ADOA-ASET

Arizona Strategic Enterprise Technology

Project Investment Justification

Analytics & Survey Solution

BN24003

Board of Nursing

Contents

1. GENERAL INFORMATION

PIJ ID: BN24003
PIJ Name: Analytics & Survey Solution
Account: Board of Nursing
Business Unit Requesting: Arizona State Board of Nursing
Sponsor: Kelly Smith
Sponsor Title: Grant Manager
Sponsor Email: ksmith@azbn.gov
Sponsor Phone: (602) 771-2305

2. MEETING PRE-WORK

2.1 What is the operational issue or business need that the Agency is trying to solve? (i.e....current process is manual, which increases resource time/costs to the State/Agency, and leads to errors…):

The AZBN has a business need to develop surveys and collect, manage, analyze, and visualize data that will be generated during the Student Nurse Clinical Rotation and Licensed or Certified Nurse Training Pilot Program (1803 Grant) to expand the capacity of preceptor training programs at health care institutions for nursing students and newly licensed or certified nurses.

2.2 How will solving this issue or addressing this need benefit the State or the Agency?

Addressing this need will allow tracking of progress, documentation of outcomes, and evaluation of the success of each project funded under the 1803 Grant. Pilot projects that prove effective in expanding clinical skills training opportunities for nursing students and new nurses and upskilling opportunities for established nurses can then be implemented throughout the State. This will improve practice readiness, help nurses develop specialty skills, improve job satisfaction, and bolster nurse retention, with the overall effect of strengthening the nurse workforce in Arizona. An additional benefit will be to expand the knowledge base about clinical skills training strategies, which can be shared broadly and will position the State as a leader in nurse education, training, and retention.

2.3 Describe the proposed solution to this business need.

The proposed solution will have 3 components: 1) Survey software; 2) Data analytics and visualization platform; 3) Data warehouse. Briefly, these components have the following capabilities: 1) Survey software - highly customizable format with multiple question types, user-friendly interface, survey capture modes that include web form, mobile app, email, and interview. 2) Data analytics and visualization platform - capacity to ingest both structured and unstructured data from multiple sources including survey data, calculate and display custom measures/metrics and trends over time, filter and compare by a range of organizational and demographic variables, display summary and individual level data in a compelling visual display and create progress reports that can be shared among project stakeholders. Additionally, key information can be assembled in user defined "action lists", which can then be shared, exported, or saved as working guides for tracking, follow-up, or other actions. 3) Data warehouse - cloud-based resource in which all data collected for this project, structured and unstructured, will be securely stored and organized. This data repository is guided by user centered design principles, with navigation tools, table structures, comprehensive documentation related to data formats, metadata, and data dictionaries, and clear organization to support information searches and reporting. This will be an invaluable resource for researchers and will allow seamless downloading via the AWS VPN client application for additional analysis. It will also provide enduring materials at the completion of the 1803 Grant program. All data collected during this project will be the property of the 1803 Grant project and will not be retained by the vendor (Forward Health Group).

2.4 Has the existing technology environment, into which the proposed solution will be implemented, been documented?

Yes

2.4a Please describe the existing technology environment into which the proposed solution will be implemented.

2.5 Have the business requirements been gathered, along with any technology requirements that have been identified?

Yes

2.5a Please explain below why the requirements are not available.

3. PRE-PIJ/ASSESSMENT

3.1 Are you submitting this as a Pre-PIJ in order to issue a Request for Proposal (RFP) to evaluate options and select a solution that meets the project requirements?

No

3.1a Is the final Statement of Work (SOW) for the RFP available for review?

3.2 Will you be completing an assessment/Pilot/RFP phase, i.e. an evaluation by a vendor, 3rd party or your agency, of the current state, needs, & desired future state, in order to determine the cost, effort, approach and/or feasibility of a project?

No

3.2a Describe the reason for completing the assessment/pilot/RFP and the expected deliverables.

3.2b Provide the estimated cost, if any, to conduct the assessment phase and/or Pilot and/or RFP/solicitation process.

