITC's duties are listed in Neb. Rev. Stat. § 86-516. Besides the duties listed in the text, NITC is required, among other things, to establish working groups, approve technology grants, and establish an information technology clearinghouse. We assessed these requirements and found NITC in compliance; however, we did not include these requirements in our discussion because legislative history focuses more on the three issues we discussed, as these issues have the widest impact and address the risks associated with information technology investments.

[2] Neb. Rev. Stat. § 86-516(1) contains the requirement for creation and revision of the plan; Neb. Rev. Stat. § 86-513(1)(a) states the Legislature's intent.

[3] Nebraska Information Technology Commission, *Digital Nebraska Envisioning Our Future*, Nebraska's Statewide Technology Plan 2005-2006 Version 2.0, pg. 6.

[4] Nebraska Information Technology Commission, *Digital Nebraska Envisioning Our Future*, Nebraska's Statewide Technology Plan 2007 Update.

[5] Neb. Rev. Stat. §§ 86-516(5) and (6).

[6] See Appendix A for a complete list of standards and guidelines published by NITC.

[7] Neb. Rev. Stat. § 86-516(8).

[8] Legislative History, LB 1349 (2000), committee hearing remarks by Lt. Gov. Dave Maurstad, February 8, 2000, pg. 9; Legislative History, LB 1349 (2000), remarks by Sen. Curt Bromm, March 14, 2000, pgs. 10655-56.

[9] The Legislature first amended the Act with LB 1349 in 2000 and later with LB 1105 in 2002. Currently, the Act defines an enterprise project as an information technology project that "would have a significant effect on a core business function and affects multiple government programs, agencies, or institutions." (Neb. Rev. Stat. § 86-506.)

[10] Neb. Rev. Stat. § 86-526(1).

[11] Meeting with NITC staff, March 21, 2007.

[12] Meeting with NITC staff, March 21, 2007. Meeting with the CIO, May 9, 2007.

[13] Meeting with the CIO, May 9, 2007.

[14] Neb. Rev. Stat. § 86-513(2). Legislative History, LB 924 (1998), committee hearing remarks by Lt. Gov. Kim Robak, February 11, 1998, pg. 25; Legislative History, LB 924 (2000), remarks by Sen. Joyce Hillman, March 10, 1998, pg. 13160; and Legislative History, LB 924 (2000), remarks by Sen. Shelley Kiel, March 23, 1998, pg. 14163.

[15] Meeting minutes, NITC State Government Council, February 10, 2005; April 14, 2005; May 12, 2005; and June 9, 2005.

[16] *Nebraska Information Technology Commission Progress Report to Honorable Dave Heineman, Governor, and 2006 Legislature, Senator Pat Engel, Executive Board Chair*, November 15, 2006, pg. 17.

[17] *Nebraska Information Technology Commission Progress Report to Honorable Dave Heineman, Governor, and 2006 Legislature, Senator Pat Engel, Executive Board Chair*, November 15, 2006, pg. 17.

[18] Meetings with the CIO, April 13, 2007 and May 9, 2007.

[19] Meeting with the CIO, May 9, 2007.

[20] Neb. Rev. Stat. § 86-521(1). Meeting with NITC staff, March 21, 2007.

[21] Neb. Rev. Stat. § 86-516(5). Letter from NITC staff dated April 10, 2007.

SECTION III: NITC's Project Review Process

In this section, we report the results of our evaluation of whether the Nebraska Information Technology Commission's (NITC's) review process is sufficient to identify strengths and weaknesses in proposed projects. In conducting this analysis, we reviewed relevant statutes, NITC standards, guidelines and policies, industry standards, and other documentation. We also interviewed NITC members and administrative personnel.

Projects Reviewed by NITC

Finding: The Act restricts NITC's review to projects that require "new or additional funding."

The Information Technology Infrastructure Act (Act) requires NITC to review and make funding recommendations for certain information technology projects, specifically, those for which the submitting agency would need "new or additional funding."[1] The Act excludes from review projects relating to the University of Nebraska's research function and legislative information technology.[2]

NITC policies also narrow the group of projects it reviews to those expected to be the most costly or to have a significant impact on state government. Specifically, it reviews proposals for projects that meet the above criteria (except standard upgrades) and are expected to: (1) cost more than $250,000; (2) cost more than $25,000 and effect a core agency function; or (3) cost more than $25,000 and impact multiple agencies.[3]

Since 1998, NITC has reviewed 89 proposals during its biennial reviews with a combined proposed cost of more than $223.7 million. These proposals were submitted by 22 agencies. Table 3.1 shows the number and proposed total cost of projects for NITC's last five biennial reviews.

Table 3.1: Projects Submitted to NITC		
Year Reviewed	*Projects*	*Proposed Total Cost*
1998	23	$45,066,096
2000	26	$8,219,199
2002	14	$98,396,244
2004	9	$26,927,962
2006	17	$45,136,403
Total	**89**	**$223,745,904**

Table created by the Legislative Performance Audit Section; data compiled from NITC's biennial reports to the Governor and the Legislature.

We found that it was difficult to determine the number or dollar value of the information technology projects that are *not* subject to

NITC review. A discussion of the potential ramifications of this finding follows our analysis of the review process.

Typical Elements of a Project Review Process

In order to assess the sufficiency of NITC's project review process, we first had to identify a standard for comparison. We found that there is no single "industry standard" for the review of government information technology projects; however, state and federal standards and best practices contain typical, common-sense elements for this type of process.[4] We found that a project review process that seeks to identify strengths and weaknesses typically consists of three basic elements:

> ➢ a project proposal;
> ➢ expert review of the proposal; and
> ➢ a selection decision.

Following is a detailed explanation of NITC's project proposal review process and how it meets the project review elements identified above. See Figure 3.2, on page 11, for a flow chart of the review process.

NITC's Review Process

Project Proposal

A typical project proposal enables the agency submitting the proposal to demonstrate to decision makers that the proposed project is: justified; has a defined budget; uses appropriate technology; and conforms with applicable executive and legislative directives.

