November 15, 2018

Report to the Governor & Legislature

Recommendations on Technology
Investments for the 2019 - 2021 Biennium

NITC | Nebraska Information
Technology Commission

State of Nebraska

Nebraska Information Technology Commission

nitc.nebraska.gov

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Contents

Introduction

This report contains the Nebraska Information Technology Commission's recommendations on technology investments for the 2019-2021 biennium. It is submitted pursuant to the commission's statutory responsibility 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).

This report contains the following sections:

- **Section 1** is a prioritized list of projects.
- **Section 2** includes the summary sheets for each of the projects.

A copy of this report and the full text of all of the project proposals are posted at: http://www.nitc.nebraska.gov/commission/reports/reports.html. The project review process is described in detail in NITC § 1-202.

SECTION 1: NITC Recommendations - Project Prioritization

Category	Description
Mandate	Required by law, regulation, or other authority.
Tier 1	Highly Recommended. Mission critical project for the agency or the state.
Tier 2	Recommended. Project with high strategic importance for the agency or the state.
Tier 3	Other. Project with strategic importance for the agency or the state; but, in general, has an overall lower priority than the Tier 1 and Tier 2 projects.
Insufficient Information	Insufficient information to make a recommendation.

Project #	Agency	Project Title	FY2020	FY2021	Total Project Cost*
Mandate					
None					
Tier 1					
09-01	SECRETARY OF STATE	Election Equipment Replacement	$12,569,660		$12,569,660
65-01	DEPT OF ADMINISTRATIVE SERVICES	Budget software for fuzioN	$1,355,583	$256,940	$1,612,523
Tier 2					
35-01	LIQUOR CONTROL COMMISSION	NLCC Licensing Software	$821,000	$156,000	$1,133,000
47-01	EDUCATIONAL TELECOMMUNICATIONS COMM	Radio Transmission Project	$270,000	$120,000	$390,000
47-02	EDUCATIONAL TELECOMMUNICATIONS COMM	KLNE Transmitter Replacement	$480,000		$480,000
47-04	EDUCATIONAL TELECOMMUNICATIONS COMM	Tower Lighting Systems upgrade		$427,000	$427,000
57-01	OIL & GAS CONSERVATION COMM	RBDMS Upgrade	$350,000	$350,000	$1,050,000

Project #	Agency	Project Title	FY2020	FY2021	Total Project Cost*
Tier 3					
54-01	STATE HISTORICAL SOCIETY	CRM Maintenance	$50,000	$50,000	$150,000
54-02	STATE HISTORICAL SOCIETY	Digital Preservation & Access Maintenance	$25,000	$25,000	$75,000

*Total project cost may include prior year or future planned costs in addition to biennial budget request amounts.

SECTION 2: Project Summary Sheets

Summary Sheet Contents:
- Summary of Request
- Financial Summary
- Proposal Score
- Reviewer Comments
- Technical Panel Comments
- Advisory Council Comments
- NITC Comments
- Agency Response to Reviewer Comments (if any)

09 - Secretary of State

Proposal Name: Election Equipment Replacement
NITC ID: 09-01

PROJECT DETAILS

Project Contact: Wayne Bena
Agency: 09 - Secretary of State
NITC Tier Alignment: Tier 1

Agency Priority: 1

SUMMARY OF REQUEST

The purpose of this project is to replace the existing election equipment consisting of voting tabulation equipment, ADA-accessible ballot marking equipment and election results reporting software statewide; this will not include our current voter registration database software. The existing equipment, while accurate and secure, has been used in Nebraska
for more than 12 years; it is showing wear and tear consistent with its age. Support & replacement equipment is becoming scarcer. Our vendor is no longer manufacturing the equipment Nebraska uses. Replacement equipment & software is needed at this time in order to maintain the integrity, security, and ADA standards of elections in Nebraska.

The Secretary of State supervises the conduct of primary and general elections in Nebraska (Neb. Rev. Stat. §32-202). The project will be a full replacement and update of outdated and obsolete election equipment that the state purchased in 2005. The project will require an RFP selection process to identify a vendor, funding for new equipment, delivery of new equipment to all 93 counties, and training for all 93 county election officials prior to the May 12, 2020 statewide primary election.

The purpose of this project is to replace the existing election equipment consisting of voting tabulation equipment, ADA-accessible ballot marking equipment and election results reporting software statewide; this will not include our current voter registration database software.

Replacing equipment ensures continued secure, reliable, convenient and accurate voting experiences. There is proprietary software that accompanies the current equipment, which means any equipment change requires a replacement of the reporting software. This replacement is necessary to stay up-to-date and vital in the ever-changing election landscape when security is under intense scrutiny.

The existing equipment, while accurate and secure, has been used in Nebraska for more than 12 years; it is showing wear and tear consistent with its age. Regular maintenance contributes to it working; however, in more and more instances, the machines are performing less optimally than even five years ago. Our current vendor is no longer manufacturing the equipment Nebraska uses, so having access to support and replacement equipment when needed is becoming more scarce. Replacement equipment and software is needed at this time in order to maintain the integrity, security, and ADA standards of elections in Nebraska.

A statewide solution to the current elections infrastructure is crucial in maintaining uniformity across Nebraska. In addition, any equipment replacement should adhere to Nebraska's standard of voting by use of a paper ballot.

FINANCIAL SUMMARY

09 - Secretary of State

Proposal Name: Election Equipment Replacement
NITC ID: 09-01

Expenditures

	Fiscal Year 2020	Fiscal Year 2021	Total
Contractual Services:	$1,372,000.00	$0.00	$1,372,000.00
Telecommunications:	$0.00	$0.00	$0.00
Training:	$0.00	$0.00	$0.00
Project Costs:	$46,500.00	$0.00	$46,500.00
Capital Expenditures:	$11,151,160.00	$0.00	$11,151,160.00
Total Estimated Costs:	$12,569,660.00	$0.00	**$12,569,660.00**

Comments:

Funding

	Fiscal Year 2020	Fiscal Year 2021	Total
General Fund:	$12,569,660.00	$0.00	$12,569,660.00
Cash Fund:	$0.00	$0.00	$0.00
Federal Fund:	$0.00	$0.00	$0.00
Revolving Fund:	$0.00	$0.00	$0.00
Other Fund:	$0.00	$0.00	$0.00
Total Requested Funding:	$12,569,660.00	$0.00	**$12,569,660.00**

Comments:

PROPOSAL SCORE

	reviewer1	reviewer2	reviewer3	Average
Goals, Objectives and Projected Outcomes (15)	12	15	12	13
Project Justification / Business Case (25)	20	25	25	23
Technical Impact (20)	15	14	16	15
Preliminary Plan for Implementation (10)	6	8	7	7
Risk Assessment (10)	6	6	6	6
Financial Analysis and Budget (20)	10	14	13	12
Total Score	69	82	79	77

(Average)

REVIEWER COMMENTS

Goals, Objectives and Projected Outcomes   Review Score = 12/15

Strengths: Goals and objectives are clearly stated, the need is evident, and the project deliverables are consistent, measurable and appear attainable.

Weaknessess: The project assessment method is not tied to any specific key performance indicators.

Project Justification / Business Case   Review Score = 20/25

Strengths: The rationale is clear and the selected course of action appears to be the best alternative.

Weaknessess: The information provided is limited making it difficult to fully evaluate the proposed solution in context. For example, the number of repairs over the past 5 years would appear to average six per county or 1.2 repairs each year. That is a very low number, however, there is no information provided as to the impact of the equipment failures on the process.

Technical Impact   Review Score = 15/20

Strengths: The need to replace existing equipment is clear and the technical requirements are indicated in the context of compliance with existing certification standards.

Weaknessess: The technical elements aren't questionable, however, the scant information creates many questions. For example, the narrative indicates that consumables will be more readily available and secure while also indicating the machines will only use USB drives specifically designed for the machines. Are these USB drives part of a single-sourced solution?

Preliminary Plan for Implementation   Review Score = 6/10

Strengths: The proposed plan includes an RFP process that appears to provide adequate time to obtain and evaluate responses. A training plan is enumerated.

Weaknessess: The proposed plan allows 6 months to evaluate and award a contract but only 3 months to install, train and commission the system across 93 counties. With the information provided this creates questions as to how realistic the timeline is and whether there are any contingencies.

Risk Assessment   Review Score = 6/10

Strengths: Risks are clearly enumerated.

Weaknessess: Perhaps the most important form of risk mitigation is the ability to use the existing equipment, however, there is no information provided about what steps will be taken to make sure the current system is in good working order and deployed to provide a fail-safe. The information provided indicates that this is a statewide system with no information about what would happen in the event one or more counties couldn't use the new system while most others could.

Financial Analysis and Budget   Review Score = 10/20

Strengths: Anticipated expenditures are appear to account for the various procurement and implementation considerations.

Weaknessess: It is nearly impossible with the information provided to make any determination of whether the proposed budget is adequate or appropriate. The hardware to software cost ratio and overall cost of the implementation elicit a number of questions for which there aren't answers in the brief narrative.

Goals, Objectives and Projected Outcomes   Review Score = 15/15

Strengths:

Weaknessess:

Project Justification / Business Case   Review Score = 25/25

Strengths:

Weaknessess:

Technical Impact   Review Score = 14/20

Strengths:

Weaknessess: IT and Cyber Security is not adequately addressed

Preliminary Plan for Implementation   Review Score = 8/10

Strengths:

Weaknessess: Who is responsible for installation of the equipment and training the users? How is acceptance of installation to be handled in each county or precinct?

Risk Assessment   Review Score = 6/10

Strengths:

Weaknessess: IT and Cyber Security Risks have not been clearly defined or addressed. Specifically risks regarding the tabulation and reporting software.

Financial Analysis and Budget   Review Score = 14/20

Strengths:

Weaknessess: There is no detail regarding the need for $1.4M for training, travel, and on-site support.

Goals, Objectives and Projected Outcomes   Review Score = 12/15

Strengths: Good description of project as far as replacing existing equipment one for one.

Weaknessess: Most reviewers will have trouble staying on just the replacement of existing equipment and stray into other parts of the election system processing.

Project Justification / Business Case   Review Score = 25/25

Strengths: clearly stated existing equipment is failing and no longer supported.

Weaknessess: short time frame does not allow for new or creative solutions.

Technical Impact   Review Score = 16/20

Strengths: Scope of project clearly define

Weaknessess:

Preliminary Plan for Implementation   Review Score = 7/10

Strengths: Plan lays out what needs to be done within a specific time frame that can not slip.

Weaknessess: Lot of work to be done in a relatively short period of time. RFP timeframes seem aggressive. Contingent plans for how to address new vendor are not considered. Plans to continuing election processing if new equipment is not installed and tested in time. Unforeseen issues could severely impact the completion of this project and contingent plans should be developed.

Risk Assessment   Review Score = 6/10
Strengths:
Weaknessess: Lots of individual need to work together to bring project to completion. Risks are unknown at this time other than current equipment is failing.

Financial Analysis and Budget   Review Score = 13/20
Strengths:
Weaknessess: costs are estimates and may not meet expectations.

TECHNICAL PANEL COMMENTS

Is the project technically feasible? Yes
Is the proposed technology appropriate for the project? Yes
Can the technical elements be accomplished within the proposed timeframe and budget? Yes

Comments:

ADVISORY COUNCIL COMMENTS

Advisory Council Tier Recommendation: Tier 1

Comments:

NITC COMMENTS

Tier 1

AGENCY RESPONSE (OPTIONAL)

See attachment [09-01_agencyresponse.pdf] for agency response.

Goals, Objectives, and Projected Outcomes

Weaknesses Identified:

1. *The project assessment method is not tied to any specific key performance indicators.*

2. *Most reviewers will have trouble staying on just the replacement of existing equipment and stray into other parts of the election system processing.*

Response:

The Secretary of State's office acknowledges that this is not the typical IT project usually submitted and reviewed. Prior to submission, representatives of the Secretary of State's office consulted with the OCIO's office to confirm that a project plan should be submitted. This project only consists of replacing the ballot counting equipment and the ballot marking devices at polling locations for those with disabilities.