3.2e Based on research to date, provide a high-level cost estimate to implement the final solution.

4. PROJECT

4.1 Does your agency have a formal project methodology in place?

Yes

4.2 Describe the high level makeup and roles/responsibilities of the Agency, Vendor(s) and other third parties (i.e. agency will do...vendor will do...third party will do).

Kelly Smith- Grant Manager Arizona State Board of Nursing (Oversite for entire ARS36-1803 Nursing Preceptorship Grant)

TBD- Arizona State Board of Nursing Grant Coordinator (PM project)

Kathy Scott- Grant Consultant (Consultant for ARS36-1803 Nursing Grant. Specializing in Data Analytics)

Susan Zimmerman- IT Director Arizona State Board of Nursing (Supports the IT, PIJ and ITAC knowledge of project)

Mike Dodd- CFO Arizona State Board of Nursing (Offer guidance on the financial pieces of project)

Michael Barbouche, Founder and CEO Forward Health Group (Product strategist, Project enhancement guidance)

Susan Levine, Chief Clinical Officer Forward Health (Project DIrector. Responsible for deliverables, client satisfaction, and project success).

Kerra Guffey, Chief Administrative Officer Forward Health (Project Compliance Manager, Oversight for requirements, security and financial)

Cont. on attached Document "4.2 Project Roles and Responsibilities"

4.3 Will a PM be assigned to manage the project, regardless of whether internal or vendor provided?

Yes

4.3a If the PM is credentialed, e.g., PMP, CPM, State certification etc., please provide certification information.

4.4 Is the proposed procurement the result of an RFP solicitation process?

Yes

4.5 Is this project referenced in your agency's Strategic IT Plan?

Yes

5. SCHEDULE

5.1 Is a project plan available that reflects the estimated Start Date and End Date of the project, and the supporting Milestones of the project?

Yes

5.2 Provide an estimated start and finish date for implementing the proposed solution.

Est. Implementation Start Date	Est. Implementation End Date
9/25/2023 12:00:00 AM	6/30/2026 12:00:00 AM

5.3 How were the start and end dates determined?

Based on project plan

5.3a List the expected high level project tasks/milestones of the project, e.g., acquire new web server, develop software interfaces, deploy new application, production go live, and estimate start/finish dates for each, if known.

Milestone / Task	Estimated Start Date	Estimated Finish Date
Provide signed Full project plan and timeline	09/21/23	09/25/23
Kick-off Meeting	09/22/23	10/06/23
Deliverable #1 Project Charter & Implementation Brief	09/25/23	10/06/23
Deliverable #2 Project Schedule	09/25/23	10/06/23
Deliverable #13 Timeline Visual	09/25/23	10/06/23
Deliverable #3 Design and configure initial surveys Customize visual design elements Define and configure data metrics	10/02/23	10/27/23
A system Security Plan (SSP) will be required to be submitted and reviewed for approval by security prior to going live.	10/02/23	11/03/23
PAYMENT Deliverable 1 ($4675)	10/06/23	10/06/23
PAYMENT Deliverable 2 ($3915)	10/06/23	10/06/23
Deliverable #9 Conduct requirements discussion with project stakeholders and finalize documentation	10/09/23	11/17/23
Deliverable #8 Conduct initial survey platform training session Conduct initial analytics platform training session	10/16/23	11/24/23
PAYMENT Deliverable 8 ($5560)	10/20/23	10/20/24
Deliverable #10 Provide data analytics tool customizations Modify and customize as needed to meet analytic needs Test/ validate in QA environment	10/23/23	11/10/23
PAYMENT Deliverable 3 ($16,415)	10/27/23	10/27/23
Deliverable #4 Deploy test surveys to pilot group	10/30/23	11/10/23