The Act requires NITC to review information technology project proposals every two years prior to the Legislature's consideration of the Governor's proposed biennial budget.[5] Before agencies submit their budget proposals, NITC disseminates a guidance document, that identifies the types of projects that must be submitted for review.[6]

NITC provides a project proposal form that agencies fill out and submit for review. The submitting agency must include information that details the proposed project's objectives, justification of need, technical impact, implementation plan, risk assessment, and budget.[7] Agencies are required to submit their proposals with their biennial budget requests by September 15 of each even-numbered year.[8]

This practice is consistent with other states' and federal proposal-submission and content requirements as justification for project funding.[9]

Figure 3.2: The NITC Proposal Review Process
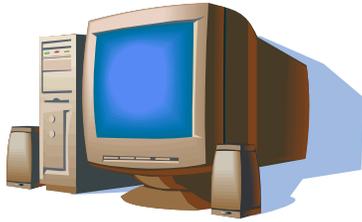
Agency requires a new budget appropriation for an information technology project

Guidance documents direct agency to NITC review process
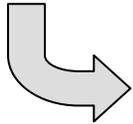
Agency develops project proposal and submits it to NITC
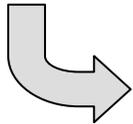
*NITC receives proposal
NITC staff chooses proposal reviewers*

Reviewers score and comment on proposal
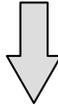
Agency has opportunity to respond to reviewer comments
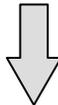
A subject-area Council and the Technical Panel review the proposal and make comments and preliminary recommendations

Proposal, comments, and recommendations sent to NITC
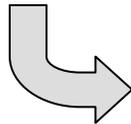
NITC prioritizes project and makes final recommendation
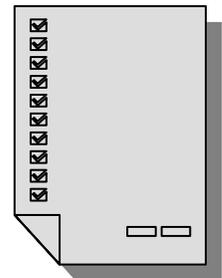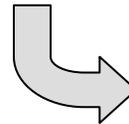
NITC issues report to the Governor and the Legislature

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Expert Review

Expert review of proposals is the central element of a typical project review process. These reviews provide an in-depth analysis of the proposal elements to determine if all risks have been considered and addressed, and if the project is a wise investment of taxpayer dollars.

Finding: NITC staff report that they assign reviewers to proposals based on the reviewers' experience in technology and government; however, there is no written policy governing reviewer qualifications or how they are assigned to projects.

NITC's review process employs several layers of proposal review. When NITC staff receive an agency proposal, they assign two or three individuals with information technology experience (from a list approved by the Technical Panel) often members of the Technical Panel and subject-area Councils, to conduct an in-depth review of the proposal. NITC staff report that they assign reviewers to proposals based on the reviewers' experience in technology and government; however, there is no written policy governing reviewer qualifications or how they are assigned to projects.[10]

The reviewers score each proposal on the required components (the project is justified, uses appropriate technology, etc.) and give written comments. The scores and comments are returned to the submitting agency, which may respond to the reviewers' comments and submit clarifying information. After the agency has commented, all proposal and review materials are forwarded to the Technical Panel and the applicable Council—usually either the Government Council or the Education Council, depending on the project's subject matter.

The Technical Panel reviews projects for technical feasibility and appropriateness. The subject-area Council looks at both the need for the project and its relative importance among the other projects in the Council's purview. Both the Technical Panel and the Council provide comments to NITC; the Council also provides preliminary prioritization recommendations.

Finding: NITC's expert review of proposals is consistent with the practices of other states and the federal government.

NITC's expert review of proposals is consistent with the practices of other states and the federal government.[11]

Selection Decision

In a typical review process, a selection decision is the culminating element of the process and takes into account the strengths and weaknesses of reviewed projects. Not all projects can be funded and decisions must be made on how to use scarce resources efficiently.

NITC reviews all project proposals, along with the reviewers' comments, Technical Panel comments, and Council preliminary recommendations. NITC members report that they take into account both technical feasibility and agency need for each project when reviewing project materials.[12] For example, a project that is technically sound

but not essential to agency operations will likely be given a lower priority. Conversely, a project may be mandated by federal or state statutes, in which case it will be given high priority regardless of the results of its technical review.

In 2006, NITC began using a "portfolio management" approach to help members make project-prioritization decisions. The concept of portfolio management requires decision makers to look at all projects together; they can then compare a project's relative value (cost and feasibility) to all other projects submitted for review.

After NITC members have reviewed the project materials for the proposed projects, they vote on the final prioritization recommendations. As required by statute, NITC presents the prioritized list to the Governor and Legislature by November 15 of each even-numbered year, so that lawmakers can take into account the prioritizations as they formulate the state's biennial budget.[13]

Finding: NITC meets the selection-decision element of the project review process.

Although NITC does not have the final word on which projects are ultimately funded—it is a common practice in the standards reviewed for an entity like the Legislature to do this—we believe it meets the selection-decision element of the typical project review process through its prioritization and recommendation process.[14]

Finding: NITC's review process is sufficient to identify the strengths and weaknesses of proposed projects.

Based on our analysis of this process, we find that NITC's review process has all three of the typical elements of a review process and is sufficient to identify the strengths and weaknesses of proposed projects.

Projects That Are Not Reviewed by NITC

As noted at the beginning of this section, NITC reviews only projects that require "new or additional funding." Neither the Act nor its legislative history explicitly states the Legislature's rationale for limiting project reviews to these projects. However, both the Act and its legislative history emphasize the Legislature's concern that information technology projects be sound investments, which would logically involve new funding. This restriction means that agencies that can fund new information technology projects within their existing appropriations or with non-General Fund money (i.e., federal money, cash funds) can develop and implement projects without NITC's review.

As discussed in Section II, the state's Chief Information Officer (CIO) believes that the majority of agency information technology projects are not subject to NITC review and statewide information regarding all agency information technology investments is not kept in a centralized, comparable format.[15] In her opinion, the 14 proposals submitted for review in the current biennium are unlikely to fully

reflect the information technology needs of the state's 82 agencies.[16] However, she stated that she cannot determine with certainty the number of existing projects, and neither can we.

Finding: We were unable to determine the number or dollar value of projects funded with other sources, such as agencies' existing appropriations, federal funds, or cash funds.

We attempted to estimate the proportion of projects reviewed by NITC versus the entirety of state information technology projects by examining the 2006 Agency Information Technology Plans submitted by state agencies as part of the biennial budget process.[17] We found that 73 of the state's 82 agencies had filed a plan at least once between 2000 and 2006.[18] As noted previously, only 22 agencies have submitted project review proposals to NITC since 1998. This means that 51 agencies have information technology systems of some kind but have not submitted proposals for new projects to NITC for review.

Finding: Information technology projects are occurring without NITC review and may pose the same risks of cost, feasibility, and suitability associated with the projects NITC reviews.

Our review of the technology plans showed current and proposed projects that ranged from server or desktop computer replacement costing less than $10,000 each, to information systems and upgrades costing more than $1 million each.[19] We believe that some of these projects may equate, in cost and impact, to the review thresholds NITC uses. Due to the lack of specificity in the plans, we could not determine the precise number of comparable projects.

Projects that are not reviewed could pose the same risks of cost, feasibility, and suitability associated with the projects NITC reviews and therefore could end up costing the state money, regardless of their funding source. For example, an agency system could overload a state-supported network, rendering it unavailable and causing all affected agencies to lose productivity. In addition, a project could have a General Fund impact if existing employees must support the new technology.

Notes

[1] Neb. Rev. Stat. § 86-516(8).