Project Justification/ Business Case

Weaknesses Identified:

1. *The information provided is limited making it difficult to fully evaluate the proposed solution in context. For example, the number of repairs over the past 5 years would appear to average six per county or 1.2 repairs each year. That is a very low number, however, there is no information provided as to the impact of the equipment failures on the process.*

2. *Short time frame does not allow for new or creative solutions*

Response:

The Secretary of State's office has seen an increase in repairs for the election equipment and submits that even one breakdown on election night could have a tremendous effect on the confidence voters have with our elections. Most failures will occur on Election Day and multiple failures will delay results. Action must be taken preemptively to prevent a widespread failure on Election Day. If the project's vendor cannot meet deadlines, the current election equipment will be used.

Technical Impact:

Weakness Identified:

1. *The technical elements aren't questionable; however, the scant information creates many questions. For example, the narrative indicates that consumables will be more readily available and secure while also indicating the machines will only use USB drives specifically designed for the machines. Are these USB drives part of a single-sourced solution?*

2. *IT and Cyber Security is not adequately addressed*

Response:

In order for election equipment to be considered for certification in Nebraska, the equipment must first be certified by the U.S. Election Assistance Commission under set guidelines regarding IT and security. The Secretary of State's office will not certify equipment that has not met EAC certification. Cyber Security is a top priority for the Secretary of State's Office.

There will be an RFP for this equipment purchase. Multiple vendors have election equipment that has more readily available consumables such as USB drives vs. the current zip disk that save vote counts or digital printers vs. dot matrix printers currently in use.

Preliminary Plan for Implementation

Weakness Identified:

1. *The proposed plan allows 6 months to evaluate and award a contract but only 3 months to install, train and commission the system across 93 counties. With the information provided, this creates questions as to how realistic the timeline is and whether there are any contingencies.*

2. *Who is responsible for installation of the equipment and training the users? How is acceptance of installation to be handled in each county or precinct*

3. *Lot of work to be done in a relatively short period of time. RFP timeframes seem aggressive. Contingent plans for how to address new vendor are not considered. Plans to continuing election processing if new equipment is not installed and tested in time. Unforeseen issues could severely impact the completion of this project and contingent plans should be developed.*

Response:

The next Statewide Election is in May of 2020. An RFP would expect the project to be ready in time for that Primary. All current equipment will remain in the counties until the delivery and training of the new equipment was completed. If project deadlines are not met, the contingency plan would be to use the current equipment for the 2020 Primary and implementation would be completed prior to the general election. In addition, the vendor would handle installation and training with subsequent training by the Secretary of State's office. Finally, representatives of the vendor would be required to be in each county on Election Day to troubleshoot any issues.

Risk Assessment

Weakness Identified:

1. *Perhaps the most important form of risk mitigation is the ability to use the existing equipment, however, there is no information provided about what steps will be taken to make sure the current system is in good working order and deployed to provide a fail-safe. The information provided indicates that this is a statewide system with no information about what would happen in the event one or more counties couldn't use the new system while most others could.*

2. *Lots of individual need to work together to bring project to completion. Risks are unknown at this time other than current equipment is failing.*

Response:

As described in the response in the Preliminary Plan for installation, current equipment would not be removed until the installation and training of the equipment in each county has occurred. The Secretary of State's office could confirm that the system is in good working order by conducting a statewide mock election of test ballots to ensure that the system is functioning properly prior to printing of the ballots for the statewide primary.

Financial Analysis and Budget

Weakness Identified:

1. *It is nearly impossible with the information provided to make any determination of whether the proposed budget is adequate or appropriate. The hardware to software cost ratio and overall cost of the implementation elicit a number of questions for which there aren't answers in the brief narrative.*

2. *There is no detail regarding the need for $1.4M for training, travel, and on-site support.*

3. *Costs are estimates and may not meet expectations.*

<u>Response:</u>

The budget for this project was created using publically available information regarding the cost of upgraded equipment, which was confirmed by a recent RFP in the State of Michigan. In addition, prices were requested in a quote for upgraded equipment from our current vendor for an insurance claim to replace equipment damaged from a roof leak in a county.

The training and onsite support budgeted was estimated by our current contract of $1,100 per person per day plus travel expenses in each county during installation as well as Election Day site support. Estimating at least two people traveling to each of Nebraska's 93 counties for at least two days each for installation and again on and before Election Day was the basis for the training budget. In addition, there will be a need for employees of the Secretary of State's office to travel to counties to provide supplemental training as well as outreach to the disability community to train on the new ballot marking equipment.

A spreadsheet of estimated costs per county is available for inspection at the Election Division or by request.

35 - Liquor Control Commission

Proposal Name: NLCC Licensing Software
NITC ID: 35-01

PROJECT DETAILS

Project Contact: Hobert Rupe
Agency: 35 - Liquor Control Commission
NITC Tier Alignment: Tier 2

Agency Priority: 1

SUMMARY OF REQUEST

NLCC is requesting to purchase an off-the-shelf alcoholic beverage licensing software system to streamline the statutory processes to manage the business and data relevant to Liquor Licensing and Licensee Compliance and Enforcement. POSSE is a flexible browser-based software product that will increase efficiency for internal staff, licensees, and citizens. The current database used by NLCC is a C1 system designed in 1987. By the purchase of POSSE, the NLCC would be able to continue to use that system and avoid the cost of a new database while also bringing modern functionality to the Commission and the public users.

FINANCIAL SUMMARY

	Expenditures		
	Fiscal Year 2020	Fiscal Year 2021	Total
Contractual Services:	$15,000.00	$0.00	$15,000.00
Telecommunications:	$0.00	$0.00	$0.00
Training:	$0.00	$0.00	$0.00
Project Costs:	$156,000.00	$156,000.00	$312,000.00
Capital Expenditures:	$650,000.00	$0.00	$650,000.00
Total Estimated Costs:	$821,000.00	$156,000.00	**$977,000.00**

Comments:

	Funding		
	Fiscal Year 2020	Fiscal Year 2021	Total
General Fund:	$821,000.00	$156,000.00	$977,000.00
Cash Fund:	$0.00	$0.00	$0.00
Federal Fund:	$0.00	$0.00	$0.00
Revolving Fund:	$0.00	$0.00	$0.00
Other Fund:	$0.00	$0.00	$0.00
Total Requested Funding:	$821,000.00	$156,000.00	**$977,000.00**

Comments:

PROPOSAL SCORE

		reviewer1	reviewer2	reviewer3	Average
Average	Goals, Objectives and Projected Outcomes (15)	10	15	10	12
	Project Justification / Business Case (25)	20	23	16	20
	Technical Impact (20)	20	19	13	17
	Preliminary Plan for Implementation (10)	10	9	5	8
	Risk Assessment (10)	10	10	5	8
	Financial Analysis and Budget (20)	10	18	10	13
	Total Score	80	94	59	78

REVIEWER COMMENTS

Goals, Objectives and Projected Outcomes   Review Score = 10/15

Strengths: SAAS - straight forward pricing and implementation plan.

Weaknessess: Customer Portal Payment Gateway - Will this utilize the states transaction processor? Is there a cost involved in conversion if required? No mention of PCI compliance or info security in general.

Project Justification / Business Case   Review Score = 20/25

Strengths: Paperless

Weaknessess: 57% of license and permit applications are now done online from 2012 Kansas report. Data out of date; however, utilizing that number what are the expected hours saved and corresponding plan to reduce staff if cost reductions or reduced time.

Technical Impact   Review Score = 20/20

Strengths: Hosting on site via OCIO would be more cost effective given the preliminary quotes. Also, data replication and coop would be addressed.

Weaknessess: Need to ensure PCI compliance is maintained

Preliminary Plan for Implementation   Review Score = 10/10

Strengths: Plan looks feasible and at this stage detailed enough for review.

Weaknessess:

Risk Assessment   Review Score = 10/10

Strengths: Shown to be a vendor with a track record

Weaknessess: PCI compliance

Financial Analysis and Budget   Review Score = 10/20

Strengths: Will certainly be savings in time and an ability to obtain better bus analytics.

Weaknessess: No attempt to provide any time/cost savings analytics via process improvement

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Goals, Objectives and Projected Outcomes   Review Score = 15/15

Strengths: Cleary defined rationale for the project.

Weaknessess:

Project Justification / Business Case   Review Score = 23/25

Strengths: Agree that an off the shelf package is preferred to a customized program from scratch. Would be helpful to have some idea of how much the improvement in turn around time will be on average if that can be estimated.

Weaknessess:

Technical Impact   Review Score = 19/20

Strengths: Positive that the vendor agrees that there is an opportunity for cost savings if the OCIO determines that in-house hosting is preferred for cost efficiency or other reasons.

Weaknessess:

Preliminary Plan for Implementation   Review Score = 9/10

Strengths: Well structured plan. The RFP process may change the outcome though depending on whether other feasible bids are submitted.

Weaknessess:

Risk Assessment   Review Score = 10/10

Strengths: Having the Kansas reference case experience helps reduce the potential risk.

Weaknessess:

Financial Analysis and Budget   Review Score = 18/20

Strengths:

Weaknessess:

Goals, Objectives and Projected Outcomes   Review Score = 10/15

Strengths: Software being used in another state.

Weaknessess:

Project Justification / Business Case   Review Score = 16/25

Strengths: This is a COT product and the score is only this high if is install and configured without modifications.

Weaknessess:

Technical Impact   Review Score = 13/20

Strengths: The OCIO could provide the hardware to support this software, however installing updates or patches to POSSE should be through an agreement between NLCC and POSSE. NLCC needs to become the subject matter expert in how this software works and be able to define how records move thourgh the system.

Weaknessess:

Preliminary Plan for Implementation   Review Score = 5/10
Strengths:
Weaknessess: What about data conversion, configuration of Nebraska rules and the operation task needed to implement new
software.
I don't see enough detail to support implementation, at best this request is in the planning stages.

Risk Assessment   Review Score = 5/10
Strengths:
Weaknessess: During the 18 month implementation NLCC will need to support dual systems until POSSE is fully implemented.

Financial Analysis and Budget   Review Score = 10/20
Strengths:
Weaknessess: total cost to implement and operate have not been estimated. The purchase price of the software is the basis for
this request.

TECHNICAL PANEL COMMENTS

Is the project technically feasible? Yes
Is the proposed technology appropriate for the project? Yes
Can the technical elements be accomplished within the proposed timeframe and budget? Yes

Comments:

ADVISORY COUNCIL COMMENTS

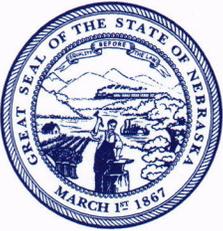Advisory Council Tier Recommendation: Tier 2

Comments:

NITC COMMENTS

Tier 2

AGENCY RESPONSE (OPTIONAL)

See attachment [35-01_agencyresponse.pdf] for agency response.

10/15/2018

NITC
I.T. Proposal: Agency 35 – Liquor Control Commission
NITC ID: 35-01

RE: Agency Response to Reviewer Comments:

<u>Agency response to Reviewer 1 identified weaknesses:</u>

- Weakness was "Customer Portal Payment Gateway – Will this utilize the state's transaction processor?"
  ANSWER BY LIQUOR CONTROL: Yes, the COT product will utilize the current Payport system being utilized for online payments.
- Weakness was "57% of license and permit applications are now done online from 2012 Kansas report."
  ANSWER BY LIQUOR CONTROL: Kansas provided an updated percentage for FY18 as 62%. Liquor Control Commission agrees this seems low. Although Nebraska will not require all applications to be submitted online, it certainly will highly encourage online applications and therefore estimate online applications to be more in the range of 85%. This is based on the fact that shipper license renewals are 100% online at this time and approximately 60% of retail liquor licenses are renewed online at this time.
- Weakness was "PCI compliance & maintenance"
  ANSWER BY LIQUOR CONTROL: Payment card industry compliance and maintenance will continue with Nebraska.Gov and the Payport payment system.
- Weakness identified was "no attempt to provide any time/cost savings analytics."
  ANSWER BY LIQUOR CONTROL: NLCC intends to have a 3rd party analysis performed to identify the time and cost savings which would result after the transition to the new licensing software is completed. NLCC believes there will be considerable time and cost savings but are unable to measure it until the "needs analysis" is completed.