Validate surveys, deployment and collection process	10/30/23	11/17/23
PAYMENT Deliverable 4 ($8640)	11/10/23	11/10/23
PAYMENT Deliverable 10 ($10,000)	11/10/23	11/10/23
Deliverable #5 Deploy surveys to target populations and begin to monitor responses	11/13/23	11/17/23
PAYMENT Deliverable 5 ($8155)	11/17/23	11/17/23
PAYMENT Deliverable 9 ($5210)	11/17/23	11/17/23
Enter survey data into platform database	11/20/23	12/01/23
Provide ongoing support for ad hoc queries, data analysis & reports	11/20/23	12/01/23
Deliverable #6 Collect survey data and validate completeness	11/20/23	12/01/23
Deliverable #7 Population data visualizations and configure reports	11/20/23	12/01/23
Deliverable #7 Capture and enter additional data sources into platform database & analytics solutio	11/20/23	12/01/23
Deliverable #11 Testing and validating in platform changes and modifications in UAT and Production environment	11/20/23	11/24/23
PAYMENT Deliverable 6 ($8610)	11/24/23	11/24/23
PAYMENT Deliverable 11 ($6090)	11/24/23	11/24/23
PAYMENT Deliverable 7 ($27,310)	11/24/23	11/24/23
Deliverable #12 Deploy final analytics and visualization solution to production platform Perform data refreshes and resolve issues as needed	11/27/23	12/01/23
PAYMENT Deliverable 12 ($227.250)	12/01/23	12/01/23
Conduct post live survey operational audits to review software utilization and provide recommendations for optimizing benefits.	03/25/24	06/30/26
Project Close Out Report and Lessons Learned	06/30/26	07/15/26

5.4 Have steps needed to roll-out to all impacted parties been incorporated, e.g. communications, planned outages, deployment plan?

Yes

5.5 Will any physical infrastructure improvements be required prior to the implementation of the proposed solution. e.g., building reconstruction, cabling, etc.?

No

5.5a Does the PIJ include the facilities costs associated with construction?

5.5b Does the project plan reflect the timeline associated with completing the construction?

6. IMPACT

6.1 Are there any known resource availability conflicts that could impact the project?

No

6.1a Have the identified conflicts been taken into account in the project plan?

6.2 Does your schedule have dependencies on any other projects or procurements?

Yes

6.2a Please identify the projects or procurements.

This project is to support the ARS36-1803 nursing grant. It will end when the nursing project is completed unless additional funding is secured. Arizona State Board of Nursing has received verbal approval for a one year, no-cost extension to the grant. Staff is awaiting this in writing. The project period end date would be extended to 6/30/26 rather than 6/30/25.

6.3 Will the implementation involve major end user view or functionality changes?

Yes

6.4 Will the proposed solution result in a change to a public-facing application or system?

No

7. BUDGET

7.1 Is a detailed project budget reflecting all of the up-front/startup costs to implement the project available, e.g, hardware, initial software licenses, training, taxes, P&OS, etc.?

Yes

7.2 Have the ongoing support costs for sustaining the proposed solution over a 5-year lifecycle, once the project is complete, been determined, e.g., ongoing vendor hosting costs, annual maintenance and support not acquired upfront, etc.?

Yes

7.3 Have all required funding sources for the project and ongoing support costs been identified?

Yes

7.4 Will the funding for this project expire on a specific date, regardless of project timelines?

Yes

7.5 Will the funding allocated for this project include any contingency, in the event of cost over-runs or potential changes in scope?

No

8. TECHNOLOGY

8.1 Please indicate whether a statewide enterprise solution will be used or select the primary reason for not choosing an enterprise solution.

There is not a statewide enterprise solution available

8.2 Will the technology and all required services be acquired off existing State contract(s)?

No

8.3 Will any software be acquired through the current State value-added reseller contract?

No

8.3a Describe how the software was selected below:

8.4 Does the project involve technology that is new and/or unfamiliar to your agency, e.g., software tool never used before, virtualized server environment?

Yes

8.5 Does your agency have experience with the vendor (if known)?

No

8.6 Does the vendor (if known) have professional experience with similar projects?

Yes

8.7 Does the project involve any coordination across multiple vendors?

No

8.8 Does this project require multiple system interfaces, e.g., APIs, data exchange with other external application systems/agencies or other internal systems/divisions?