[2] Neb. Rev. Stat. § 86-514.

[3] *Guidance on Information Technology Related Budget Requests,* 2001, pgs. 1-2.

[4] A complete list of the resources and documents reviewed can be found in Appendix A.

[5] Neb. Rev. Stat. § 86-516(8). In addition, Neb. Rev. Stat. § 86-516(5) allows NITC to review projects submitted by government entities outside of the budget cycle.

[6] Nebraska Information Technology Commission, *Guidance on Information Technology Related Budget Requests, Project Proposal Form Requirements*, Revised October 19, 2001.

[7] Nebraska Information Technology Commission, *Project Proposal Form, New or Additional State Funding Requests for Information Technology Projects, FY2007-2009 Biennium.*

[8] Nebraska Information Technology Commission, *Project Proposal Form, New or Additional State Funding Requests for Information Technology Projects, FY2007-2009 Biennium.*

[9] Government Accountability Office, *Information Technology: Improvements Needed to More Accurately Identify and Better Oversee Risky Projects Totaling Billions of Dollars* (GAO-06-1099T), September 2006, pg. 7. Joint Legislative Audit and Review Committee, Virginia General Assembly, *Review of Information Technology Systems Development*, January 2003, pg. iii.

[10] Meeting with NITC staff, March 21, 2007; Letter from NITC staff dated May 8, 2007.

[11] Government Accountability Office, *Information Technology Investment Management: A Framework for Assessing and Improving Process Maturity* (GAO-04-394G), March 2004. State of Tennessee, *Information Systems Planning Process*, May 2006, pg. 5. Florida Department of Environmental Protection*, Annual Information Technology Project Planning and Prioritization (March 21, 2007)*, pgs. 5-6.

[12] Meetings with NITC commissioners, March 2, 2007; April 12, 2007; May 15, 2007; May 16, 2007 (two meetings); May 18, 2007; May 21, 2007; and June 5, 2007.

[13] Neb. Rev. Stat. § 86-516(8).

[14] Government Accountability Office, *Information Technology Investment Management: A Framework for Assessing and Improving Process Maturity* (GAO-04-394G), March 2004. State of Louisiana, *Information Technology Budget Instructions – IT Budget Forms FY 07-08,* 10/12/2006*, pg. 2.

[15] Meetings with the CIO, April 13, 2007 and May 9, 2007.

[16] Meeting with the CIO, May 9, 2007.

[17] http://www.nitc.state.ne.us/nitc/documents/fy2007-09/index.html, accessed on June 1, 2007.

[18] The state agency count comes from State Personnel Division, 2006 Almanac, pg. 14.

[19] At least three agencies had server or desktop replacements under the $10,000 mark. Approximately five agencies had information systems costing more than $1 million.

SECTION IV: NITC's Authority to Address Project Weaknesses

In this section, we report the results of our evaluation of whether the Information Technology Infrastructure Act (Act) provides the Nebraska Information Technology Commission (NITC) with sufficient authority to address significant weaknesses identified during the review process for proposed projects. In conducting this analysis, we reviewed relevant statutes, NITC guidelines and policies, industry standards, and other documentation. We also interviewed NITC members and administrative personnel.

Identifying and Addressing Project Weaknesses

As discussed in Section III, identifying weaknesses is an inherent aspect of a review process. Reviews by technical experts and advisory groups, and prioritization and final recommendations by NITC are all opportunities to identify the strengths and weaknesses in a proposed project. If this process uncovers a significant weakness, NITC can take action at different levels of review to address these concerns. Following is a discussion of each level along with examples of NITC actions reported in its 2006 biennial report.

Technical Review

The initial technical review is conducted by two or three independent reviewers appointed by NITC staff. Weaknesses in a project's technical feasibility or budget are usually first discovered during the technical review. Reviewers document any weaknesses, and associated low scores, on a review form that is provided to the submitting agency. The agency then has the opportunity to respond to or clarify the issues that concerned the reviewers.

For example, when the reviewers evaluated the Nebraska Public Employees Retirement Systems' (NPERS') computer program migration proposal, they stated that they could not tell if the project was feasible, appropriate, or could be accomplished within the proposed budget. NPERS responded to these comments by providing an update of activities and notifying NITC that it had retained an employee from the Chief Information Officer's staff to manage the project.[1]

Advisory Council Review

After the technical review is complete, the Technical Panel and subject-area Councils meet separately to review the proposals and scores. This level of review allows them to evaluate the individual merits of each proposal. For the subject-area councils, it further affords them an opportunity to gain a more global perspective on projects in their

subject areas in order to look at agency needs and the possibility for collaboration between projects in the same field.

For example, both the University of Nebraska and the Nebraska State College System proposed implementation of new student information systems during the same biennium. The Education Council encouraged collaboration between the two entities to promote efficiency and cost effectiveness.[2]

Prioritization and Final Recommendation

Finding: If a project's weaknesses are not addressed to its satisfaction, NITC's only official recourse is to give the project a low prioritization rating.

If a project's weaknesses are not addressed to NITC's satisfaction during the expert review of proposals, its only official recourse is to give the project a low prioritization rating in its biennial recommendation report to the Governor and the Legislature. For example, the Department of Roads submitted two projects for review that NITC deemed to have "insufficient information to proceed with a recommendation." Consequently, NITC gave them the lowest prioritization of all proposals received that year.[3]

Finding: Some projects may be mandated by federal or state statutes and are given high priority regardless of review results.

As noted in Section III, however, some projects are mandated by federal or state statutes and are given high priority regardless of review results. For example, the Department of Health and Human Services proposed to replace its Medicaid database at an estimated cost of $50 million.[4] The project received a relatively low technical review score, but the necessity of the project overrode the technical concerns. NITC has requested periodic updates regarding the progress of this project.[5]

Conclusion

Finding: We found that for most types of projects, the existing process is adequate for addressing weaknesses identified during the review process.

We found that for most types of projects, the existing process is adequate to address identified weaknesses. However, the process may be inadequate for addressing problems identified in mandated projects, which will almost certainly be funded regardless of any potential problems identified by NITC. Although NITC can request the submitting agency to voluntarily provide it with follow-up reports on the development and implementation process—as it did with the Health and Human Services Department's Medicaid project—it cannot require an agency to provide such information.

Finding: The review process may be inadequate for addressing problems identified in mandated projects, which will almost certainly be funded regardless of any potential problems identified by NITC.

We also found that the policy decision limiting NITC's review to the project proposal process could hinder the complete resolution of some weaknesses identified during review and does not afford NITC the opportunity to mitigate problems that arise during project development and implementation.

18

Finding: NITC has no formal authority for oversight once a project is reviewed, thus missing the highest risk time periods for a project.