<u>Agency response to Reviewer 3 identified weaknesses:</u>

- ❖ Strength was qualified by "COT product and the score is only this high if installed and configured without modifications."
  ANSWER BY LIQUOR CONTROL: The intention by the staff is to not modify the off the shelf product at all. It is determined that Liquor Control would instead modify our processes to conform to the COT product. This will then allow upgrades/updates of the software manufacturer to be automatic in Nebraska.

Janice M. Wiebusch
Commissioner

Robert Batt
Chairman

Bruce Bailey
Commissioner

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An Equal Opportunity Employer

I.T. Proposal: Agency 35 – Liquor Control Commission
NITC ID: 35-01

- ❖ Weakness was identified as "data conversion, configuration of Nebraska rules and the operation task needed to implement new software."
  ANSWER BY LIQUOR CONTROL: The software is designed especially for the alcohol beverage licensing industry and therefore the administrative side to the software will allow staff the power to customize the controls to fit our Nebraska rules and regulations. Liquor Control Commission staff acknowledges the need for CIO assistance regarding the data configuration and data transferring. Before moving forward with any purchase, this piece will need to be addressed as Liquor Control simply does not have the expertise.
- ❖ Weakness "during the 18 month implementation, NLCC will need to support dual systems until POSSE is fully implemented."
  ANSWER BY LIQUOR CONTROL: Liquor Control acknowledges this to be true but believes it would be true of any upgrade whether it was custom or off the shelf.
- ❖ Weakness "total cost to implement and operate have not been estimated. The purchase price of the software is the basis for this request."
  ANSWER BY LIQUOR CONTROL: Liquor Control acknowledges this to be true. It is the determination of the budget officer that the current base appropriation for NLCC is the current cost to implement the off the shelf product. NLCC staff acknowledges there will be additional work to implement a new licensing software program and are prepared to help in this endeavor.

The Liquor Control Commission appreciates the ability to respond to the weaknesses and concerns of the reviewers.

Respectfully,

Hobert R. Rupe
Executive Director
NEBRASKA LIQUOR CONTROL COMMISSION

HBR/lp

47 - Nebraska Educational Telecommunications Commission

Proposal Name: Radio Transmission Project
NITC ID: 47-01

PROJECT DETAILS

Project Contact: Ling-Ling Sun
Agency: 47 - Nebraska Educational Telecommunications Commission
NITC Tier Alignment: Tier 2

Agency Priority: 1

SUMMARY OF REQUEST

NET is requesting an appropriation to replace an aging FM antenna and aging feed line at KTNE (Alliance) and also the aging feed line at KRNE (Merriman). The antenna at KTNE is 28 years old and needs to be replaced. Transmission line repairs at KTNE over the last two years totaled $56,443 and KRNE repairs have totaled $44,000 over the last four years. Replacing this equipment and older components would be done to reduce rising maintenance costs and to eliminate downtime. Also, the NET FM system is the State of Nebraska's primary relay system for the Emergency Alert System. Total costs for this project are estimated at $390,000, split $270,000 in FY2020 for KTNE with the remaining $120,000 in FY2021 for KRNE.

Delaying the completion of this final phase any further would continue to increase off-air downtime at these sites and increase annual operating expenses for repairs, maintenance and supplies. The project would begin the summer of 2019 and proceed through the fall (weather and tower crews permitting) at KTNE. Work on the KRNE site would begin summer of 2020 and run through the fall of 2020. Delaying the work heightens the risk that tower crews will be difficult to schedule and may be more expensive due to on-going demand related to spectrum repacking adjustments on television towers and a nationwide shortage of tower crews.

FINANCIAL SUMMARY

Expenditures			
	Fiscal Year 2020	Fiscal Year 2021	Total
Contractual Services:	$0.00	$0.00	$0.00
Telecommunications:	$0.00	$0.00	$0.00
Training:	$0.00	$0.00	$0.00
Project Costs:	$0.00	$0.00	$0.00
Capital Expenditures:	$270,000.00	$120,000.00	$390,000.00
Total Estimated Costs:	$270,000.00	$120,000.00	**$390,000.00**

Comments: Total Cost is estimated at $390,000. $270,000 in FY2020 and $120,000 in FY2021.

Funding			
	Fiscal Year 2020	Fiscal Year 2021	Total
General Fund:	$270,000.00	$120,000.00	$390,000.00
Cash Fund:	$0.00	$0.00	$0.00
Federal Fund:	$0.00	$0.00	$0.00
Revolving Fund:	$0.00	$0.00	$0.00
Other Fund:	$0.00	$0.00	$0.00
Total Requested Funding:	$270,000.00	$120,000.00	**$390,000.00**

Comments:

PROPOSAL SCORE

	reviewer1	reviewer2	reviewer3	Average
Goals, Objectives and Projected Outcomes (15)	13	12	15	13
Project Justification / Business Case (25)	22	23	20	22
Technical Impact (20)	18	15	19	17
Preliminary Plan for Implementation (10)	10	7	10	9
Risk Assessment (10)	10	7	8	8
Financial Analysis and Budget (20)	18	17	18	18
Total Score	91	81	90	87

47 - Nebraska Educational Telecommunications Commission

Proposal Name: Radio Transmission Project
NITC ID: 47-01

REVIEWER COMMENTS

Goals, Objectives and Projected Outcomes Review Score = 13/15
Strengths: Required detail with clear objective.

Weaknessess:

Project Justification / Business Case Review Score = 22/25
Strengths: Good business case - citing statutory requirements.
Weaknessess:

Technical Impact Review Score = 18/20
Strengths: Standardizing on replacement equipment.
Weaknessess:

Preliminary Plan for Implementation Review Score = 10/10
Strengths:
Weaknessess:

Risk Assessment Review Score = 10/10
Strengths:
Weaknessess:

Financial Analysis and Budget Review Score = 18/20
Strengths: Anticipated expenses seem reasonable and are in line with past NET projects of a similar nature.
Weaknessess:

Goals, Objectives and Projected Outcomes Review Score = 12/15
Strengths: This project appears fairly clear cut, to replace the aging antennas and feed lines to two public radio towers.

Weaknessess: The section does not describe the relationship to the agency's information technology plan and whether this was an anticipated capital project. For those less familiar with radio broadcast engineering, it would have been helpful to have a brief breakdown of the work plan related to project measurement over time. And, please define "feed line". Is that the external tower cabling to reach the antennas?

Project Justification / Business Case Review Score = 23/25
Strengths: This project has a defined business case--replace the hardware or suffer unavoidable outages to rural areas of the State.
Weaknessess: Elsewhere in the project description it mentions the increasing costs incurred for annual repairs versus the cost of a total equipment replacement. That should be re-stated here in this section as part of the business case.

Technical Impact Review Score = 15/20
Strengths: Compliance with industry standards was mentioned, but the standards were not itemized.
Weaknessess: More granularity, including the technical equipment descriptions, would be valuable here. Are there previous NET tower equipment replacements done in the last three years that would help inform about this upcoming replacement? Is there a continuum of hardware equipment options that were considered before providing estimates, even though the procurement has not bee performed? e.g. Good, Better, Best?

Preliminary Plan for Implementation Review Score = 7/10
Strengths: Major project steps were outlined in the response.
Weaknessess: No detail on the NET project team; who does what? No breakdown of the major milestones or timeline, other than the fiscal year.

Risk Assessment Review Score = 7/10
Strengths: Requiring liability insurance and bonding is a positive for this project.
Weaknessess: What if the supply chain for equipment or availability of installers is negatively affected? What mitigation will be involved if the proposed timeline is interrupted?

Financial Analysis and Budget Review Score = 17/20
Strengths: Budget estimates seem reasonable for this kind of technical transition.
Weaknessess: More granular breakdown of the $376,000 of hardware (e.g. types of equipment, etc...) would have enhanced the project proposal.

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47 - Nebraska Educational Telecommunications Commission

Proposal Name: Radio Transmission Project
NITC ID: 47-01

Goals, Objectives and Projected Outcomes   Review Score = 15/15
Strengths: Clear on all points
Weaknessess:

Project Justification / Business Case   Review Score = 20/25
Strengths: Clear picture of benefits and importance
Weaknessess: Would be better if information included in the exec summary had been worked into this part of the narrative.
The other "few solutions" should have been mentioned.

Technical Impact   Review Score = 19/20
Strengths: Clear on all
Weaknessess:

Preliminary Plan for Implementation   Review Score = 10/10
Strengths: Clear plan that seems well within existing expertise
Weaknessess:

Risk Assessment   Review Score = 8/10
Strengths:
Weaknessess: Would be better to give clarification on any risks related to the mentioned "de-grandfathering" of towers.

Financial Analysis and Budget   Review Score = 18/20
Strengths: Budget seems appropriate but broadcast technology is generally outside my wheelhouse
Weaknessess:

TECHNICAL PANEL COMMENTS

Is the project technically feasible? Yes
Is the proposed technology appropriate for the project? Yes
Can the technical elements be accomplished within the proposed timeframe and budget? Yes

Comments:

ADVISORY COUNCIL COMMENTS

Advisory Council Tier Recommendation: Tier 2

Comments:

NITC COMMENTS

Tier 2

AGENCY RESPONSE (OPTIONAL)

See attachment [47-01_agencyresponse.pdf] for agency response.

Agency Responses to the reviewers comments on

47 - Nebraska Educational Telecommunications Commission

Proposal Name: Radio Transmission Project

NITC ID: 47-01

NET thanks the reviewer's comments and supports on this request. NET appreciates the opportunity to provide a written response as supplement information for clarification.

1. The section does not describe the relationship to the agency's information technology plan and whether this was an anticipated capital project. For those less familiar with radio broadcast engineering, it would have been helpful to have a brief breakdown of the work plan related to project measurement over time. And, please define "feed line". Is that the external tower cabling to reach the antennas?

This request is a part of long term plan and it is an anticipated capital project. Feedline often gets burnt due to various reasons causing broadcast outages. NET statewide services consists of nine full power transmitters. Reliability of each transmitter is affected by its environment and other various factors. NET has requested replacement of feedline and antenna for transmitters based on individual transmitter conditions. It is NET's intent to complete all nine transmitter feedline and antenna replacement over multi-years. Yes, feedline is transmission line that is passing/transferring high power RF frequency signals from the transmitter to the antenna mounted on the tower structure.

2. Elsewhere in the project description it mentions the increasing costs incurred for annual repairs versus the cost of a total equipment replacement. That should be re-stated here in this section as part of the business case

Thank you for the suggestion. Accumulated transmission line burnouts eventually become impractical financially and technically to repair. It costs less overall to replace with state-of-the-art, single, continuous run from transmitter to the antenna. NET elected to use helical line replacement in place of multiple 20' line sections, in hope of less burnout.

3. More granularity, including the technical equipment descriptions, would be valuable here. Are there previous NET tower equipment replacements done in the last three years that would help inform about this upcoming replacement? Is there a continuum of hardware equipment options that were considered before providing estimates, even though the procurement has not been performed? e.g. Good, Better, Best?

NET operates nine full power FM transmitters and has completed other transmission line and antenna replacement in the past years. All estimates are based on quotes secured from transmission line and antenna manufacturer and tower crew.

4. No detail on the NET project team; who does what? No breakdown of the major milestones or timeline, other than the fiscal year.

The replacement work will be done by a professional tower crew. Milestone and timeline will be based on bid response. NET will facilitate the installation work and manage the tower crews at our transmission sites to ensure all work in completed correctly and in a timely manner with minimal interruption to over the air broadcasts.