No

8.9 Have any compatibility issues been identified between the proposed solution and the existing environment, e.g., upgrade to server needed before new COTS solution can be installed?

No

8.9a Describe below the issues that were identified and how they have been/will be resolved, or whether an ADOA-ASET representative should contact you.

8.10 Will a migration/conversion step be required, i.e., data extract, transformation and load?

No

8.11 Is this replacing an existing solution?

No

8.11a Indicate below when the solution being replaced was originally acquired.

8.11b Describe the planned disposition of the existing technology below, e.g., surplused, retired, used as backup, used for another purpose:

8.12 Describe how the agency determined the quantities reflected in the PIJ, e.g., number of hours of P&OS, disk capacity required, number of licenses, etc. for the proposed solution?

TBD

8.13 Does the proposed solution and associated costs reflect any assumptions regarding projected growth, e.g., more users over time, increases in the amount of data to be stored over 5 years?

Yes

8.14 Does the proposed solution and associated costs include failover and disaster recovery contingencies?

Yes

8.14a Please select why failover and disaster recovery is not included in the proposed solution.

8.15 Will the vendor need to configure the proposed solution for use by your agency?

Yes

8.15a Are the costs associated with that configuration included in the PIJ financials?

Yes

8.16 Will any app dev or customization of the proposed solution be required for the agency to use the project in the current/planned tech environment, e.g. a COTS app that will req custom programming, an agency app that will be entirely custom developed?

No

8.16a Will the customizations inhibit the ability to implement regular product updates, or to move to future versions?

8.16b Describe who will be customizing the solution below:

8.16c Do the resources that will be customizing the application have experience with the technology platform being used, e.g., .NET, Java, Drupal?

8.16d Please select the application development methodology that will be used:

8.16e Provide an estimate of the amount of customized development required, e.g., 25% for a COTS application, 100% for pure custom development, and describe how that estimate was determined below:

8.16f Are any/all Professional & Outside Services costs associated with the customized development included in the PIJ financials?

8.17 Have you determined that this project is in compliance with all applicable statutes, regulations, policies, standards & procedures, incl. those for network, security, platform, software/application &/or data/info found at aset.az.gov/resources/psp?

Yes

8.17a Describe below the compliance issues that were identified and how they have been/will be resolved, or whether an ADOA-ASET representative should contact you:

8.18 Are there other high risk project issues that have not been identified as part of this PIJ?

No

8.18a Please explain all unidentified high risk project issues below:

9. SECURITY

9.1 Will the proposed solution be vendor-hosted?

Yes

9.1a Please select from the following vendor-hosted options:

Commercial data center environment, e.g AWS, Azure

9.1b Describe the rationale for selecting the vendor-hosted option below:

Service experts

9.1c Has the agency been able to confirm the long-term viability of the vendor hosted environment?

Yes

9.1d Has the agency addressed contract termination contingencies, e.g., solution ownership, data ownership, application portability, migration plans upon contract/support termination?

Yes

9.1e Has a Conceptual Design/Network Diagram been provided and reviewed by ASET-SPR?

No

9.1f Has the spreadsheet located at https://aset.az.gov/arizona-baseline-security-controls-excel already been completed by the vendor and approved by ASET-SPR?

Yes

9.2 Will the proposed solution be hosted on-premise in a state agency?

No

9.2a Where will the on-premise solution be located:

9.2b Were vendor-hosted options available and reviewed?

9.2c Describe the rationale for selecting an on-premise option below:

9.2d Will any data be transmitted into or out of the agency's on-premise environment or the State Data Center?

9.3 Will any PII, PHI, CGIS, or other Protected Information as defined in the 8110 Statewide Data Classification Policy be transmitted, stored, or processed with this project?

Yes

9.3a Describe below what security infrastructure/controls are/will be put in place to safeguard this data:

See attached security infrastructure/controls document.