For weaknesses identified during the review process, NITC has no statutory authority to verify that the agency followed through with the solution, so it cannot assure that the solution actually occurs. Additionally, because projects are often in the earliest stages of planning when presented to NITC, the state is vulnerable during what are commonly considered the highest risk phases of information technology projects—development and implementation.[6] It is during these phases that costly problems such as scheduling delays, cost overruns, or technical glitches could occur.

The Government Accountability Office (GAO) highlights the need for such oversight in the evaluation methodology it uses to determine the sophistication of a project review process. The GAO notes that while an organization like NITC should not "micromanage" each project, it "should maintain adequate oversight and observe each project's performance and progress toward predefined cost and schedule expectations as well as each project's anticipated benefits and risk exposure."[7]

Finding: Since NITC has no official authority to conduct ongoing oversight, it has no recourse if agencies developing information technology projects choose not to cooperate.

NITC has taken some steps to obtain voluntary cooperation from submitting agencies for projects it remained concerned about after the proposal review process. For example, in its 2006 recommendations to the Legislature, NITC identified five proposed projects that it believed warranted further attention. In its comments, NITC stated that the submitting agencies should coordinate with the Technical Panel for review or oversight as needed.[8] Through this process, NITC aims to increase its involvement and review of projects that present significant risks. Nevertheless, since NITC has no official authority to conduct ongoing oversight, it has no recourse if agencies developing information technology projects choose not to cooperate.

Notes

[1] Nebraska Information Technology Commission, *Report to the Governor and the Legislature, Recommendations on Technology Investments for the FY2007-2009 Biennium*, November 15, 2006, pgs. 98-104.

[2] *Report to the Governor and the Legislature,* 2006, pgs. 5-6 and 88-97.

[3] *Report to the Governor and the Legislature,* 2006, pgs. 5-6.

[4] *Report to the Governor and the Legislature,* 2006, pgs. 5-6 and 29-32.

[5] *Report to the Governor and the Legislature,* 2006, pgs. 6 and 32; Minutes, NITC Technical Panel, February 13, 2007; Meeting with NITC Staff, March 21, 2007.

[6] *Project Management for Information, Technology, Business, and Certification* by Gopal K. Kapur (Upper Saddle River, NJ: Prentice Hall, 2005), Chapters 7 and 8.

[7] Government Accountability Office, *Information Technology Investment Management: A Framework for Assessing and Improving Process Maturity* (GAO-04-394G), March 2004, pg. 50.

[8] *Report to the Governor and the Legislature,* 2006, pgs. 6-7; Minutes, NITC Technical Panel, February 13, 2007.

III. Committee Findings and Recommendations and Fiscal Analyst's Opinion

Performance Audit Committee Recommendations

On November 20, 2007, in accordance with Neb. Rev. Stat. § 50-1211(1) of the Legislative Performance Audit Act, the Legislative Performance Audit Committee convened to consider the findings and recommendations contained in the Performance Audit Section's draft report entitled *The Nebraska Information Technology Commission: An Examination of Statutory Compliance and the Project Review Process* and the Nebraska Information Technology Commission's response to that report.

The Committee adopted the following recommendations.

Does NITC comply with relevant portions of the Information Technology Infrastructure Act (Act)?

Finding: NITC complies with the relevant portions of the Act. Most importantly, NITC complies with the three most significant statutory requirements of: (1) publishing and annually updating a statewide technology plan; (2) developing, with input from its advisory groups, a large body of procedures and standards for state agencies to use in planning information technology projects; and (3) developing a process for reviewing agency information technology proposals that require new funding.

Recommendation: None.

<div align="center">✳✳✳</div>

Finding: NITC has not created an enterprise project program, but this is not a violation of the Act in the strictest sense, because of ambiguities in the statutory language.

Discussion: NITC states that the enterprise project program has not been needed because no projects of this type have been proposed and the Act does not clearly authorize NITC to designate projects as enterprise projects. We believe that a recent proposal relating to the state retirement systems' computer system, PIONEER, meets the statutory definition of an enterprise project and should be so designated but acknowledge that the statute does not explicitly authorize NITC to designate such projects. In addition, the Act's use of intent language instead of language directly creating the program makes it unclear whether the Legislature intended creation of the program to be a requirement.

Recommendation: NITC should work with the Committee to introduce legislation to resolve ambiguities in the language relating to the enterprise project program.

<center>***</center>

Finding: The Act establishes a goal for NITC of coordination of information technology projects but contains no specific requirements related to that goal.

Finding: NITC has coordinated information technology projects that involve several agencies when possible.

Finding: NITC is hindered in its ability to coordinate due to a lack of information.

Discussion: In order to coordinate, NITC must first have knowledge of all information technology investments in state government. Currently, NITC does not have this information because complete, useable data regarding the state's information technology investments is not available. Therefore, NITC could be missing opportunities to coordinate projects and investments.

Recommendation: The Committee will consider the policy question relating to NITC authority to coordinate the state's information technology projects. If it is satisfied with the existing level of coordination, no action is necessary. If it would like to see additional coordination, it will consider introducing legislation to specify the additional tasks it wants NITC to undertake.

Recommendation: Regardless of NITC's role in coordinating information technology projects, the Committee will consider introducing legislation to require that pertinent information on all state information technology projects be maintained in a thorough, comparable format, to improve NITC's and others' ability to gain a complete picture of the state's technology investments.

<center>***</center>

Finding: The Act uses two terms that are unclear and undefined.

Recommendation: The Committee will consider introducing legislation to clarify these terms or, if the terms are unnecessary, to delete them.

Is NITC's review process sufficient to identify strengths and weaknesses in proposed projects?

Finding: NITC's project review process is sufficient to identify the strengths and weaknesses of the proposed projects it reviews. The process includes the three typical components of such a process—a project proposal, expert review of proposals, and a selection decision—each of which is consistent with requirements for similar processes used by other states and the federal government.

Recommendation: None.

∗∗∗

Finding: NITC staff report that they assign reviewers to proposals based on the reviewers' experience in technology and government; however, there is no written policy governing reviewer qualifications or how they are assigned to projects.

Discussion: Having a written policy establishing reviewer qualifications would provide a standard of accountability.

Recommendation: NITC should develop a written policy establishing reviewer qualifications and the process that should be used to select reviewers.

∗∗∗

Finding: NITC is authorized only to review information technology projects that use new or additional General Funds. We were unable to determine the number or dollar value of projects funded by other sources, such as agencies' existing appropriations, federal funds, or cash funds.

Finding: The information technology projects that are not subject to NITC review may pose the same risks to cost, feasibility, and suitability associated with the projects NITC reviews.

Discussion: Projects that do not receive a new appropriation may still impact the state's budget.