5. What if the supply chain for equipment or availability of installers is negatively affected? What mitigation will be involved if the proposed timeline is interrupted?

This can happen due to tower crew availability, delay at state purchasing side, and price increase if there is a supply shortage. Mitigation will be to continue repair outages as possible or have to face outages until we are able to repair and/or replacement is completed.

6. More granular breakdown of the $376,000 of hardware (e.g. types of equipment, etc...) would have enhanced the project proposal.

Equipment will be transmission line(s) and/or antenna systems. Labor will be tower crew. This is typically bid out as one turn-key service contract from the tower maintenance company.

7. Would be better if information included in the exec summary had been worked into this part of the narrative. The other "few solutions" should have been mentioned.

Repair or replacement are the only two options for this project.

8. Is the project technically feasible?

Yes. NET applies only industry standard toward this project.

9. Is the proposed technology appropriate for the project?

Industry has specific standards broadcasters must follow. NET elected helical transmission line to replace sectioned rigid lines after balance pros and cons in hope of less future burnout.

10. Can the technical elements be accomplished within the proposed timeframe and budget?

Yes, however, there are uncontrolled factors may impact timeline such as weather and tower crew availability.

Proposal Name: KLNE Transmitter Replacement and KXNE TV Transmitter Replacement

NITC ID: 47-02

NITC ID: 47-04

NET thanks the reviewer's comments and supports on these two requests. NET appreciates the opportunity to provide a written response as supplement information for clarification. Due to similarity of the two proposals and reviewers comments, NET chooses to response both 47-02 and 47-04 comments in one Q&A fashion to best answer the viewer's concerns.

1. There was no mention of the relationship to the agency's information technology plan. Was this an anticipated capital expense? How many Inductive Output Tube (IOT) transmitters have been replaced? How many are yet to be replaced?

Thank you for the suggestion. These NET requests are part of ITPlan and are anticipated capital expenses. NET has total of four IOT transmitters. One has been replaced, one is working in progress for replacement this year and two are requested for replacement.

2. Will solid state transmitters improve broadcast signal range or clarity?

No.

3. Even the State procurement process has timelines and variables outside of the agency's control. What effect would a drastic procurement process delay have on the feasibility of the overall project? Breaking down the total project timeline and milestones within the 24-month biennial budget timeline would be helpful.

It is NET's intent to complete the project within one FY for each request. The transmitter installation and proof of performance will take about two weeks after a successful procurement process. NET will have to continue maintain the transmitter or face the risk of staying off the air should any delay on the procurement process.

4. What effect would a drastic procurement process delay have on the feasibility of the overall project and how would it be mitigated?

NET will request from FCC a special temporary authority license to operate at reduced power level to cover a much reduced area or face the risk of off the air based on type of outage.

5. How was the $458,000 estimated for Hardware? Was it based on a recent Nebraska transmitter replacement project or a comparable project completed in another state? More detail desired on the Capital Expenditure section.

Estimate is obtained from manufacturer based on transmitter power level which is regulated by FCC license.

6. Tie-in to IT plan could have been more strongly described.

Thank you for the suggestion. NET will incorporate the suggestion to future requests.

7. No alternatives (if any) were discussed

Transmitter will be procured through state competitive bidding process. Transmitter has to comply with industry standard and FCC regulations.

8. Cost of maintenance not fully discussed to make the case clear about replace/maintain

IOT transmitter requires replacement of power tube approximately every 4-5 years at minimum cost of $52,000. Parts for repair over same period is estimated to be $7,500-$10,000. New solid state transmitter eliminates the need for IOT power tube and maintenance will be minimal over first 5-10 years.

9. Could more clearly describe maintenance/service benefits

NET existing IOT transmitters were modified from analog to digital. It is our hope to replace them before they fail and cause regional outages due to many cable head-ends relying on Over the Air signal for redistribution. Solid state

transmitter by nature will provide reduced power operation. Solid state transmitter employ multiple power amp modules (PA) and will remain on air at reduced power in the event of a PA failure. IOT power tube is a single point of failure.

10. Could give better situation of project in terms of broad transmitter plan
NET has addressed overall goal and plan in ITPlan for transmitter replacement anticipating transmission standard change and take advantage of technology advancement.

11. No specific mention of analysis of barriers to success of project, but this seems like a fairly routine process for NET
Yes, transmitter installation and proof of performance follows industry standards and best practices. It usually requires about two weeks to complete both the installation and the proof of performance following a successful bidding process.

12. Is the project technically feasible?
Yes.

13. Is the proposed technology appropriate for the project?
Yes. Transmitter will be procured through state competitive bidding process. Transmitter has to comply with industry standards and FCC regulations.

14. Can the technical elements be accomplished within the proposed timeframe and budget?
Yes. It is NET's intent to complete the project within one FY for each transmitter including procurement and installation.

Respectfully submitted,

Ling Ling Sun

NET Assistance General Manager, Technology/CTO

47 - Nebraska Educational Telecommunications Commission

Proposal Name: KLNE Transmitter Replacement
NITC ID: 47-02

PROJECT DETAILS

Project Contact: Ling-Ling Sun
Agency: 47 - Nebraska Educational Telecommunications Commission
NITC Tier Alignment: Tier 2

Agency Priority: 2

SUMMARY OF REQUEST

NET seeks funding to replace the television transmitter at KLNE (Lexington). The present transmitter is a 20 year old Inductive Output Tube (IOT) liquid cooled model that was modified for DTV transmission in 2009. IOT transmitters are no longer manufactured and the tubes are very difficult to acquire and cost nearly $45,000 each. The new transmitter will be a much more energy efficient solid state transmitter, less expensive to maintain, less downtime for maintenance and will be upgradeable to the ATSC 3.0 broadcast standard.

Delaying the replacement risks significant broadcast television service outages if repairs are required due to the scarcity of parts. The tube cost will continue to rise at a higher than normal rate due to the overall lack of inventory worldwide plus the low level of activity for these tubes will also put pressure on availability of acquiring a replacement tube. Any outage would also effect satellite services and central/southwestern Nebraska cable subscribers.

FINANCIAL SUMMARY

Expenditures			
	Fiscal Year 2020	Fiscal Year 2021	Total
Contractual Services:	$0.00	$0.00	$0.00
Telecommunications:	$0.00	$0.00	$0.00
Training:	$0.00	$0.00	$0.00
Project Costs:	$0.00	$0.00	$0.00
Capital Expenditures:	$480,000.00	$0.00	$480,000.00
Total Estimated Costs:	$480,000.00	$0.00	**$480,000.00**

Comments: Total Cost is estimated at $480,000.

Funding			
	Fiscal Year 2020	Fiscal Year 2021	Total
General Fund:	$480,000.00	$0.00	$480,000.00
Cash Fund:	$0.00	$0.00	$0.00
Federal Fund:	$0.00	$0.00	$0.00
Revolving Fund:	$0.00	$0.00	$0.00
Other Fund:	$0.00	$0.00	$0.00
Total Requested Funding:	$480,000.00	$0.00	**$480,000.00**

Comments:

PROPOSAL SCORE

	reviewer1	reviewer2	reviewer3	Average
Goals, Objectives and Projected Outcomes (15)	14	12	12	13
Project Justification / Business Case (25)	23	20	20	21
Technical Impact (20)	19	17	16	17
Preliminary Plan for Implementation (10)	9	7	10	9
Risk Assessment (10)	10	8	9	9
Financial Analysis and Budget (20)	19	15	15	16
Total Score	94	79	82	85

(Average)

REVIEWER COMMENTS

Goals, Objectives and Projected Outcomes

Review Score = 14/15

Strengths:

Weaknessess:

Project Justification / Business Case	Review Score = 23/25

Strengths:

Weaknessess:

Technical Impact	Review Score = 19/20

Strengths:

Weaknessess:

Preliminary Plan for Implementation	Review Score = 9/10

Strengths:

Weaknessess:

Risk Assessment	Review Score = 10/10

Strengths:

Weaknessess:

Financial Analysis and Budget	Review Score = 19/20

Strengths:

Weaknessess:

Goals, Objectives and Projected Outcomes	Review Score = 12/15

Strengths: The basic project description and project measurement methods are mentioned. Having an upgrade path to ATSC 3.0 is important.

Weaknessess: There was no mention of the relationship to the agency's information technology plan. Was this an anticipated capital expense? How many Inductive Output Tube (IOT) transmitters have been replaced? How many are yet to be replaced?

Project Justification / Business Case	Review Score = 20/25

Strengths: The project justification and business case seems straightforward and understandable.

Weaknessess: When will the IOT Transmitters reach 'no longer supported' by manufacturers or maintenance companies? A brief discussion of the ultimate deadline would have been helpful. What per cent reduction in maintenance costs have been derived from other IOT Transmitter replacements?

Technical Impact	Review Score = 17/20

Strengths: Most major elements of this section have been addressed.

Weaknessess: Will solid state transmitters improve broadcast signal range or clarity?

Preliminary Plan for Implementation	Review Score = 7/10

Strengths: The major deliverables of the project have been described, but with little detail.

Weaknessess: Even the State procurement process has timelines and variables outside of the agency's control. What effect would a drastic procurement process delay have on the feasibility of the overall project? Breaking down the total project timeline and milestones within the 24-month biennial budget timeline would be helpful.

Risk Assessment	Review Score = 8/10

Strengths: The overall risks associated with this project appear manageable.

Weaknessess: What effect would a drastic procurement process delay have on the feasibility of the overall project and how would it be mitigated?

Financial Analysis and Budget	Review Score = 15/20

Strengths:

Weaknessess: How was the $458,000 estimated for Hardware? Was it based on a recent Nebraska transmitter replacement project or a comparable project completed in another state? More detail desired on the Capital Expenditure section.

Goals, Objectives and Projected Outcomes	Review Score = 12/15

Strengths: Clear description of situation and proposed solution

Weaknessess: How will savings be measured?

Tie-in to IT plan could have been more strongly described.

47 - Nebraska Educational Telecommunications Commission

Proposal Name: KLNE Transmitter Replacement
NITC ID: 47-02

Project Justification / Business Case

Review Score = 20/25

Strengths: Important point about also meeting ATSC standards.
Weaknessess: No alternatives (if any) were discussed

Cost of maintenance not fully discussed to make the case clear about replace/maintain

Technical Impact

Review Score = 16/20

Strengths: Clear explanation of benefits
Weaknessess: Could more clearly describe maintenance/service benefits

Could give better situation of project in terms of broad transmitter plan

Preliminary Plan for Implementation

Review Score = 10/10

Strengths: Clearly described
Weaknessess:

Risk Assessment

Review Score = 9/10

Strengths: Risks / Mitigation of inaction well described
Weaknessess: No specific mention of analysis of barriers to success of project, but this seems like a fairly routine process for NET

Financial Analysis and Budget

Review Score = 15/20

Strengths:
Weaknessess: Transmitter technology is not in my wheelhouse, but I feel it would be appropriate to clarify in the narrative somewhere why there is a budget discrepancy between this project and nearly identical project 47-04

TECHNICAL PANEL COMMENTS

Is the project technically feasible? Yes
Is the proposed technology appropriate for the project? Yes
Can the technical elements be accomplished within the proposed timeframe and budget? Yes

Comments:

ADVISORY COUNCIL COMMENTS

Advisory Council Tier Recommendation: Tier 2

Comments:

NITC COMMENTS

Tier 2

AGENCY RESPONSE (OPTIONAL)

See attachment [47-02_agencyresponse.pdf] for agency response.

Agency Responses to the reviewers comments on

47 - Nebraska Educational Telecommunications Commission

Proposal Name: Radio Transmission Project

NITC ID: 47-01

NET thanks the reviewer's comments and supports on this request. NET appreciates the opportunity to provide a written response as supplement information for clarification.

1. The section does not describe the relationship to the agency's information technology plan and whether this was an anticipated capital project. For those less familiar with radio broadcast engineering, it would have been helpful to have a brief breakdown of the work plan related to project measurement over time. And, please define "feed line". Is that the external tower cabling to reach the antennas?

