IT Project Proposal Report - Detail
Agency: 013 - DEPT OF EDUCATION
Budget Cycle: 2017-2019 Biennium　　　　　Version: AF - AGENCY FINAL REQUEST

IT Project : Teacher Cert System Upgrade

General Section

Contact Name : Dean Folkers	**E-mail :** dean.folkers@nebraska.gov	**Agency Priority :**	2
Address : 301 Centennial Mall South	**Telephone :** 4024714740	**NITC Priority :**	
City : Lincoln		**NITC Score :**	
State : Nebraska	**Zip :** 68509		

Expenditures

IT Project Costs	Total	Prior Exp	FY16 Appr/Reappr	FY18 Request	FY19 Request	Future Add
Contractual Services						
Design	0	0	0	0	0	0
Programming	0	0	0	0	0	0
Project Management	0	0	0	0	0	0
Data Conversion	0	0	0	0	0	0
Other	550,000	0	0	275,000	275,000	0
Subtotal Contractual Services	550,000	0	0	275,000	275,000	0
Telecommunications						
Data	0	0	0	0	0	0
Video	0	0	0	0	0	0
Voice	0	0	0	0	0	0
Wireless	0	0	0	0	0	0
Subtotal Telecommunications	0	0	0	0	0	0
Training						
Technical Staff	0	0	0	0	0	0
End-user Staff	0	0	0	0	0	0
Subtotal Training	0	0	0	0	0	0

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Expenditures

IT Project Costs	Total	Prior Exp	FY16 Appr/Reappr	FY18 Request	FY19 Request	Future Add
Other Operating Costs						
Personnnel Cost	0	0	0	0	0	0
Supplies & Materials	0	0	0	0	0	0
Travel	0	0	0	0	0	0
Other	0	0	0	0	0	0
Subtotal Other Operating Costs	0	0	0	0	0	0
Capital Expenditures						
Hardware	0	0	0	0	0	0
Software	0	0	0	0	0	0
Network	0	0	0	0	0	0
Other	0	0	0	0	0	0
Subtotal Capital Expenditures	0	0	0	0	0	0
TOTAL PROJECT COST	550,000	0	0	275,000	275,000	0

Funding

Fund Type	Total	Prior Exp	FY16 Appr/Reappr	FY18 Request	FY19 Request	Future Add
General Fund	0	0	0	0	0	0
Cash Fund	550,000	0	0	275,000	275,000	0
Federal Fund	0	0	0	0	0	0
Revolving Fund	0	0	0	0	0	0
Other Fund	0	0	0	0	0	0
TOTAL FUNDING	550,000	0	0	275,000	275,000	0
VARIANCE	0	0	0	0	0	0

IT Project: Teacher Cert System Upgrade

EXECUTIVE SUMMARY:

Please see attached NITC Project Proposal Form.

Attachments:

   2017-19 Teacher Cert Project.pdf

GOALS, OBJECTIVES, AND OUTCOMES (15 PTS):

Please see attached NITC Project Proposal Form.

PROJECT JUSTIFICATION / BUSINESS CASE (25 PTS):

Please see attached NITC Project Proposal Form.

TECHNICAL IMPACT (20 PTS):

Please see attached NITC Project Proposal Form.

PRELIMINARY PLAN FOR IMPLEMENTATION (10 PTS):

Please see attached NITC Project Proposal Form.

RISK ASSESSMENT (10 PTS):

Please see attached NITC Project Proposal Form.

FINANCIAL ANALYSIS AND BUDGET (20 PTS):

Please see attached NITC Project Proposal Form.

Nebraska Information Technology Commission

Project Proposal Form

**Funding Requests
for Information Technology Projects**

2017-2019 Biennial Budget

IMPORTANT NOTE: Project proposals should only be submitted by entering the information into the Nebraska Budget Request and Reporting System (NBRRS). The information requested in this Microsoft Word version of the form should be entered in the NBRRS in the "IT Project Proposal" section. The tabs in the "IT Project Proposal" section coincide with sections contained in this Microsoft Word version of the form. Information may be cut-and-pasted from this form or directly entered into the NBRRS. ALSO NOTE that for each IT Project Proposal created in the NBRRS, the submitting agency must prepare an "IT Issue" in the NBRRS to request funding for the project.