Recommendation: The Committee will consider the policy question of whether it would be advantageous to have NITC review state agency information technology projects regardless of their funding sources. Although the Legislature would not approve project funding, NITC could be authorized to provide feedback to agencies and an-

other entity, like the Legislature or the Office of the CIO, to help ensure the use of consistent standards and appropriate technology.

Does NITC have sufficient authority to address significant weaknesses identified during the project review process?

Finding: Project weaknesses can be resolved during the review process through communication with the agency that submitted the project proposal. If NITC's concerns about a project are not resolved during the process, its only recourse is to give the project a low score and prioritization recommendation. This may not be adequate for projects mandated by state or federal government, which will likely be implemented regardless of a low recommendation.

Discussion: The Act and legislative history make it clear that the Legislature wanted NITC to be an advisory body without the authority to stop or reject a project, regardless of the extent of its concerns.

Recommendation: The Committee will consider the policy question of whether it is satisfied with NITC's responsibility as an advisory body. If so, no action is needed. If the Committee is not satisfied with NITC's responsibility as an advisory body, it should consider introducing legislation to give NITC additional authority.

Recommendation: Regardless of the policy decision concerning NITC's authority, the Committee will consider introducing legislation to clarify the extent to which it expects NITC to have an impact on mandated information technology projects.

***

Finding: NITC has no formal authority for oversight once a project is reviewed, thus missing the highest risk time periods for a project.

Finding: Since NITC has no official authority to conduct ongoing oversight, it has no recourse if agencies developing information technology projects choose not to cooperate.

Discussion: The Act limits NITC's involvement to the proposal phase of information technology projects, which may restrict NITC's effectiveness. The state and federal standards and best practices we reviewed noted that there is a high risk during the development and implementation portions of information technology projects as well as during the project proposal phase.

Recommendation: The Committee will consider whether NITC should be authorized to provide on-going oversight of information technology projects during their development and implementation.

State of Nebraska

LEGISLATIVE COUNCIL

Legislative Fiscal Office
PO Box 94604, State Capitol
Lincoln, NE 68509-4604

July 9, 2007

RECEIVED

JUL 1 1 2007

LEGISLATIVE RESEARCH

Martha Carter
Performance Audit Section
Nebraska Legislature
Room 1201 – State Capitol
Lincoln, NE 68509

Dear Martha:

Following is the estimated fiscal impact of the findings and recommendations contained in the draft report regarding the audit of the Nebraska Information Technology Commission (NITC).

It should be noted that many of the draft report's recommendations are framed in language such as "NITC should work with the Committee to introduce legislation..." Depending on the scope and nature of such legislation there may be costs. These will be more accurately addressed through the fiscal note process. In such instances, I have made a notation to the effect of: "Depends on the nature and scope of potential legislation".

> **Finding 2:** NITC has not created an enterprise project program, but this is not a violation of the Act in the strictest sense, because of ambiguities in the statutory language.
>
> **Recommendation:** NITC should work with the Committee to introduce legislation to resolve ambiguities in the language relating to the enterprise project program.
>
> **Fiscal Impact:** Depends on the nature and scope of potential legislation. More than likely, this will not have a fiscal impact if the legislation is limited to specificity of language. If, however, proposed legislation expands the scope of NITC duties, there may be a fiscal impact.

> **Findings 3-5:** The Act establishes a goal for NITC of coordination of information technology projects but contains no specific requirements related to that goal.
>
> NITC has coordinated information technology projects that involve several agencies when possible.
>
> NITC is hindered in its ability to coordinate due to a lack of information.

Recommendation: The Committee should consider the policy questions relating to NITC authority to coordinate the state's information technology projects. If it is satisfied with the existing level of coordination, no action is necessary. If it would like to see additional coordination, it should consider introducing legislation to specify the additional tasks it wants NITC to undertake.

Fiscal Impact: Depends on the nature and scope of potential legislation. Certainly, some additional tasks could be addressed with current budgetary resources. Depending on the level of complexity that potential legislation may include, some new tasks and coordination may require additional resources.

Recommendation: Regardless of NITC's role in coordinating information technology projects, the Committee should consider introducing legislation to require that pertinent information on all state information technology projects be maintained in a thorough, comparable format, to improve NITC's and others' ability to gain a complete picture of the state's technology investments.

Fiscal Impact: Again, this will be determined by the level at which such information is retained and the detailed data to be collected. The requirement of collecting and maintaining such information may result in a complex software system being required. Conversely, it may be addressed with a current database program. The language in any potential legislation will be the driving factor in this.

➢ **Findings 9-10:** NITC is authorized only to review information technology projects that use new or additional General Funds. We were unable to determine the number or dollar value of projects funded by other sources, such as agencies' existing appropriations, federal funds, or cash funds.

The information technology projects that are not subject to NITC review may pose the same risks to cost, feasibility, and suitability associated with the projects NITC reviews.

Recommendation: The Committee should consider the policy question of whether it would be advantageous to have NITC review state agency information technology projects regardless of their funding sources. Although the Legislature would not approve project funding, NITC could be authorized to provide feedback to agencies and another entity, like the Legislature of the Office of the CIO, to help ensure the use of consistent standards and appropriate technology.

Fiscal Impact: Assuming the Committee considers this and *does* include a "review regardless of fund source" provision, the overall breadth of NITC workload could increase dramatically. This recommendation will likely result in the need for additional NITC staff and resources.

➢ **Finding 11:** Project weaknesses can be resolved during the review process through communication with the agency that submitted the project proposal. If NITC's concerns about a project are not resolved during the process, its only recourse is to give the project a low score and prioritization recommendation. This may not be adequate for projects mandated by state or federal government, which will likely be implemented regardless of a low recommendation.

Recommendation: The Committee should consider the policy question of whether it is satisfied with NITC's responsibility as an advisory body. If so, no action is needed. If the Committee is not satisfied with NITC's responsibility as an advisory body, it should consider introducing legislation to give NITC additional authority.

Regardless of the policy decision concerning NITC's authority, the Committee should consider introducing legislation to clarify the extent to which it expects NITC to have an impact on mandated information technology projects.

Fiscal Impact: Depends on the nature and scope of potential legislation. More than likely, this will not have a fiscal impact if the legislation is limited to specificity of language. If, however, proposed legislation expands the scope of NITC duties, there may be a fiscal impact.

> **Findings 12-13:** NITC has no formal authority for oversight once a project is reviewed, thus missing the highest risk time periods for a project.

Since NITC has no official authority to conduct ongoing oversight, it has no recourse if agencies developing information technology projects choose not to cooperate.

Recommendation: The Committee should consider whether NITC should be authorized to provide on-going oversight of information technology projects during their development and implementation.

Fiscal Impact: Assuming the Committee considers this and *does* authorize such expanded oversight duties, this recommendation will likely result in the need for additional NITC staff and resources. The degree to which these duties expand would determine the level of additional resources.

Should you have any questions or concerns please contact me.