This request is a part of long term plan and it is an anticipated capital project. Feedline often gets burnt due to various reasons causing broadcast outages. NET statewide services consists of nine full power transmitters. Reliability of each transmitter is affected by its environment and other various factors. NET has requested replacement of feedline and antenna for transmitters based on individual transmitter conditions. It is NET's intent to complete all nine transmitter feedline and antenna replacement over multi-years. Yes, feedline is transmission line that is passing/transferring high power RF frequency signals from the transmitter to the antenna mounted on the tower structure.

2. Elsewhere in the project description it mentions the increasing costs incurred for annual repairs versus the cost of a total equipment replacement. That should be re-stated here in this section as part of the business case

Thank you for the suggestion. Accumulated transmission line burnouts eventually become impractical financially and technically to repair. It costs less overall to replace with state-of-the-art, single, continuous run from transmitter to the antenna. NET elected to use helical line replacement in place of multiple 20' line sections, in hope of less burnout.

3. More granularity, including the technical equipment descriptions, would be valuable here. Are there previous NET tower equipment replacements done in the last three years that would help inform about this upcoming replacement? Is there a continuum of hardware equipment options that were considered before providing estimates, even though the procurement has not been performed? e.g. Good, Better, Best?

NET operates nine full power FM transmitters and has completed other transmission line and antenna replacement in the past years. All estimates are based on quotes secured from transmission line and antenna manufacturer and tower crew.

4. No detail on the NET project team; who does what? No breakdown of the major milestones or timeline, other than the fiscal year.

The replacement work will be done by a professional tower crew. Milestone and timeline will be based on bid response. NET will facilitate the installation work and manage the tower crews at our transmission sites to ensure all work in completed correctly and in a timely manner with minimal interruption to over the air broadcasts.

5. What if the supply chain for equipment or availability of installers is negatively affected? What mitigation will be involved if the proposed timeline is interrupted?

This can happen due to tower crew availability, delay at state purchasing side, and price increase if there is a supply shortage. Mitigation will be to continue repair outages as possible or have to face outages until we are able to repair and/or replacement is completed.

6. More granular breakdown of the $376,000 of hardware (e.g. types of equipment, etc...) would have enhanced the project proposal.

Equipment will be transmission line(s) and/or antenna systems. Labor will be tower crew. This is typically bid out as one turn-key service contract from the tower maintenance company.

7. Would be better if information included in the exec summary had been worked into this part of the narrative. The other "few solutions" should have been mentioned.

Repair or replacement are the only two options for this project.

8. Is the project technically feasible?

Yes. NET applies only industry standard toward this project.

9. Is the proposed technology appropriate for the project?
Industry has specific standards broadcasters must follow. NET elected helical transmission line to replace sectioned rigid lines after balance pros and cons in hope of less future burnout.

10. Can the technical elements be accomplished within the proposed timeframe and budget?
Yes, however, there are uncontrolled factors may impact timeline such as weather and tower crew availability.

Proposal Name: KLNE Transmitter Replacement and KXNE TV Transmitter Replacement

NITC ID: 47-02

NITC ID: 47-04

NET thanks the reviewer's comments and supports on these two requests. NET appreciates the opportunity to provide a written response as supplement information for clarification. Due to similarity of the two proposals and reviewers comments, NET chooses to response both 47-02 and 47-04 comments in one Q&A fashion to best answer the viewer's concerns.

1. There was no mention of the relationship to the agency's information technology plan. Was this an anticipated capital expense? How many Inductive Output Tube (IOT) transmitters have been replaced? How many are yet to be replaced?
Thank you for the suggestion. These NET requests are part of ITPlan and are anticipated capital expenses. NET has total of four IOT transmitters. One has been replaced, one is working in progress for replacement this year and two are requested for replacement.

2. Will solid state transmitters improve broadcast signal range or clarity?
No.

3. Even the State procurement process has timelines and variables outside of the agency's control. What effect would a drastic procurement process delay have on the feasibility of the overall project? Breaking down the total project timeline and milestones within the 24-month biennial budget timeline would be helpful.
It is NET's intent to complete the project within one FY for each request. The transmitter installation and proof of performance will take about two weeks after a successful procurement process. NET will have to continue maintain the transmitter or face the risk of staying off the air should any delay on the procurement process.

4. What effect would a drastic procurement process delay have on the feasibility of the overall project and how would it be mitigated?
NET will request from FCC a special temporary authority license to operate at reduced power level to cover a much reduced area or face the risk of off the air based on type of outage.

5. How was the $458,000 estimated for Hardware? Was it based on a recent Nebraska transmitter replacement project or a comparable project completed in another state? More detail desired on the Capital Expenditure section.
Estimate is obtained from manufacturer based on transmitter power level which is regulated by FCC license.

6. Tie-in to IT plan could have been more strongly described.
Thank you for the suggestion. NET will incorporate the suggestion to future requests.

7. No alternatives (if any) were discussed
Transmitter will be procured through state competitive bidding process. Transmitter has to comply with industry standard and FCC regulations.

8. Cost of maintenance not fully discussed to make the case clear about replace/maintain
IOT transmitter requires replacement of power tube approximately every 4-5 years at minimum cost of $52,000. Parts for repair over same period is estimated to be $7,500-$10,000. New solid state transmitter eliminates the need for IOT power tube and maintenance will be minimal over first 5-10 years.

9. Could more clearly describe maintenance/service benefits
NET existing IOT transmitters were modified from analog to digital. It is our hope to replace them before they fail and cause regional outages due to many cable head-ends relying on Over the Air signal for redistribution. Solid state

transmitter by nature will provide reduced power operation. Solid state transmitter employ multiple power amp modules (PA) and will remain on air at reduced power in the event of a PA failure. IOT power tube is a single point of failure.

10. Could give better situation of project in terms of broad transmitter plan

NET has addressed overall goal and plan in ITPlan for transmitter replacement anticipating transmission standard change and take advantage of technology advancement.

11. No specific mention of analysis of barriers to success of project, but this seems like a fairly routine process for NET

Yes, transmitter installation and proof of performance follows industry standards and best practices. It usually requires about two weeks to complete both the installation and the proof of performance following a successful bidding process.

12. Is the project technically feasible?

Yes.

13. Is the proposed technology appropriate for the project?

Yes. Transmitter will be procured through state competitive bidding process. Transmitter has to comply with industry standards and FCC regulations.

14. Can the technical elements be accomplished within the proposed timeframe and budget?

Yes. It is NET's intent to complete the project within one FY for each transmitter including procurement and installation.

Respectfully submitted,

Ling Ling Sun

NET Assistance General Manager, Technology/CTO

47 - Nebraska Educational Telecommunications Commission

Proposal Name: KXNE TV Transmitter Replacement
NITC ID: 47-04

PROJECT DETAILS

Project Contact: Ling-Ling Sun
Agency: 47 - Nebraska Educational Telecommunications Commission
NITC Tier Alignment: Tier 2

Agency Priority: 4

SUMMARY OF REQUEST

NET seeks funding to replace the television transmitter at KXNE (Norfolk). The present transmitter is a 20 year old Inductive Output Tube (IOT) liquid cooled model that was modified for DTV transmission in 2009. IOT transmitters are no longer manufactured and the tubes are very difficult to acquire. The new transmitter will be a much more energy efficient solid state transmitter which will be upgradeable to the ATSC 3.0 broadcast standard. It will replace the last IOT in the NET television system.

Delaying the replacement risks significant broadcast television service outages if repairs are required due to the scarcity of parts. NET is seeking to avoid the need to replace the IOT power tube in this transmitter at an estimated cost of $45,000. The tube cost will continue to rise at a higher than normal rate due to the overall lack of inventory worldwide plus the low level of activity for these tubes will also put pressure on availability of acquiring a replacement tube. Any outage would also effect satellite services and northeastern Nebraska cable subscribers.

FINANCIAL SUMMARY

Expenditures			
	Fiscal Year 2020	Fiscal Year 2021	Total
Contractual Services:	$0.00	$0.00	$0.00
Telecommunications:	$0.00	$0.00	$0.00
Training:	$0.00	$0.00	$0.00
Project Costs:	$0.00	$0.00	$0.00
Capital Expenditures:	$0.00	$427,000.00	$427,000.00
Total Estimated Costs:	$0.00	$427,000.00	**$427,000.00**

Comments: Total Cost is estimated at $427,000.

Funding			
	Fiscal Year 2020	Fiscal Year 2021	Total
General Fund:	$0.00	$427,000.00	$427,000.00
Cash Fund:	$0.00	$0.00	$0.00
Federal Fund:	$0.00	$0.00	$0.00
Revolving Fund:	$0.00	$0.00	$0.00
Other Fund:	$0.00	$0.00	$0.00
Total Requested Funding:	$0.00	$427,000.00	**$427,000.00**

Comments:

PROPOSAL SCORE

	reviewer1	reviewer2	reviewer3	Average
Goals, Objectives and Projected Outcomes (15)	15	12	12	13
Project Justification / Business Case (25)	23	20	20	21
Technical Impact (20)	19	17	16	17
Preliminary Plan for Implementation (10)	9	7	10	9
Risk Assessment (10)	9	8	9	9
Financial Analysis and Budget (20)	19	15	15	16
Total Score	94	79	82	85

(left margin label: Average)

REVIEWER COMMENTS

Goals, Objectives and Projected Outcomes

Review Score = 15/15

Proposal Name: KXNE TV Transmitter Replacement
NITC ID: 47-04

Strengths: Upgrade will reduce future annual operating and maintenance costs.
Weaknessess:

Project Justification / Business Case Review Score = 23/25
Strengths:
Weaknessess:

Technical Impact Review Score = 19/20
Strengths: Upgrading and standardizing.
Weaknessess:

Preliminary Plan for Implementation Review Score = 9/10
Strengths:
Weaknessess:

Risk Assessment Review Score = 9/10
Strengths:
Weaknessess:

Financial Analysis and Budget Review Score = 19/20
Strengths:
Weaknessess:

Goals, Objectives and Projected Outcomes Review Score = 12/15
Strengths: The basic project description and project measurement methods are mentioned. Having an upgrade path to ATSC 3.0 is important.
Weaknessess: There was no mention of the relationship to the agency's information technology plan. Was this an anticipated capital expense? How many Inductive Output Tube (IOT) transmitters have been replaced? How many are yet to be replaced?

Project Justification / Business Case Review Score = 20/25
Strengths: The project justification and business case seems straightforward and understandable.
Weaknessess: When will the IOT Transmitters reach 'no longer supported' by manufacturers or maintenance companies? A brief discussion of the ultimate deadline would have been helpful. What per cent reduction in maintenance costs have been derived from other IOT Transmitter replacements?

Technical Impact Review Score = 17/20
Strengths: Most major elements of this section have been addressed.
Weaknessess: Will solid state transmitters improve broadcast signal range or clarity?

Preliminary Plan for Implementation Review Score = 7/10
Strengths: The major deliverables of the project have been described, but with little detail.
Weaknessess: Even the State procurement process has timelines and variables outside of the agency's control. What effect would a drastic procurement process delay have on the feasibility of the overall project? Breaking down the total project timeline and milestones within the 24-month biennial budget timeline would be helpful.

Risk Assessment Review Score = 8/10
Strengths: The overall risks associated with this project appear manageable.
Weaknessess: What effect would a drastic procurement process delay have on the feasibility of the overall project and how would it be mitigated?

Financial Analysis and Budget Review Score = 15/20
Strengths:
Weaknessess: How was the $407,000 estimated for Hardware? Was it based on a recent Nebraska transmitter replacement project or a comparable project completed in another state? More detail desired on the Capital Expenditure section.

Goals, Objectives and Projected Outcomes Review Score = 12/15
Strengths: Clear description of situation and proposed solution
Weaknessess: How will savings be measured?

Tie-in to IT plan could have been more strongly described.