Project Title	Teacher Certification Upgrade
Agency/Entity	Nebraska Department of Education

Notes about this form:

1. **USE.** The Nebraska Information Technology Commission ("NITC") is required by statute to "make recommendations on technology investments to the Governor and the Legislature, including a prioritized list of projects, reviewed by the technical panel..." Neb. Rev. Stat. § 86-516(8). "Governmental entities, state agencies, and noneducation political subdivisions shall submit all projects which use any combination of general funds, federal funds, or cash funds for information technology purposes to the process established by sections 86-512 to 86-524. The commission may adopt policies that establish the format and minimum requirements for project submissions." Neb. Rev. Stat. § 86-516(5). In order to perform this review, the NITC and DAS Budget Division require agencies/entities to complete this form when requesting funding for technology projects.
2. **WHICH TECHNOLOGY BUDGET REQUESTS REQUIRE A PROJECT PROPOSAL FORM?** See NITC 1-202 available at http://nitc.ne.gov/standards/. Attachment A to that document establishes the minimum requirements for project submission.
3. **COMPLETING THE FORM IN THE NEBRASKA BUDGET REQUEST AND REPORTING SYSTEM (NBRRS).** Project proposals should only be submitted by entering the information into the NBRRS. The information requested in this Microsoft Word version of the form should be entered in the NBRRS in the "IT Project Proposal" section. The tabs in the "IT Project Proposal" section coincide with sections contained in this Microsoft Word version of the form. Information may be cut-and-pasted from this form or directly entered into the NBRRS. ALSO NOTE that for each "IT Project Proposal" created in the NBRRS, the submitting agency must prepare an "IT Issue" in the NBRRS to request funding for the project.
4. **QUESTIONS.** Contact the Office of the CIO/NITC at (402) 471-7984 or ocio.nitc@nebraska.gov

General Information

Project Title	Teacher Certification Upgrade
Agency (or entity)	Nebraska Department of Education

Contact Information for this Project:

Name	Dean Folkers
Address	301 Centennial Mall S, PO Box 94987
City, State, Zip	Lincoln NE 68509
Telephone	402-471-4740
E-mail Address	dean.folkers@nebraska.gov

Executive Summary

Provide a one or two paragraph summary of the proposed project. This summary will be used in other externally distributed documents and should therefore clearly and succinctly describe the project and the information technology required.

The teacher certification (TC) and licensure system operated at the Nebraska Department of Education has undergone periodic maintenance and operational retrofitting over the past 15 years. As part of a department wide focus on evaluating systems status, increasing efficiency and operations, and mitigating security risks the TC system has been identified as needing to go through an update. A portion of the licensing fees provided by users is set aside to support future updates/upgrades to the system and are targeted for the process.

The primary scope of an initial phase is the evaluation and documentation of business process, integration of other existing related legacy systems, and a recommendation for the options to move forward with the system upgrade/development. Based on these recommendations and decision will be made as to the appropriate path, costs, and project plan to complete the work.

Goals, Objectives, and Projected Outcomes (15 Points)

1. Describe the project, including:
   - Specific goals and objectives;
   - Expected beneficiaries of the project; and
   - Expected outcomes.

Specific goal and objectives:

Upgrade the Teacher Certification System

Beneficiaries:
Internal users: through a more efficient process of managing requests, propagating business logic and rules, and supporting response time to users.

External users: would benefit from an updated system to process licensure applications, integration with higher education offices for transcript validation and transport, online fee collection, access to send certificates, and other efficient self service tools.

Expected Outcomes:
Modernize the TC system that implements efficient business approaches, supports integration of systems, and streamlines the operations and support.

Increased security measures associated with the storage and management of the TC data.

2. Describe the measurement and assessment methods that will verify that the project outcomes have been achieved.

   Until the specifications and project have been defined in the coming the primary goal will be to complete the requirements gathering and documentation phase of the project.

3. Describe the project's relationship to your agency comprehensive information technology plan.

   This project is part of the agencies Technology Plan for the next biennium.

Project Justification / Business Case (25 Points)

4. Provide the project justification in terms of tangible benefits (i.e. economic return on investment) and/or intangible benefits (e.g. additional services for customers).

   - Increased customer service experience.
   - Efficient and secure system to support historical and future teacher licensing
   - Integration with existing staffing data system and alignment to education data standards support e transport of record information to and from other state Certification offices for efficient processing.

5. Describe other solutions that were evaluated, including their strengths and weaknesses, and why they were rejected. Explain the implications of doing nothing and why this option is not acceptable.

   At this point, the primary phase of the project being implemented is the evaluation of options. Because of the budget cycle timing, the decision as to the solution has not been determined, but will result from the requirements/documentation phase to begin in

October 2016. The submission of this request to allow for authorization of the cash funds set aside for this system in the biennium budget for 17-19.