Sincerely,

Scott Danigole
Legislative Fiscal Analyst

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IV. *Background Materials*

BACKGROUND MATERIALS

The "background materials" provided here are materials (in addition to the Section's report) that were available to the Committee when it issued the findings and recommendations contained in Part III of this report. They include:

- ➤ the Section's draft findings and recommendations (provided for context);
- ➤ the agency's response to a draft of the Section's report;
- ➤ the Legislative Auditor's summary of the agencies' response;
- ➤ the summary of testimony given at the public hearing; and
- ➤ Appendix A: Audit Methodology.

Performance Audit Section Draft Findings and Recommendations (June 2007)

We found that NITC is in compliance with the Information Technology Infrastructure Act. However, in the course of the audit, we identified several potential policy questions that the Committee may wish to consider. Our specific findings and recommendations follow.

Does NITC comply with relevant portions of the Information Technology Infrastructure Act (Act)?

Finding: NITC complies with the relevant portions of the Act. Most importantly, NITC complies with the three most significant statutory requirements of: (1) publishing and annually updating a statewide technology plan; (2) developing, with input from its advisory groups, a large body of procedures and standards for state agencies to use in planning information technology projects; and (3) developing a process for reviewing agency information technology proposals that require new funding.

Recommendation: None.

***

Finding: NITC has not created an enterprise project program, but this is not a violation of the Act in the strictest sense, because of ambiguities in the statutory language.

Discussion: NITC states that the enterprise project program has not been needed because no projects of this type have been proposed and the Act does not clearly authorize NITC to designate projects as enterprise projects. We believe that a recent proposal relating to the state retirement systems' computer system, PIONEER, meets the statutory definition of an enterprise project and should be so designated but acknowledge that the statute does not explicitly authorize NITC to designate such projects. In addition, the Act's use of intent language instead of language directly creating the program makes it unclear whether the Legislature intended creation of the program to be a requirement.

Recommendation: NITC should work with the Committee to introduce legislation to resolve ambiguities in the language relating to the enterprise project program.

***

Finding: The Act establishes a goal for NITC of coordination of information technology projects but contains no specific requirements related to that goal.

Finding: NITC has coordinated information technology projects that involve several agencies when possible.

Finding: NITC is hindered in its ability to coordinate due to a lack of information.

Discussion: In order to coordinate, NITC must first have knowledge of all information technology investments in state government. Currently, NITC does not have this information because complete, useable data regarding the state's information technology investments is not available. Therefore, NITC could be missing opportunities to coordinate projects and investments.

Recommendation: The Committee should consider the policy question relating to NITC authority to coordinate the state's information technology projects. If it is satisfied with the existing level of coordination, no action is necessary. If it would like to see additional coordination, it should consider introducing legislation to specify the additional tasks it wants NITC to undertake.

Recommendation: Regardless of NITC's role in coordinating information technology projects, the Committee should consider introducing legislation to require that pertinent information on all state information technology projects be maintained in a thorough, comparable format, to improve NITC's and others' ability to gain a complete picture of the state's technology investments.

***

Finding: The Act uses two terms that are unclear and undefined.

Recommendation: The Committee should consider introducing legislation to clarify these terms or, if the terms are unnecessary, to delete them.

Is NITC's review process sufficient to identify strengths and weaknesses in proposed projects?

Finding: NITC's project review process is sufficient to identify the strengths and weaknesses of the proposed projects it reviews. The process includes the three typical components of such a process—a project proposal, expert review of proposals, and a selection deci-

sion—each of which is consistent with requirements for similar processes used by other states and the federal government.

Recommendation: None.

***

Finding: NITC staff report that they assign reviewers to proposals based on the reviewers' experience in technology and government; however, there is no written policy governing reviewer qualifications or how they are assigned to projects.

Discussion: Having a written policy establishing reviewer qualifications would provide a standard of accountability.

Recommendation: NITC should develop a written policy establishing reviewer qualifications and the process that should be used to select reviewers.

***

Finding: NITC is authorized only to review information technology projects that use new or additional General Funds. We were unable to determine the number or dollar value of projects funded by other sources, such as agencies' existing appropriations, federal funds, or cash funds.

Finding: The information technology projects that are not subject to NITC review may pose the same risks to cost, feasibility, and suitability associated with the projects NITC reviews.

Discussion: Projects that do not receive a new appropriation may still impact the state's budget.

Recommendation: The Committee should consider the policy question of whether it would be advantageous to have NITC review state agency information technology projects regardless of their funding sources. Although the Legislature would not approve project funding, NITC could be authorized to provide feedback to agencies and another entity, like the Legislature or the Office of the CIO, to help ensure the use of consistent standards and appropriate technology.

Does NITC have sufficient authority to address significant weaknesses identified during the project review process?

Finding: Project weaknesses can be resolved during the review process through communication with the agency that submitted the pro-

ject proposal. If NITC's concerns about a project are not resolved during the process, its only recourse is to give the project a low score and prioritization recommendation. This may not be adequate for projects mandated by state or federal government, which will likely be implemented regardless of a low recommendation.

Discussion: The Act and legislative history make it clear that the Legislature wanted NITC to be an advisory body without the authority to stop or reject a project, regardless of the extent of its concerns.

Recommendation: The Committee should consider the policy question of whether it is satisfied with NITC's responsibility as an advisory body. If so, no action is needed. If the Committee is not satisfied with NITC's responsibility as an advisory body, it should consider introducing legislation to give NITC additional authority.

Recommendation: Regardless of the policy decision concerning NITC's authority, the Committee should consider introducing legislation to clarify the extent to which it expects NITC to have an impact on mandated information technology projects.

∗∗∗

Finding: NITC has no formal authority for oversight once a project is reviewed, thus missing the highest risk time periods for a project.

Finding: Since NITC has no official authority to conduct ongoing oversight, it has no recourse if agencies developing information technology projects choose not to cooperate.

Discussion: The Act limits NITC's involvement to the proposal phase of information technology projects, which may restrict NITC's effectiveness. The state and federal standards and best practices we reviewed noted that there is a high risk during the development and implementation portions of information technology projects as well as during the project proposal phase.

Recommendation: The Committee should consider whether NITC should be authorized to provide on-going oversight of information technology projects during their development and implementation.

STATE OF NEBRASKA

Dave Heineman
Governor

OFFICE OF THE CHIEF INFORMATION OFFICER
Brenda L. Decker
Chief Information Officer

July 17, 2007

Martha Carter, Legislative Auditor
Legislative Audit and Research Office
State Capitol, Room 1201
P.O. Box 94945
Lincoln, NE 68509-4945

      RE: Nebraska Information Technology Commission ("NITC")
              Response to Draft Performance Audit Report

Dear Ms. Carter:

This letter is in response to the Performance Audit Section – Draft Report entitled *The Nebraska Information Technology Commission: An Examination of Statutory Compliance and the Project Review Process* dated June 2007. Enclosed with this letter is a completed Agency Response Worksheet.