10. AREAS OF IMPACT

Application Systems

Database Systems

Software

Hardware

Hosted Solution (Cloud Implementation)

AWS (non-government) cloud

Security

Telecommunications

Enterprise Solutions

Contract Services/Procurements

11. FINANCIALS

Description	PIJ Category	Cost Type	Fiscal Year Spend	Quantity	Unit Cost	Extended Cost	Tax Rate	Tax	Total Cost
Year 1 Development Costs	Professional & Outside Services	Development	1	1	$331,830	$331,830	0.00 %	$0	$331,830
Years 1 Subscription Fees	License & Maintenance Fees	Development	1	1	$275,341	$275,341	860.00 %	$23,679	$299,020
Year 2 Development Costs	Professional & Outside Services	Development	2	1	$239,880	$239,880	0.00 %	$0	$239,880
Years 2 Subscription Fees	License & Maintenance Fees	Development	2	1	$275,341	$275,341	860.00 %	$23,679	$299,020
Year 3 Development Costs	Professional & Outside Services	Development	3	1	$256,047	$256,047	0.00 %	$0	$256,047
Years 3 Subscription Fees	License & Maintenance Fees	Development	3	1	$275,341	$275,341	860.00 %	$23,679	$299,020

Base Budget (Available)	Base Budget (To Be Req)	Base Budget % of Project
$0	$0	0%
APF (Available)	**APF (To Be Req)**	**APF % of Project**
$0	$0	0%
Other Appropriated (Available)	**Other Appropriated (To Be Req)**	**Other Appropriated % of Project**
$0	$0	0%
Federal (Available)	**Federal (To Be Req)**	**Federal % of Project**
$1,724,817	$0	100%
Other Non-Appropriated (Available)	**Other Non-Appropriated (To Be Req)**	**Other Non-Appropriated % of Project**
$0	$0	0%

Total Budget Available	Total Development Cost
$1,724,817	$1,724,817
Total Budget To Be Req	**Total Operational Cost**
$0	$0
Total Budget	**Total Cost**
$1,724,817	$1,724,817

12. PROJECT SUCCESS

Please specify what performance indicator(s) will be referenced in determining the success of the proposed project (e.g. increased productivity, improved customer service, etc.)? (A minimum of one performance indicator must be specified)

Please provide the performance objective as a quantifiable metric for each performance indicator specified.
Note: The performance objective should provide the current performance level, the performance goal, and the time period within which that performance goal is intended to be achieved. You should have an auditable means

to measure and take corrective action to address any deviations.

Example: Within 6 months of project completion, the agency would hope to increase "Neighborhood Beautification" program registration by 20% (3,986 registrants) from the current registration count of 19,930 active participants.

Performance Indicators

Project success is determined by ARS 36-1803:   (1) To increase the placements of student nurses/new grad nurses and nursing assistants in clinical rotations, (2) increase and enhance preceptor training and (3) increase the number and retention of nurses and nursing assistants in the state of Arizona

13. CONDITIONS

Conditions for Approval

Should development costs exceed the approved estimates by 10% or more, or should there be significant changes to the proposed technology scope of work or implementation schedule, the Agency must amend the PIJ to reflect the changes and submit it to ADOA-ASET, and ITAC if required, for review and approval prior to further expenditure of funds.

Monthly reporting on the project status is due to ADOA-ASET no later than the 15th of the month following the start of the project. Failure to comply with timely project status reporting will affect the overall project health. The first status report for this project is due on November 15, 2023.

Prior to system production environment launch or go live, the Agency must work with the Department of Administration (ADOA) and Department of Homeland Security (AZDOHS) Cyber Command, to assure the System Security Plan document is completed and approved by Cyber Command in order to ensure that the selected solution will provide an appropriate level of protection for State data.

14. OVERSIGHT SUMMARY

Project Background

The Arizona Board of Nursing (AZBN) is responsible for ensuring that each person holding a nursing license or certificate is competent to practice safely.