6. If the project is the result of a state or federal mandate, please specify the mandate being addressed.

State law requires teachers and administrations maintain an active teaching/administrative license to be employed in Nebraska public schools. The federal expectations are the schools employ teachers teaching in areas of endorsement. The Teacher Certification system is the mechanism to manage and support the record keeping, validation, and licensing decisions for the 50,000 active licenses in Nebraska.

Technical Impact (20 Points)

7. Describe how the project enhances, changes or replaces present technology systems, or implements a new technology system. Describe the technical elements of the project, including hardware, software, and communications requirements. Describe the strengths and weaknesses of the proposed solution.

The current Teacher Certification System was built on Delphi technology in the late 1990's. The system is in need of modernization, privacy and security updates, customer service support enhancement and integration with the Nebraska Educator staff data.

The specific technical solution has not been identified to date as the project requirements/documentation phase is set to begin in October 2016.

8. Address the following issues with respect to the proposed technology:
    *   Describe the reliability, security and scalability (future needs for growth or adaptation) of the technology.
    *   Address conformity with applicable NITC technical standards and guidelines (available at http://nitc.ne.gov/standards/) and generally accepted industry standards.
    *   Address the compatibility with existing institutional and/or statewide infrastructure.

A strong focus of any proposed system will have the cornerstones of:
    o   Security,
    o   Reliability
    o   Scalability
    o   Integration with existing and other state agencies and higher education institutions
    o   And would comply or exceed all NITC technical standards and guidelines.

Preliminary Plan for Implementation (10 Points)

9. Describe the preliminary plans for implementing the project. Identify project sponsor(s) and examine stakeholder acceptance. Describe the project team, including their roles, responsibilities, and experience.

The NDE Project Management Office (PMO) will be responsible for deploying staff or contractors to manage this project.

Information related to the PMO and scope of operations to consider for the project include:

Project Manager Qualifications

NDE has established a Project Management Office and has hired a certified project manager to lead this effort. Additional project managers will be assigned to help manage the **Shared Systems and Supports** Project.

The project managers responsible for expanding the **Shared Systems and Supports** project must have the appropriate skills, education, experience, and knowledge to lead the efforts from analysis through implementation. Specifically, the project manager must meet the following minimum qualifications:

- Previous experience developing IT project plans
- Knowledge of team leadership principles
- Ability to work with other organizations in order to establish a process for sharing data
- Knowledge of techniques for quality assurance and risk management
- Conflict resolution skills and related experience with stakeholders, vendors, and staff
- Knowledge of IT project management and execution methodologies such as the Project Management Institute's (PMI) Project Management Body of Knowledge (PMBOK)
- Experience working with and managing an outside application vendor

Project Management Methodology

NDE will utilize project management best practices activities that include:

- Development of a project charter defining the project and roles and responsibilities
- Defining activities and their sequence
- Development of a project schedule and budget
- Resource, quality, and configuration planning
- Development of business and technical requirements
- Risk and change management
- Ongoing performance review, corrective actions, and project plan updates
- Monitoring planned versus actual performance, schedule, and budget
- Ongoing quality assurance and documentation
- User review and acceptance
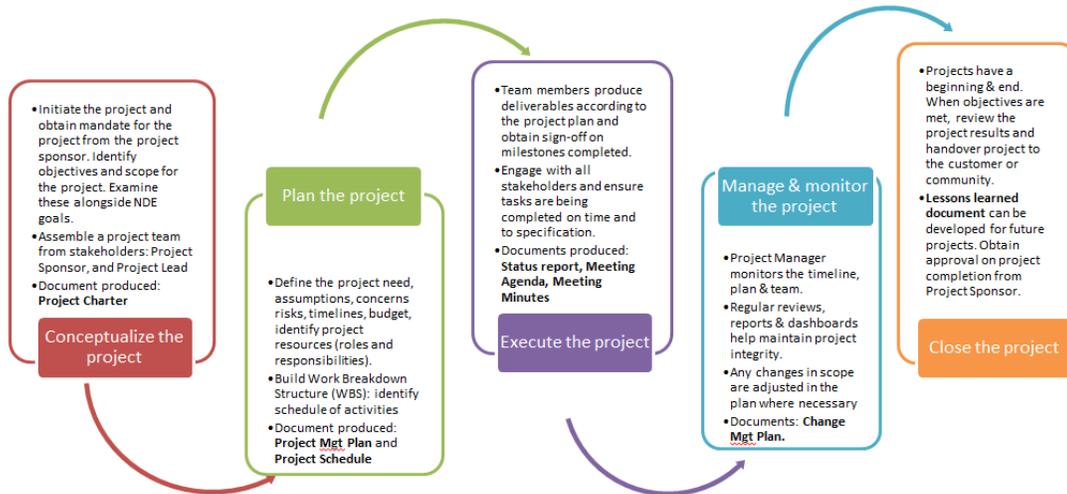- Post Implementation Evaluation.