The members of the NITC, at our meeting on June 27, 2007, had the opportunity to review the draft report with our staff and staff from the Performance Audit Section. After this review, the NITC authorized me, as Chair of the Commission, to submit this response.

I am pleased to inform you that the NITC has no significant disagreements with the findings or recommendations contained in the draft report. Further, the NITC will implement the recommendations contained therein, as set forth below.

Finding 2

> **Findings:** NITC has not created an enterprise project program, but this is not a violation of the Act in the strictest sense, because of ambiguities in the statutory language.
>
> **Recommendations:** NITC should work with the Committee to introduce legislation to resolve ambiguities in the language relating to the enterprise project program.
>
> **NITC Response: The NITC agrees with the findings and will work with the Committee as recommended.**

Nebraska Information Technology Commission
Lieutenant Governor Rick Sheehy, Chair
State Capitol, Room 2315 • P.O. Box 94863 • Lincoln, Nebraska 68509-4863 • Home Page://www.nitc.state.ne.us
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Finding 8

Findings: NITC staff report that they assign reviewers to proposals based on the reviewers' experience in technology and government; however, there is no written policy governing reviewer qualifications or how they are assigned to projects.

Recommendations: NITC should develop a written policy establishing reviewer qualifications and the process that should be used to select reviewers.

NITC Response: The NITC agrees with the findings and will implement the recommendations.

I appreciate the opportunity to respond to the draft report. And, on behalf of the NITC, I would like to thank the Legislative Performance Audit Section staff for their courtesy and professionalism throughout this audit.

Please feel free to contact me or the NITC staff if you have any questions or need any additional information.

Sincerely,

NEBRASKA INFORMATION
TECHNOLOGY COMMISSION
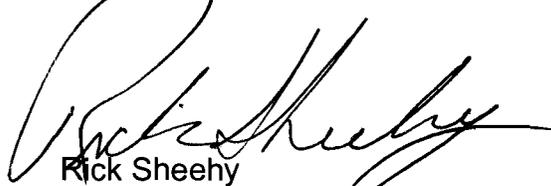
Rick Sheehy
Lieutenant Governor
Chair, Nebraska Information Technology
Commission

Enclosure: Agency Response Worksheet
Copies: NITC Commissioners

LEGISLATIVE AUDITOR'S
SUMMARY OF AGENCY RESPONSE

On July 17, 2007, the Nebraska Information Technology Commission (NITC), through its chairperson, submitted a response to a draft of the Performance Audit Section's report prepared in conjunction with this audit. Neb. Rev. Stat. § 50-1210 requires the Legislative Auditor to "prepare a brief written summary of the response, including a description of any significant disagreements the agency has with the section's report or recommendations." The Legislative Auditor's summary of the response follows.

Of the 13 findings included in the draft report, NITC responded to the two findings that had recommendations within its purview. The remaining findings relate to policy issues and are in the purview of the Legislative Performance Audit Committee (Committee) and the Legislature as a whole. NITC discussed the findings with the auditors during its June 27, 2007, meeting.

Finding 2

NITC agrees with the finding and will work with the Committee to resolve ambiguities in the statutory language of the Information Technology Infrastructure Act that deal with the creation of an enterprise project program.

Finding 8

NITC agrees with the finding and will develop a written policy establishing reviewer qualifications and the process that should be used to select reviewers.

SUMMARY OF PUBLIC HEARING TESTIMONY

On November 20, 2007, the Performance Audit Committee (Committee) held a public hearing on the draft report entitled *The Nebraska Information Technology Commission: An Examination of Statutory Compliance and the Project Review Process.*

Don Arp, Jr., lead performance auditor on the audit, testified first. Mr. Arp highlighted the three questions the Committee had directed the Performance Audit Section to examine. He said that the Nebraska Information Technology Commission (NITC) complies with the Information Technology Infrastructure Act, has a project proposal review process that is adequate to address project strengths and weaknesses, and has authority to address significant issues with reviewed projects. Mr. Arp also noted a few minor issues that NITC is already addressing.

Mr. Arp then highlighted the four policy questions raised during the course of the audit and briefly explained the associated findings and recommendations. The questions raised are:

1. What authority should NITC have to coordinate the state's information technology projects?

2. Would it be advantageous to have NITC review state agency information technology projects regardless of their funding sources?

3. Is the Committee satisfied with NITC's responsibility as an advisory body?

4. Should NITC be authorized to provide on-going oversight of information technology projects?

Lieutenant Governor Rick Sheehy, NITC chairman, testified next. He pledged NITC's cooperation in addressing the issues raised in the report. Senator Pat Engel asked Lt. Gov. Sheehy whether more staff would be needed if the statutes were changed to increase NITC's duties and authority. Lt. Gov. Sheehy invited Ms. Brenda Decker, Chief Information Officer, to respond. Ms. Decker said that the answer would depend on the extent of the changes made to NITC's duties. In response to a question from Sen. Lavon Heidemann, Ms. Decker also suggested that it could be useful for NITC to review projects beyond the planning stage.

No others testified.

Appendix A: Methodology

This audit was conducted in accordance with generally accepted government auditing standards for performance audits. The methodologies we used to answer each of the scope statement questions are described briefly at the beginning of each section. This appendix provides additional details.

Section II: NITC's Statutory Compliance

The Information Technology Infrastructure Act contains requirements that apply to organizations other than the Nebraska Information Technology Commission (NITC). Following is a description of the statutes identified by the Legislative Performance Audit Section (Section) as being relevant to the scope of the audit.

Statutory Sections Included in the Audit

During the course of this audit, the Section examined Neb. Rev. Stat. § 86-513, § 86-515, § 86-516, § 86-518, § 86-521, § 86-524, and §§ 86-526 to 86-530.

Statutory Sections Excluded from the Audit

As a practice, the Section does not generally audit intent, citation, or definition language. As a result, the Section did not audit Neb. Rev. Stat. §§ 86-501 to 86-511, § 86-512, § 86-514, § 86-517, or § 86-525.

Additionally, pursuant to the language of the request for this audit, the Section focused on NITC's duties and the technology project review process. As a result, the Section *did not* audit Neb. Rev. Stat. § 86-519, § 86-520, § 86-522, or § 86-523. These sections were not reviewed because they either dealt with an office not under NITC control or involved the establishment of grant funds.