47 - Nebraska Educational Telecommunications Commission

Proposal Name: KXNE TV Transmitter Replacement
NITC ID: 47-04

Project Justification / Business Case   Review Score = 20/25
Strengths: Important point about also meeting ATSC standards.
Weaknessess: No alternatives (if any) were discussed
Cost of maintenance not fully discussed to make the case clear about replace/maintain

Technical Impact   Review Score = 16/20
Strengths: Clear explanation of benefits
Weaknessess: Could more clearly describe maintenance/service benefits

Could give better situation of project in terms of broad transmitter plan

Preliminary Plan for Implementation   Review Score = 10/10
Strengths: Clearly Described
Weaknessess:

Risk Assessment   Review Score = 9/10
Strengths: Risks / Mitigation of inaction well described
Weaknessess: No specific mention of analysis of barriers to success of project, but this seems like a fairly routine process for
NET

Financial Analysis and Budget   Review Score = 15/20
Strengths:
Weaknessess: Transmitter technology is not in my wheelhouse, but I feel it would be appropriate to clarify in the narrative
somewhere why there is a budget discrepancy between this project and nearly identical project 47-02

TECHNICAL PANEL COMMENTS

Is the project technically feasible? Yes
Is the proposed technology appropriate for the project? Yes
Can the technical elements be accomplished within the proposed timeframe and budget? Yes

Comments:

ADVISORY COUNCIL COMMENTS

Advisory Council Tier Recommendation: Tier 2

Comments:

NITC COMMENTS

Tier 2

AGENCY RESPONSE (OPTIONAL)

See attachment [47-04_agencyresponse.pdf] for agency response.

Agency Responses to the reviewers comments on

47 - Nebraska Educational Telecommunications Commission

Proposal Name: Radio Transmission Project

NITC ID: 47-01

NET thanks the reviewer's comments and supports on this request. NET appreciates the opportunity to provide a written response as supplement information for clarification.

1. The section does not describe the relationship to the agency's information technology plan and whether this was an anticipated capital project. For those less familiar with radio broadcast engineering, it would have been helpful to have a brief breakdown of the work plan related to project measurement over time. And, please define "feed line". Is that the external tower cabling to reach the antennas?

This request is a part of long term plan and it is an anticipated capital project. Feedline often gets burnt due to various reasons causing broadcast outages. NET statewide services consists of nine full power transmitters. Reliability of each transmitter is affected by its environment and other various factors. NET has requested replacement of feedline and antenna for transmitters based on individual transmitter conditions. It is NET's intent to complete all nine transmitter feedline and antenna replacement over multi-years. Yes, feedline is transmission line that is passing/transferring high power RF frequency signals from the transmitter to the antenna mounted on the tower structure.

2. Elsewhere in the project description it mentions the increasing costs incurred for annual repairs versus the cost of a total equipment replacement. That should be re-stated here in this section as part of the business case

Thank you for the suggestion. Accumulated transmission line burnouts eventually become impractical financially and technically to repair. It costs less overall to replace with state-of-the-art, single, continuous run from transmitter to the antenna. NET elected to use helical line replacement in place of multiple 20' line sections, in hope of less burnout.

3. More granularity, including the technical equipment descriptions, would be valuable here. Are there previous NET tower equipment replacements done in the last three years that would help inform about this upcoming replacement? Is there a continuum of hardware equipment options that were considered before providing estimates, even though the procurement has not been performed? e.g. Good, Better, Best?

NET operates nine full power FM transmitters and has completed other transmission line and antenna replacement in the past years. All estimates are based on quotes secured from transmission line and antenna manufacturer and tower crew.

4. No detail on the NET project team; who does what? No breakdown of the major milestones or timeline, other than the fiscal year.

The replacement work will be done by a professional tower crew. Milestone and timeline will be based on bid response. NET will facilitate the installation work and manage the tower crews at our transmission sites to ensure all work in completed correctly and in a timely manner with minimal interruption to over the air broadcasts.

5. What if the supply chain for equipment or availability of installers is negatively affected? What mitigation will be involved if the proposed timeline is interrupted?

This can happen due to tower crew availability, delay at state purchasing side, and price increase if there is a supply shortage. Mitigation will be to continue repair outages as possible or have to face outages until we are able to repair and/or replacement is completed.

6. More granular breakdown of the $376,000 of hardware (e.g. types of equipment, etc...) would have enhanced the project proposal.

Equipment will be transmission line(s) and/or antenna systems. Labor will be tower crew. This is typically bid out as one turn-key service contract from the tower maintenance company.

7. Would be better if information included in the exec summary had been worked into this part of the narrative. The other "few solutions" should have been mentioned.

Repair or replacement are the only two options for this project.

8. Is the project technically feasible?

Yes. NET applies only industry standard toward this project.

9. Is the proposed technology appropriate for the project?

Industry has specific standards broadcasters must follow. NET elected helical transmission line to replace sectioned rigid lines after balance pros and cons in hope of less future burnout.

10. Can the technical elements be accomplished within the proposed timeframe and budget?

Yes, however, there are uncontrolled factors may impact timeline such as weather and tower crew availability.

Proposal Name: KLNE Transmitter Replacement and KXNE TV Transmitter Replacement

NITC ID: 47-02

NITC ID: 47-04

NET thanks the reviewer's comments and supports on these two requests. NET appreciates the opportunity to provide a written response as supplement information for clarification. Due to similarity of the two proposals and reviewers comments, NET chooses to response both 47-02 and 47-04 comments in one Q&A fashion to best answer the viewer's concerns.

1. There was no mention of the relationship to the agency's information technology plan. Was this an anticipated capital expense? How many Inductive Output Tube (IOT) transmitters have been replaced? How many are yet to be replaced?

Thank you for the suggestion. These NET requests are part of ITPlan and are anticipated capital expenses. NET has total of four IOT transmitters. One has been replaced, one is working in progress for replacement this year and two are requested for replacement.

2. Will solid state transmitters improve broadcast signal range or clarity?

No.

3. Even the State procurement process has timelines and variables outside of the agency's control. What effect would a drastic procurement process delay have on the feasibility of the overall project? Breaking down the total project timeline and milestones within the 24-month biennial budget timeline would be helpful.

It is NET's intent to complete the project within one FY for each request. The transmitter installation and proof of performance will take about two weeks after a successful procurement process. NET will have to continue maintain the transmitter or face the risk of staying off the air should any delay on the procurement process.

4. What effect would a drastic procurement process delay have on the feasibility of the overall project and how would it be mitigated?

NET will request from FCC a special temporary authority license to operate at reduced power level to cover a much reduced area or face the risk of off the air based on type of outage.

5. How was the $458,000 estimated for Hardware? Was it based on a recent Nebraska transmitter replacement project or a comparable project completed in another state? More detail desired on the Capital Expenditure section.

Estimate is obtained from manufacturer based on transmitter power level which is regulated by FCC license.

6. Tie-in to IT plan could have been more strongly described.

Thank you for the suggestion. NET will incorporate the suggestion to future requests.

7. No alternatives (if any) were discussed

Transmitter will be procured through state competitive bidding process. Transmitter has to comply with industry standard and FCC regulations.

8. Cost of maintenance not fully discussed to make the case clear about replace/maintain

IOT transmitter requires replacement of power tube approximately every 4-5 years at minimum cost of $52,000. Parts for repair over same period is estimated to be $7,500-$10,000. New solid state transmitter eliminates the need for IOT power tube and maintenance will be minimal over first 5-10 years.

9. Could more clearly describe maintenance/service benefits

NET existing IOT transmitters were modified from analog to digital. It is our hope to replace them before they fail and cause regional outages due to many cable head-ends relying on Over the Air signal for redistribution. Solid state

transmitter by nature will provide reduced power operation. Solid state transmitter employ multiple power amp modules (PA) and will remain on air at reduced power in the event of a PA failure. IOT power tube is a single point of failure.

10. Could give better situation of project in terms of broad transmitter plan

NET has addressed overall goal and plan in ITPlan for transmitter replacement anticipating transmission standard change and take advantage of technology advancement.

11. No specific mention of analysis of barriers to success of project, but this seems like a fairly routine process for NET

Yes, transmitter installation and proof of performance follows industry standards and best practices. It usually requires about two weeks to complete both the installation and the proof of performance following a successful bidding process.

12. Is the project technically feasible?

Yes.

13. Is the proposed technology appropriate for the project?

Yes. Transmitter will be procured through state competitive bidding process. Transmitter has to comply with industry standards and FCC regulations.

14. Can the technical elements be accomplished within the proposed timeframe and budget?

Yes. It is NET's intent to complete the project within one FY for each transmitter including procurement and installation.

Respectfully submitted,

Ling Ling Sun

NET Assistance General Manager, Technology/CTO

54 - State Historical Society

Proposal Name: CRM Maintenance
NITC ID: 54-01

PROJECT DETAILS

Project Contact: Jay Shaeffer
Agency: 54 - State Historical Society
NITC Tier Alignment: Tier 3

Agency Priority: 1

SUMMARY OF REQUEST

History Nebraska's ongoing tasks require synchronized data management of multiple relationships with constituents required by its various statutory programs. As part of the agency IT Plan, a robust CRM platform requires funds for ongoing maintenance and support via a Software-as-a-Service (SAAS) Maintenance model.

See attached History Nebraska Technology Strategy Draft (HN Technology Strategy Draft 7-11-18.pdf) and History Nebraska Technology Plan Draft (HN Technology Plan Draft 9-07-18.pdf).

FINANCIAL SUMMARY

Expenditures

	Fiscal Year 2020	Fiscal Year 2021	Total
Contractual Services:	$0.00	$0.00	$0.00
Telecommunications:	$0.00	$0.00	$0.00
Training:	$0.00	$0.00	$0.00
Project Costs:	$0.00	$0.00	$0.00
Capital Expenditures:	$50,000.00	$50,000.00	$100,000.00
Total Estimated Costs:	$50,000.00	$50,000.00	**$100,000.00**

Comments:

Funding

	Fiscal Year 2020	Fiscal Year 2021	Total
General Fund:	$50,000.00	$50,000.00	$100,000.00
Cash Fund:	$0.00	$0.00	$0.00
Federal Fund:	$0.00	$0.00	$0.00
Revolving Fund:	$0.00	$0.00	$0.00
Other Fund:	$0.00	$0.00	$0.00
Total Requested Funding:	$50,000.00	$50,000.00	**$100,000.00**

Comments:

PROPOSAL SCORE

	reviewer1	reviewer2	reviewer3	Average
Goals, Objectives and Projected Outcomes (15)	10	5	13	9
Project Justification / Business Case (25)	25	10	20	18
Technical Impact (20)	15	5	12	11
Preliminary Plan for Implementation (10)	5	2	10	6
Risk Assessment (10)	0	2	2	1
Financial Analysis and Budget (20)	10	2	5	6
Total Score	65	26	62	51

(Average)

REVIEWER COMMENTS

Goals, Objectives and Projected Outcomes   Review Score = 10/15

Strengths: The attachments provided important background information and outlined the process whereby the proposed technology was prioritized as part of an overall strategic plan.

Weaknessess: While there may well be key performance indicators associated with the implementation of the proposed CRM, they are not mentioned. This reviewer did read through both attachments, however, there didn't appear to be an evaluation plan in either of those.

Project Justification / Business Case   Review Score = 25/25

Strengths: The narrative provided, along with the corresponding attachments, provide a clear and cogent business case for pursuing the implementation of an enterprise CRM solution. The goals and objectives are both reasonable and attainable. While nothing is listed in two of the sections, the rationale does provide a clear mandate for moving forward and CRM is a category of solutions.
Weaknessess: Posing an important project deliverable in the form of a hypothetical, "could go a long way toward..." is a poor choice that casts doubt rather than inspiring confidence.