AZBN currently has a business need to develop surveys that will be generated during the Student Nurse Clinical Rotation and Licensed or Certified Nurse Training Pilot Program (1803 Grant) to expand the capacity of preceptor training programs at health care institutions for nursing students and newly licensed or certified nurses. The data from the surveys will then be collected, managed, analyzed, and a visualize of the data will be generated during the Student Nurse Clinical Rotation and Licensed or Certified Nurse Training Pilot Program (1803 Grant) to assist in expanding the capacity of preceptor training programs at health care institutions for nursing students and newly licensed or certified nurses.

Business Justification

Project success is determined by ARS 36-1803:
To increase the placements of student nurses/new grad nurses and nursing assistants in clinical rotations (Year One projection- 460 Students, 1111 New Grad RNs, 64 Specialty trained RNs, and 40 additional CNAs/LPNs)

To increase and enhance preceptor training (Year One projection- 1145 additional preceptors plus 5 adjunct faculty)

Long term goal - Measurable increase the number and retention of nurses and nursing assistants in the state of Arizona

The new solution will allow the tracking of progress, documentation of outcomes, and evaluation of the success of each project funded under the 1803 Grant. Pilot projects that prove effective in expanding clinical skills training opportunities for nursing students and new nurses and upskilling opportunities for established nurses can then be implemented throughout the State. This will improve practice readiness, help nurses develop specialty skills, improve job satisfaction, and bolster nurse retention, with the overall effect of strengthening the nurse workforce in Arizona. An additional benefit will be to expand the knowledge base about clinical skills training strategies, which can be shared broadly and will position the State as a leader in nurse education, training, and retention. The Board will be able to download to their own database in order to retain the information collected.

Implementation Plan

Vendor is AZRAMP Authorized. A system Security Plan (SSP) will be required to be submitted and reviewed for approval by security prior to going live.

Agency:

Kelly Smith- Grant Manager Arizona State Board of Nursing (Oversite for entire ARS36-1803 Nursing Preceptorship Grant)

TBD- Arizona State Board of Nursing Grant Coordinator (PM project)

Kathy Scott- Grant Consultant (Consultant for ARS36-1803 Nursing Grant. Specializing in Data Analytics)

Susan Zimmerman- IT Director Arizona State Board of Nursing (Supports the IT, PIJ and ITAC knowledge of project)

Mike Dodd- CFO Arizona State Board of Nursing (Offer guidance on the financial pieces of project)

Vendor:

Michael Barbouche, Founder and CEO Forward Health Group (Product strategist, Project enhancement guidance)

Susan Levine, Chief Clinical Officer Forward Health (Project DIrector. Responsible for deliverables, client satisfaction, and project success).

Kerra Guffey, Chief Administrative Officer Forward Health (Project Compliance Manager, Oversight for requirements, security and financial)

Kate Nisbet, Client Solutions Manager Forward Health (Project Coordinator, Requirements Gathering, Liaison FHG and AZBN)

Shawn Korth, Contract Administrator Forward Health (Administrative support to FHG and AZBN teams) Crissy Buhr, Project Manager Forward Health (Survey specialist)

Melissa Brendemuehl VP of Data and Development Forward Health (Data Architect, Responsible for integrity of survey tool, data analytics and visualization platform and data warehouse).

Joel May, Senior Web Developer Forward Health(Manager web development strategy and activities- if any)

Riley Redfern, Web Developer Forward Health (Performs web development activities - if any)

Tim Kamps, DIrector of Data Analytics Forward Health (Senior Data Analyst. Responsible for managing data analytics strategy and activities)

Josh Tull, Data Analyst Forward Health, Responsible for managing data analytics activities

Hank Hopkins, Data Analyst Forward Health-

Vendor Selection

The vendor was selected through a request for proposal (RFP) process Forward Health Group, Inc. was the only vendor to submit a quote.

Budget or Funding Considerations

The budget funding will be 100% Federal funding in the amount of $1,724,817.00.

15. PIJ REVIEW CHECKLIST

Agency Project Sponsor

Kelly Smith

Agency CIO (or Designee)

Susan Zimmerman

Agency ISO (or designee)

Susan Zimmerman

OSPB Representative

ASET Engagement Manager

ASET SPR Representative

Emily Gross

Agency SPO Representative

Agency CFO

Mike Dodd