Standards and Guidelines

Following is a list of the standards and guidelines published by NITC:

➤ Technology Access Clause
➤ Accessibility Policy
➤ Geospatial Metadata Standard
➤ Land Record Information and Mapping Standards
➤ Security Statement - State of Nebraska Home Page
➤ Web Branding and Policy Consistency
➤ Web Cookie Standard

- Emergency Information Page
- E-mail Standard for State Government Agencies
- Secure E-mail for State Government Agencies (Under review by NITC)
- Use of Computer-based Fax Services by State Government Agencies
- E-mail Standard for State Government Agencies
- Secure E-mail for State Government Agencies (Under review by NITC)
- Use of Computer-based Fax Services by State Government Agencies
- Blocking E-mail Attachments
- Blocking Unsolicited Bulk E-mail / "Spam"
- Lotus Notes Guidelines for State Government Agencies
- Lotus Notes Standards for State Government Agencies
- IP Communication Protocol Standard for Synchronous Distance Learning and Videoconferencing
- Network Edge Device Standard for Entities Choosing to Connect to Network Nebraska
- Contracting Guidelines for Upgrade of Distance Learning Services
- Acceptable Use Policy - State Data Communications Network
- Security Policies (Under review by NITC)
- Electronic Crime Scene Investigation
- Incident Response and Reporting Procedure for State Government
    - Reporting Form - Short
    - Reporting Form - Long
- Information Technology Disaster Recovery Plan Standard
- Wireless Local Area Network Standard
- WLAN Security Checklist
- Approval Process
- Remote Access Standard
- Identity and Access Management Standard for State Government Agencies
- Video and Audio Compression Standard for Synchronous Distance Learning and Videoconferencing
- Scheduling Standard for Synchronous Distance Learning and Videoconferencing
- Section 4 of the 2002 Statewide Technology Plan
- Project Status Reporting Guidelines

Sections III and IV: NITC's Project Review Process and Authority to Address Project Weaknesses

The Legislative Performance Audit Section reviewed the following technical standards and documents to determine if NITC's project review process is sufficient:

➢ Information Technology*: Improvements Needed to More Accurately Identify and Better Oversee Risky Projects Totaling Billions of Dollars* (GAO-06-1099T), September 2006.
http://www.gao.gov/new.items/d061099t.pdf

➢ *Information Technology Investment Management: A Framework for Assessing and Improving Process Maturity* (GAO-04-394G), March 2004.
http://www.gao.gov/new.items/d04394g.pdf

➢ Information Technology Management: *Governmentwide Strategic Planning, Performance Measurement, and Investment Management Can Be Further Improved* (GAO-04-49), January 2004.
http://www.gao.gov/new.items/d0449.pdf

➢ *Review of Information Technology Systems Development* (Joint Legislative Audit and Review Committee, Virginia General Assembly), January 2003.
http://jlarc.state.va.us/reports/Rpt289.pdf

➢ "Harnessing IT to Drive Enterprise Strategy" by Michael Hugos in *CIO Best Practices: Enabling Strategic Value with Information Technology*, Joe Stenzel, ed. (Hoboken, New Jersey: John Wiley & Sons, Inc, 2007).

➢ *Management of Information Technology* (Third Edition) by Carroll W. Frenzel (Cambridge, MA: Course Technology, 1999).

➢ *Information Systems Planning Process* (State of Tennessee), May 2006.
http://www.state.tn.us/finance/oir/prd/ispprocess.pdf

➢ *Annual Information Technology Project Planning and Prioritization* (Florida Department of Environmental Protection), March 21, 2007.
http://www.dep.state.fl.us/PM/files/docs/plng_init_process.doc

➢ *Information Technology Budget Instructions - IT Budget Forms FY 07-08* (Louisiana), October 12, 2006.
http://doa.louisiana.gov/oit/docs/IT%20Budget%20Instructions%20FY2007-2008%20Revised%20092006.pdf

Performance Audit Committee Reports: 1994 to 2007

Performance Audit Reports

The Nebraska Lottery's Implementation of LB 1039 (February 2007)
The State Department of Education's Student-based Teacher-led Assessment and Reporting System (February 2007)
The Lincoln Regional Center's Sex Offender Services Program (August 2006)
The Public Employees Retirement Board and the Nebraska Public Employees Retirement Systems: An Examination of Compliance, PIONEER, and Management (August 2006)
The Nebraska Medicaid Program's Collection of Improper Payments (May 2005)
The Lincoln Regional Center's Billing Process (December 2004)
Nebraska Board of Parole (September 2003)
Nebraska Department of Environmental Quality: Administering the Livestock Waste Management Act (May 2003)
HHSS Personal-Services Contracts (January 2003)
Nebraska Habitat Fund (January 2002)
State Board of Agriculture (State Fair Board) (December 2001)
Nebraska Environmental Trust Board (October 2001)
Nebraska Department of Roads: Use of Consultants for Preconstruction Engineering (June 2001)
Department of Correctional Services, Inmate Welfare Fund (November 2000)
Bureau of Animal Industry: An Evaluation of the State Veterinarian's Office (March 2000)
Nebraska Ethanol Board (December 1999)
State Foster Care Review Board: Compliance with Federal Case-Review Requirements (January 1999)
Programs Designed to Increase The Number of Providers In Medically Underserved Areas of Nebraska (July 1998)
Nebraska Department of Agriculture (June 1997)
Board of Educational Lands and Funds (February 1997)
Public Service Commission: History of Structure, Workload and Budget (April 1996)
Public Employees Retirement Board and Nebraska Public Employees Retirement Systems:
Review of Compliance-Control Procedures (March 1996)
Leaking Underground Storage Tank Program (December 1995)
School Weatherization Fund (September 1995)
The Training Academy of the Nebraska State Patrol and the Nebraska Law Enforcement Training Center (September 1995)
Nebraska Equal Opportunity Commission (January 1995)
The Interstate Agricultural Grain Marketing Commission (February 1994)

Preaudit Inquiries

Implementation of the Nebraska Information System (NIS) (November 2005)
The Lincoln Regional Center Psychiatrists' Work Commitments (September 2005)
The Nebraska State Patrol's Record of its Investigation of State Treasurer Lorelee Byrd (November 2004)
HHSS Public Assistance Subprograms' Collection of Overpayments (August 2004)
NDEQ Recycling Grant Programs (October 2003)
HHSS Reimbursement and Overpayment Collection (August 2003)
Grain Warehouse Licensing in Nebraska (May 2003)
HHSS Personal-Services Contracts (July 2002)
Livestock Waste Management Act (May 2002)
Nebraska Telecommunications Universal Service Fund (April 2001)
State Board of Health (November 2001)
State Board of Agriculture (State Fair Board) (August 2001)
Game and Parks Commission Cash Funds (August 1999)
Education Technology (January 1998)
Nebraska Research and Development Authority (April 1997)
Nebraska's Department of Agriculture (June 1996)
Nebraska's Department of Correctional Services Cornhusker State Industries Program (April 1996)
DAS Duplication of NU Financial Record-Keeping (February 1995)