Technical Impact   Review Score = 15/20

Strengths: Technical issues associated with accessing the SaaS environment and training considerations are enumerated in the attachments.
Weaknessess: Much of what is called out in the attachments is more the substance of operational considerations rather than technical considerations. It is anticipated that the selection of a reputable CRM with adequate bandwidth to deliver it will address any number of the technical considerations. At the same time, there is mention of additional modules and custom work that will need to be done fully realize the benefits of the proposed solution. Lacking more detail it is impossible to fully consider the technical impact of this undertaking.

Preliminary Plan for Implementation   Review Score = 5/10

Strengths: The procurement process will comply with NITC/OCIO standards.
Weaknessess: No specific information is provided with respect to the implementation plan, deliverables, linkage of training and staff development to attainment of deliverables or ongoing support.

Risk Assessment   Review Score = 0/10

Strengths:
Weaknessess: There are no project specific risks indicated. The implications of not obtaining funding may pose operational challenges, but the risks associated with implementing the proposed solution will exist regardless of the funding source. These need to recognized, enumerated, and a plan must be in place to mitigate the risk.

Financial Analysis and Budget   Review Score = 10/20

Strengths:
Weaknessess: There is not sufficient information to determine whether the proposed budget is adequate and reasonable to deliver the intended outcomes. Presumably, the proposed budget will pay for subscription licensing of the SaaS. The attachments indicate that additional staff will be needed but this isn't included in the proposal and without it there is no budget for staff training.

Goals, Objectives and Projected Outcomes   Review Score = 5/15

Strengths: We have a good description of a current status, projected issue, and several needs identified.

Weaknessess: Appears to be in the strategy phase of solving the issue, no Project Measurement or Assessment methods identified also no Project Relationship provided. Also, too broad of scope of issues identified without specific information of how the project will address the identified issues.

Project Justification / Business Case   Review Score = 10/25

Strengths: We have a good amount of information to justify improving the constituent relationship process within History Nebraska.
Weaknessess: I do not have specifics on what products, tools, or services are being evaluated or what the 'requirements' of the project are.

Technical Impact   Review Score = 5/20

Strengths: The proposal identifies the need for a single tool to replace multiple databases.
Weaknessess: No technical issues specified.

Preliminary Plan for Implementation   Review Score = 2/10

Strengths: We have a basic outline of justifying and implementing a CRM tool.
Weaknessess: Some of the requirements of this project can be met with existing services that State of Nebraska owns. Hardware/Software inventory. Infrastructure Support. Not sure if these were considered thus far or not.

Risk Assessment   Review Score = 2/10

Strengths: Risk is provided.
Weaknessess: No specific loss is identified if the project is not approved. No mitigation is provided.

Financial Analysis and Budget	Review Score = 2/20

Strengths: $200,000 number is provided.

Weaknessess: No specifics on what the $200,000 is for. Categorized as 'other'.

Goals, Objectives and Projected Outcomes	Review Score = 13/15

Strengths: The specific goals for this project are well defined, as are the beneficiaries and the project's relationship to the AITP.

Weaknessess: I suspect that there are other critical benefits for internal staff that aren't listed, nor are any review or assessment methods to define a successful project (number of systems eliminated, exact services added or data migrated/consolidated would be beneficial).

Project Justification / Business Case	Review Score = 20/25

Strengths: Many intangible benefits are detailed clearly and show the value that this project would provide, especially focused on services that aren't possible today.

Weaknessess: Additional detail regarding any tangible benefits would improve the score in this section. These might include improvements to PII and PCI data security, any dollar amounts regarding transactions to be managed or maintained in the system and other volumes of existing information that will be maintained (Are the number of contacts to be included in this system in the hundreds, thousands or higher?).

Technical Impact	Review Score = 12/20

Strengths: A high level description of the technical improvements and business processes is listed, but is primarily focused on goals and not specific impacts.

Weaknessess: The exact number of systems/processes that can be reduced through this project is not included, nor is any mention of why a cloud solution is preferred over an on-premise solution. This may also be worth inclusion in the Risk Assessment, especially when there is a known PII impact. NITC/OCIO compliance is mentioned in the preliminary plan, but no technical details are included here, including any integration with existing point-of-sale systems or other OCIO-hosted technologies.

Preliminary Plan for Implementation	Review Score = 10/10

Strengths: Support requirements are clearly defined, as is the requested project and software development methodology.

Weaknessess: An estimated timeline, including milestones for key functionality, would show further understanding of the effort required to successfully implement the project. Core team members, their expertise and involvement would improve the score.

Risk Assessment	Review Score = 2/10

Strengths: Budgetary risk is a critical consideration for any agency's proposal and has been highlighted, although $50K annually may not be sufficient to implement and maintain a solution with the various desired requirements.

Weaknessess: All other risks have not been listed. These may include conversion issues, new hardware requirements for key functions like the expansion of the POS system's use and ability to access a cloud solution reliably from locations which may not have internet access currently. Also, there is risk in hosting some of this data on cloud resources rather than on-premise.

Financial Analysis and Budget	Review Score = 5/20

Strengths:

Weaknessess: The budget outlined appears to only include consideration for maintenance costs. There was no description of any implementation, conversion, hosting and transmission cost projections.

TECHNICAL PANEL COMMENTS

Is the project technically feasible? Yes
Is the proposed technology appropriate for the project? Unknown
Can the technical elements be accomplished within the proposed timeframe and budget? Unknown

Comments: Insufficient information to make a determination.

ADVISORY COUNCIL COMMENTS

Advisory Council Tier Recommendation: Tier 3

Comments:

54 - State Historical Society

Proposal Name: CRM Maintenance
NITC ID: 54-01

Tier 3

54 - State Historical Society

Proposal Name: Digital Preservation & Access Maintenance
NITC ID: 54-02

PROJECT DETAILS

Project Contact: Jay Shaeffer
Agency: 54 - State Historical Society
NITC Tier Alignment: Tier 3

Agency Priority: 2

SUMMARY OF REQUEST

History Nebraska's ongoing statutory responsibilities to collect, preserve, and make accessible historical resources (including digital born government records as well as digitized analog photographs, manuscripts, and artifacts) require a cloud-based solution for preservation and access. As part of the agency's IT Plan, a preservation service acquired in the 2018-19 fiscal year requires funds for ongoing maintenance and support.

See attached History Nebraska Technology Strategy draft (HN Technology Strategy Draft 7-11-18.pdf) and History Nebraska Technology Plan draft (HN Technology Plan Draft 9-07-18).

FINANCIAL SUMMARY

Expenditures			
	Fiscal Year 2020	Fiscal Year 2021	Total
Contractual Services:	$0.00	$0.00	$0.00
Telecommunications:	$0.00	$0.00	$0.00
Training:	$0.00	$0.00	$0.00
Project Costs:	$0.00	$0.00	$0.00
Capital Expenditures:	$25,000.00	$25,000.00	$50,000.00
Total Estimated Costs:	$25,000.00	$25,000.00	**$50,000.00**

Comments:

Funding			
	Fiscal Year 2020	Fiscal Year 2021	Total
General Fund:	$0.00	$0.00	$0.00
Cash Fund:	$0.00	$0.00	$0.00
Federal Fund:	$0.00	$0.00	$0.00
Revolving Fund:	$0.00	$0.00	$0.00
Other Fund:	$0.00	$0.00	$0.00
Total Requested Funding:	$0.00	$0.00	**$0.00**

Comments:

PROPOSAL SCORE

		reviewer1	reviewer2	reviewer3	Average
Average	Goals, Objectives and Projected Outcomes (15)	15	14	10	13
	Project Justification / Business Case (25)	24	22	18	21
	Technical Impact (20)	20	13	15	16
	Preliminary Plan for Implementation (10)	10	6	7	8
	Risk Assessment (10)	10	8	5	8
	Financial Analysis and Budget (20)	18	13	13	15
	Total Score	97	76	68	80

REVIEWER COMMENTS

Goals, Objectives and Projected Outcomes   Review Score = 15/15
Strengths:

Weaknessess:

Project Justification / Business Case   Review Score = 24/25
Strengths:
Weaknessess:

Technical Impact   Review Score = 20/20
Strengths:
Weaknessess:

Preliminary Plan for Implementation   Review Score = 10/10
Strengths:
Weaknessess:

Risk Assessment   Review Score = 10/10
Strengths:
Weaknessess:

Financial Analysis and Budget   Review Score = 18/20
Strengths:
Weaknessess:

Goals, Objectives and Projected Outcomes   Review Score = 14/15
Strengths: Concept is good.

Weaknessess:

Project Justification / Business Case   Review Score = 22/25
Strengths: Valuable to have this historical information available online to the citizens and have them be able to access it at their
own choosing versus having to contact the Historical Society.
Weaknessess:

Technical Impact   Review Score = 13/20
Strengths:
Weaknessess: Does not describe how the digital assets of History Nebraska will get to the Cloud.   Impact of bandwidth at the
sites is pointed out but the impact to the State's commodity Internet is not addressed.

Preliminary Plan for Implementation   Review Score = 6/10
Strengths: Plan for Historical Society team members to be trained and able to use the software.
Weaknessess: Historical Society already has digital assets in the Cloud and this plan does not address how this request will
assist them with getting to those assets.   If there is already a vendor picked, there should be a better implementation plan laid out.

Risk Assessment   Review Score = 8/10
Strengths: Recognize the need for digital preservation.
Weaknessess: May not need to be Cloud based.

Financial Analysis and Budget   Review Score = 13/20
Strengths:
Weaknessess: In the attached History Nebraska Technology Plan it indicates that the Infrastructure and Software is outsourced so
would question the need for additional IT FTE's in the future.   Does the $25K per year request cover all of the infrastructure and
FTE costs?   Where is the increase bandwidth cost to the sites documented?

Goals, Objectives and Projected Outcomes   Review Score = 10/15
Strengths: Shows business case with clear customer base and beneficiaries.

Weaknessess: Questions around the current technology being utilized.
Questions around how the SaaS is being implemented and supported.
What is the need for more Infrastructure personnel if moving to SaaS?

Project Justification / Business Case   Review Score = 18/25
Strengths: Providing historical data to users in an easy to use fashion.
Weaknessess: No other solutions evaluated.
May not be economically advantageous.

54 - State Historical Society

Proposal Name: Digital Preservation & Access Maintenance
NITC ID: 54-02

Technical Impact   Review Score = 15/20

Strengths: Addresses technical details based off SaaS environment.
Weaknessess: The State of NE Enterprise can meet most, if not all of the reliability, security, and scalability needs. Unsure of the
cost comparison to utilize current technologies.

Preliminary Plan for Implementation   Review Score = 7/10

Strengths: Utilizing SaaS allows for a fairly known schedule.
Weaknessess: Ongoing support is not realistic or fully detailed.
No major milestones and generic timeline.

Risk Assessment   Review Score = 5/10

Strengths: Utilizing SaaS ensures the system will stay current.
Weaknessess: Risks are unfounded. Most can be mitigated with State of Nebraska Enterprise solutions. Barriers are unfounded.

Financial Analysis and Budget   Review Score = 13/20

Strengths:
Weaknessess: Generic costs, with a high amount of support and requested personnel for a SaaS solution.

TECHNICAL PANEL COMMENTS

Is the project technically feasible? Yes
Is the proposed technology appropriate for the project? Yes
Can the technical elements be accomplished within the proposed timeframe and budget? Unknown

Comments: Insufficient information to make a determination.

ADVISORY COUNCIL COMMENTS

Advisory Council Tier Recommendation: Tier 3

Comments:

NITC COMMENTS

Tier 3

AGENCY RESPONSE (OPTIONAL)

57 - Oil & Gas Conservation

Proposal Name: RBDMS Upgrade
NITC ID: 57-01

PROJECT DETAILS

Project Contact: Chuck Borcher
Agency: 57 - Oil & Gas Conservation
NITC Tier Alignment: Tier 2

Agency Priority: 1

SUMMARY OF REQUEST

RBDMS 3.0 upgrades the current RBDMS Classic. Classic was as ACCESS 2003 / SQL 2014 based information / regulatory system developed by the Ground Water Protection Council (GWPC) and twenty-nine cooperating states. RBDMS 3.0 upgrades to HTML- based frontend with SQL Server 2014 backend. This adds functionality to Classic plus gives us the ability to move forward given the recent mandate by the OCIO to upgrade to Office 2016. The upgrade rendered ACCESS 2003 inoperable.