Additional project management activities are detailed below under Roles and Responsibilities.

Project Plan

This project will consist of those activities required to accomplish the proposed projects and implement the **Shared Systems and Supports** project that would meet each of the functional requirements described in this document. Project methodology life cycle defines the five project management phases or processes: conceptualize the project, plan the project, execute the project, manage and monitor the project, and finally close the project. Each phase addresses a specific aspect of managing a project from definition through close. Although these phases are described sequentially, in practice some of these phases may overlap or be applied concurrently during the lifetime of the project.

DIAGRAM 3

Roles and Responsibilities

Role	Responsibilities
Project Sponsor	• Provides executive level leadership and guidance of the project • Secures project funding and ensures the availability of project resources • Participates in Steering Committee meetings that address key project milestones • Monitors project progress • Communicates project status to major stakeholders • Champions support for the project and markets its benefits • Provides direction on alternative strategies to accomplish project goals if risks/issues arise • Approves the project scope and approach
Executive Leadership Committee	• Guides the overall effort towards the achievement of its objectives • Attends and actively participates in Steering Committee meetings • Communicates project objectives and status to peers, colleagues, and staff • Provides direction and guidance to the development process

	• Provides input on development progress • Sets priorities of recommendations • Ensures support and buy-in for project recommendations in areas of influence • Assists the Project Manager to resolve issues and remove obstacles
Project Management Office Lead	• Helps coordinate work efforts that impact the project. • Resolves significant project issues. • Communicates project status to internal and external stakeholders as needed. • Reviews project deliverables • Elevates budget, schedule, and technical issues to the Project Sponsor, as necessary
Project Manager	• Coordinates and oversees project activities. • Ensures that project work is completed according to schedule • Develops project management-related deliverables. • Serves as liaison between vendor and stakeholders. • Tracks and resolves project issues. • Ensures that issues and changes are documented. • Maintains the project work plan. • Institutes controls to determine adherence to the project work plan and schedule. • Develops and executes the risk management plan. • Reviews project deliverables. • Facilitates project management team and stakeholder meetings. • Conducts project team meetings. • Prepares weekly project status reports. • Facilitates active and timely participation of program and technical staff for the duration of the project.
Subject Matter Experts	• Provides input for requirements and design • Represents the project from a business perspective • Prioritizes user acceptance components • Manages and implements the acceptance test work plan • Communicates test results to the IT teams • Escalates risks and mitigation measures to the appropriate organization level • Participates in end user acceptance testing • Participates in user training • Participates in outreach and communication prior to and during implementation.

10. List the major milestones and/or deliverables and provide a timeline for completing each.

General Project Framework

Requirements gathering   October 2016   Complete February 2017
Determine viable solution(s)   Complete March 2017
     Build or buy
Implementation   Begin July 2017

QA Testing   Estimated January 2018
Training   January-March 2018
Deployment   April –June 2018

11. Describe the training and staff development requirements.

    Training on system will be required.

12. Describe the ongoing support requirements.

    Part of the requirements gathering and decision making process will be consideration for the future Total Cost of Ownership (TCO). Existing NDE staff provide technical support for maintaining solution, providing enhancements, and adjusting to changing laws and certification requirements. It is an assumption that this would continue to occur.

Risk Assessment (10 Points)

13. Describe possible barriers and risks related to the project and the relative importance of each.

    Timing and options not available to complete the task

14. Identify strategies which have been developed to minimize risks.

    Effective planning and evaluation of solutions and options for implementation and development.

Financial Analysis and Budget (20 Points)

15. Financial Information

The "Financial" information tab in the Nebraska Budget Request and Reporting System (NBRRS) is used to enter the financial information for this project (NOTE: For each IT Project Proposal created in the NBRRS, the submitting agency must prepare an "IT Issue" in the NBRRS to request funding for the project.)

A cash fund has been accruing a portion of license fees to offset the costs associated with an upgrade to the system.

The targeting budget estimate is use $275,000 in contractual services for the coming biennium to achieve the options resulting from the requirements/documentation phase of the implementation.