FINANCIAL SUMMARY

Expenditures

	Fiscal Year 2020	Fiscal Year 2021	Total
Contractual Services:	$350,000.00	$350,000.00	$700,000.00
Telecommunications:	$0.00	$0.00	$0.00
Training:	$0.00	$0.00	$0.00
Project Costs:	$0.00	$0.00	$0.00
Capital Expenditures:	$0.00	$0.00	$0.00
Total Estimated Costs:	$350,000.00	$350,000.00	**$700,000.00**

Comments: Funding for this project will be borne by the agency (43%) and the GWPC (57%). The total projected cost is $1,050,000.

Funding

	Fiscal Year 2020	Fiscal Year 2021	Total
General Fund:	$0.00	$0.00	$0.00
Cash Fund:	$150,000.00	$150,000.00	$300,000.00
Federal Fund:	$0.00	$0.00	$0.00
Revolving Fund:	$0.00	$0.00	$0.00
Other Fund:	$200,000.00	$200,000.00	$400,000.00
Total Requested Funding:	$350,000.00	$350,000.00	**$700,000.00**

Comments:

PROPOSAL SCORE

		reviewer1	reviewer2	reviewer3	Average
Average	Goals, Objectives and Projected Outcomes (15)	15	14	12	14
	Project Justification / Business Case (25)	25	25	20	23
	Technical Impact (20)	20	19	16	18
	Preliminary Plan for Implementation (10)	10	10	8	9
	Risk Assessment (10)	10	8	8	9
	Financial Analysis and Budget (20)	20	19	17	19
	Total Score	100	95	81	92

REVIEWER COMMENTS

Goals, Objectives and Projected Outcomes   Review Score = 15/15
Strengths: ACCESS 2003 upgrade to supportable platform
Weaknessess:

Project Justification / Business Case   Review Score = 25/25
Strengths: OGCC installed this version in June 2000. No new development of "classic" has occurred. Upgrading vs replace is recommended strategy

Weaknessess:

Technical Impact   Review Score = 20/20
Strengths: Platform supportable by OCIO
Weaknessess:

Preliminary Plan for Implementation   Review Score = 10/10
Strengths: Upgrade is low risk
Weaknessess:

Risk Assessment   Review Score = 10/10
Strengths: Agree, risk is minimal
Weaknessess:

Financial Analysis and Budget   Review Score = 20/20
Strengths: Upgrade vs Replace is normally a prudent financial decision with this type of platform.
Weaknessess:

Goals, Objectives and Projected Outcomes   Review Score = 14/15
Strengths:

Weaknessess:

Project Justification / Business Case   Review Score = 25/25
Strengths: Clear need to do this project in terms of replacing obsolete technology. This will also make the application more secure.
Weaknessess:

Technical Impact   Review Score = 19/20
Strengths: The explanation is clear as to the technical components and rationale.
Weaknessess:

Preliminary Plan for Implementation   Review Score = 10/10
Strengths: Clear timelines and resource assignments.
Weaknessess:

Risk Assessment   Review Score = 8/10
Strengths:
Weaknessess:

Financial Analysis and Budget   Review Score = 19/20
Strengths:
Weaknessess:

Goals, Objectives and Projected Outcomes   Review Score = 12/15
Strengths: Good technical and business move to implement the most current version of software.
Weaknessess:

Project Justification / Business Case   Review Score = 20/25
Strengths: stay current on business critical applications is a good practice, without maintaining business software the risk of
business failure is imminent.
Weaknessess:

Technical Impact   Review Score = 16/20
Strengths:
Weaknessess: Should consider a backup server and maintain a current copy of your data for purpose of disaster recovery.

Preliminary Plan for Implementation   Review Score = 8/10
Strengths:
Weaknessess:

Risk Assessment   Review Score = 8/10
Strengths: Using GWPC provides support and a community of users to rely upon.

Proposal Name: RBDMS Upgrade
NITC ID: 57-01

Weaknessess:

Financial Analysis and Budget   Review Score = 17/20
Strengths:
Weaknessess: may not have all cost identified to properly implement the new solution.

TECHNICAL PANEL COMMENTS

Is the project technically feasible? Yes
Is the proposed technology appropriate for the project? Yes
Can the technical elements be accomplished within the proposed timeframe and budget? Yes

Comments:

ADVISORY COUNCIL COMMENTS

Advisory Council Tier Recommendation: Tier 2

Comments:

NITC COMMENTS

Tier 2

AGENCY RESPONSE (OPTIONAL)

65 - Administrative Services

Proposal Name: Budget software for fuzioN
NITC ID: 65-01

PROJECT DETAILS

Project Contact: Jerry Broz
Agency: 65 - Administrative Services
NITC Tier Alignment: Tier 1

Agency Priority: 1

SUMMARY OF REQUEST

During the 2016 legislative session, Department of Administrative Services (DAS) requested and received legislative appropriation and funding to migrate disparate IT systems individually supporting human resource and benefit management, employee recruiting and development, payroll, and financial functions to a cloud-based single enterprise platform. DAS selected the Oracle Fusion Cloud solution and initiated the migration project (Program fuzioN) during the first fiscal year of the biennium ending June 30, 2019.

DAS' original plan included implementation of a new Planning, Budgeting, Forecasting and Performance Reporting module. However, this module was removed from the 2016 request, with the intention to re-submit a request for its funding to support implementation during the 2019/2021 biennium.

The end state would be the realization of operational, process, and expense synergies by moving to a single enterprise platform while providing a flexible planning application that supports enterprise-wide planning, budgeting and forecasting. This module also provides a secure, collaborative, and process driven service for defining, authoring, reviewing, and publishing financial, management and regulatory report packages.

The issue also includes a request for a new FTE - IT Business System Analyst/Coord. Each of the current fuzioN areas - Financial Capital Management (FCM), Supply Chain Management (SCH) have team members to support those areas and to work with the system's customers.

FINANCIAL SUMMARY

Expenditures			
	Fiscal Year 2020	Fiscal Year 2021	**Total**
Contractual Services:	$1,100,000.00	$0.00	$1,100,000.00
Telecommunications:	$0.00	$0.00	$0.00
Training:	$800.00	$800.00	$1,600.00
Project Costs:	$254,783.00	$256,140.00	$510,923.00
Capital Expenditures:	$0.00	$0.00	$0.00
Total Estimated Costs:	$1,355,583.00	$256,940.00	**$1,612,523.00**

Comments:

Funding			
	Fiscal Year 2020	Fiscal Year 2021	**Total**
General Fund:	$0.00	$0.00	$0.00
Cash Fund:	$0.00	$0.00	$0.00
Federal Fund:	$0.00	$0.00	$0.00
Revolving Fund:	$1,355,583.00	$256,940.00	$1,612,523.00
Other Fund:	$0.00	$0.00	$0.00
Total Requested Funding:	$1,355,583.00	$256,940.00	**$1,612,523.00**

Comments:

PROPOSAL SCORE

		reviewer1	reviewer2	reviewer3	Average
Average	**Goals, Objectives and Projected Outcomes (15)**	15	13	10	13
	Project Justification / Business Case (25)	22	23	15	20
	Technical Impact (20)	19	15	15	16
	Preliminary Plan for Implementation (10)	10	5	8	8
	Risk Assessment (10)	10	5	7	7
	Financial Analysis and Budget (20)	18	18	17	18
	Total Score	94	79	72	82

REVIEWER COMMENTS

Goals, Objectives and Projected Outcomes   Review Score = 15/15
Strengths:

Weaknessess:

Project Justification / Business Case   Review Score = 22/25
Strengths:
Weaknessess:

Technical Impact   Review Score = 19/20
Strengths:
Weaknessess:

Preliminary Plan for Implementation   Review Score = 10/10
Strengths:
Weaknessess:

Risk Assessment   Review Score = 10/10
Strengths:
Weaknessess:

Financial Analysis and Budget   Review Score = 18/20
Strengths:
Weaknessess:

Goals, Objectives and Projected Outcomes   Review Score = 13/15
Strengths: Project goals and objectives are clear and the value of extending the existing fuzioN project to offer the required
functionality is strategic.
Weaknessess: It is presumed that project measurement and assessment will utilize the existing fuzioN framework, however,
nothing is called out.

Project Justification / Business Case   Review Score = 23/25
Strengths: Leveraging an existing project to extend functionality increases the efficacy of work already underway and the value of
the overall project.
Weaknessess:

Technical Impact   Review Score = 15/20
Strengths: Technical elements of the existing fuzioN project are well documented.
Weaknessess: The operational and strategic impact are clear, along with the technical impact of the existing fuzioN project. That
said, the technical impact of this module is additive to the existing project and deserves to be documented here.

Preliminary Plan for Implementation   Review Score = 5/10
Strengths:
Weaknessess: Again, it is understood that the proposed solution extends the existing project, however, a single sentence cannot
sufficiently articulate a preliminary plan.

Risk Assessment   Review Score = 5/10
Strengths:

Weaknessess: The narrative provided doesn't document any risks associated with implementing the proposed solution. The only risk mentioned is to the existing project in the form of what will be necessary if the proposed solution is not funded.

Financial Analysis and Budget   Review Score = 18/20

Strengths: Project expenditures are clearly documented within approved format.

Weaknessess: 60% of the expenditures under "Other Project Costs" are in the "Other" category. Without additional information it is impossible to consider whether this expenditure is reasonable.

Goals, Objectives and Projected Outcomes   Review Score = 10/15

Strengths: From a purely technical perspective, the proposed solution makes a great deal of sense.

Weaknessess: I do not see any discussion related to a functional "Fit-Gap" analysis. Are all the State Agencies in support of this solution? Are there any letters of support? How significant will the work be in the agencies in order to conform to the new system?

Project Justification / Business Case   Review Score = 15/25

Strengths: If installed properly and if the agencies are properly trained in how to use the system then the greater efficiency talked about can be obtained.

Weaknessess: This proposal assumes the successful implementation of the HRM/FCM/SCM components that are yet fully operational.

Technical Impact   Review Score = 15/20

Strengths:

Weaknessess: I believe there will still be a number of integration issues that will have to be addressed. I also am concerned with potential change management issues that could become problematic given the hybrid environment this system will exist in, I still worry that there is not any agency buy-in documentation that indicates their support of this effort. Did not see any discussion related to data conversion.

Preliminary Plan for Implementation   Review Score = 8/10

Strengths: KPMG is a viable and knowledgeable implementor.

Weaknessess: As I understand the process this will be a complex hybrid environment for some time. Eventually, most of the systems will be integrated, but that may be a long way down the road. We already see delays and issues with the HRM/FCM project and that the payroll (Oracle - state side) is being pulled from the Human Capital Management (HCM) phase, which targets a January 1, 2019 go-live date and moved to the Financial Capital Management (FCM) phase, which is currently slated for April 1, 2019.

Risk Assessment   Review Score = 7/10

Strengths: The concerns and risks are real.

Weaknessess: There needs to be a test plan developed to ensure all components are properly tested. The Chart of Accounts changes will pose a significant concern.

Financial Analysis and Budget   Review Score = 17/20

Strengths:

Weaknessess: I can't determine if all costs are being accounted for.

TECHNICAL PANEL COMMENTS

Is the project technically feasible? Yes
Is the proposed technology appropriate for the project? Yes
Can the technical elements be accomplished within the proposed timeframe and budget? Yes

Comments:

ADVISORY COUNCIL COMMENTS

Advisory Council Tier Recommendation: Tier 1

Comments:

65 - Administrative Services

Proposal Name: Budget software for fuzioN
NITC ID: 65-01

NITC COMMENTS

Tier 1

AGENCY RESPONSE (OPTIONAL)