

CNPWeb Replacement Project

State of Arizona – Department of Education

Change Request

September 20th, 2023



Agency Vision

The Arizona Department of Education is a service organization committed to raising academic outcomes and empowering parents.



Project Team Introduction

ADE Roles Present at ITAC

- Colette Chapman - Associate Superintendent/Executive Sponsor
- Melissa Conner - Senior Deputy Associate Superintendent/Product Owner
- Cara Alexander - Deputy Associate Superintendent/Product Owner
- Beth Neely - Chief Information Officer (CIO)
- Joe Carrillo - Chief Technology Officer, Deputy CIO
- Qur'an Nero - Director of IT Program Management
- Venkesh Ethiraj - Project Management Office Manager
- Suchi Narla - IT Project Manager

Project Team Introduction (cont.)

Vendor (LINQ) Roles Present at ITAC

- Mike Borges - President & General Manager
- Matthew Essner - Vice President of Sales
- Scott Howard - Senior Director of Engineering
- Justin DeWind - SVP of Development
- Amy Basnage - Director of Professional Services - State Nutrition
- Syd Frandsen - Product Manager - State Nutrition

Date/high-level overview of the approved original project investment justification (PIJ):

In September 2019, ADOA ASET approved the original PIJ for the CNPWeb Replacement project. The original timeline was October 2019 through August 2021.

With this solution:

- *Operational efficiencies would be realized through the accurate accumulation of data, which would, in turn, provide the Health and Nutrition Services Department with more comprehensive information to directly assess and provide benefits to program recipients in need of services*
- *Federal reporting processes would be automated, eliminating manual reconciliation & human error*
- *The program application process would be standardized and streamlined*
- *The need for multiple system data queries would be eliminated and the new system would provide a data analytics feature*
- *Data consistency, collection, storage, and reporting features would be centralized and automated*
- *A technologically updated system would be more efficient and effective in serving the needs of these four programs and be fully supported*

Change Request 0663 was approved by ITAC in June 2021 to extend the timeline through September 2023 and increase budget.

We are now seeking ITAC approval for a 2nd change request to extend the project timeline. Today's presentation will summarize the factors driving this request and overview the timeline changes.

Project Change Request Overview

What in the PIJ is changing?

Timeline

- ✓ The timeline was adjusted to spit up the deliverables into two phases
 - Change MVP end date from 05/2023 to 07/2024 and Phase 2 with end date 07/2025

Scope

- N/A

Budget

- ✓ From \$2,750,930 to \$3,047,580*

*Vendor contract has not changed, the increase in cost is to maintain internal ADE IT resources for the increased timelines.

- 65% Overall development is complete
- 91% MVP (Minimum Viable Product) is complete with go live of July 1st 2024
- Vendor will complete all the deliverables as stated in contract and requirements with no additional charges for the increased timeline

Project Change Request Overview (cont.)

What initiated this change?

- Vendor LINQ missed end-to-end UAT timeline due to the delayed release of key modules – security roles/permissions, entity profiles, single sign-on, and vendor’s internal system integration (CORE to CORE 2).
- Vendor’s Root Cause Analysis:
 1. Changes in processes and leadership
 2. Volatility in Scope & Schedule
 3. Management of New Technical Architecture

When was the Risk identified in the project?

✓ *Risk was identified in January and was escalated to ADE and LINQ leadership teams*

Note: Core is LINQ’s legacy system that houses their Claims, Accounting, Compliance, Reports and Security modules
Core 2 is LINQ’s new system which they built modules brand new for ADE's implementation, such as the Site Applications, FFVP, Documents, Contacts Directory, etc

Project Change Request Overview (cont.)

What initiated this change?

1. Changes in processes and leadership

Root Cause Analysis

- ✓ *Multiple management changes occurred throughout the course of the project, for both ADE and LINQ.*
- ✓ *Resource allocation when breaking down the work was not always stable.*
- ✓ *Agile implementation switched development methodologies mid-project.*
- ✓ *Too many changes were attempted at once.*

Mitigation Strategy

- ✓ *Resources have been allocated to the project in the form of engineering scrum teams, product manager, and project manager. Every effort to maintain these resources will be made to ensure resources are properly allocated.*
- ✓ *Agile implementation initially occurred in July 2021. It is now well implemented as the teams have become knowledgeable of the process and are efficiently operating.*
- ✓ *Collaboration between the Core and Core 2 teams has become more encouraged, allowing for any gaps in the integration of the two systems to be identified early.*

Project Change Request Overview (cont.)

What initiated this change?

2. Volatility in Scope & Schedule

Root Cause Analysis

- ✓ *The scope was not well understood. A t-shirt sizing attempt was made early on (July 2021) that should have increased the timeline but was discounted as not accurate.*
- ✓ *Revised timeline from 2021 was made under the assumption of zero unknowns.*
- ✓ *The need/desire to build new modules increased the amount of work necessary to complete the project, as well as the complexity of the project.*

Mitigation Strategy

- ✓ *All requirements from the original Business Requirement Documents have been parsed out into user stories and acceptance criteria at this point.*
- ✓ *Consistent refinements of the user stories by the engineering scrum teams will assist to identify unknowns, and to flesh out any questions or needed clarification prior to starting work.*
- ✓ *Sprint metrics such as velocity and cycle time are analyzed at the end of each sprint to ensure the team is delivering consistently. Any dips in efficiency will be addressed, and predictability/consistency will make our timelines more accurate*

Project Change Request Overview (cont.)

What initiated this change?

3. Management of New Technical Architecture

Root Cause Analysis

- ✓ *Shiny object syndrome. New, better practices did need to be adopted to rebuild modules in Core 2, but this was taken to an extreme and too many were adopted at once.*
- ✓ *Desire to rewrite based on changing technical direction.*
- ✓ *Core and Core 2 integration was not defined until later in the project.*

Mitigation Strategy

- ✓ *Engineering management has defined which design patterns to leverage and where to leverage them, giving the teams consistency to move forward.*
- ✓ *The development process has been well defined and documented, to provide zero ambiguity or confusion that may cause tech debt to occur.*
- ✓ *More consistency in code review will allow for the design patterns, code, and development processes to be monitored and consistent, so that we are not encountering shiny object syndrome or new practices.*

Project Change Request Overview (cont.)

Additional Mitigation Strategies:

- **Increased communication between LINQ and ADE teams:**
 - ✓ *Via frequent touch points to cover bugs/known issues, roadblocks, end-to-end UAT updates and any other clarifications or discussions needed.*
 - ✓ *Adding bi-weekly UAT release demos to showcase all features has helped increase product visibility for HNS program area.*
 - ✓ *Both teams have been more transparent about any risks or issues and work together to resolve.*

Financial Impact

Change in Project Financials

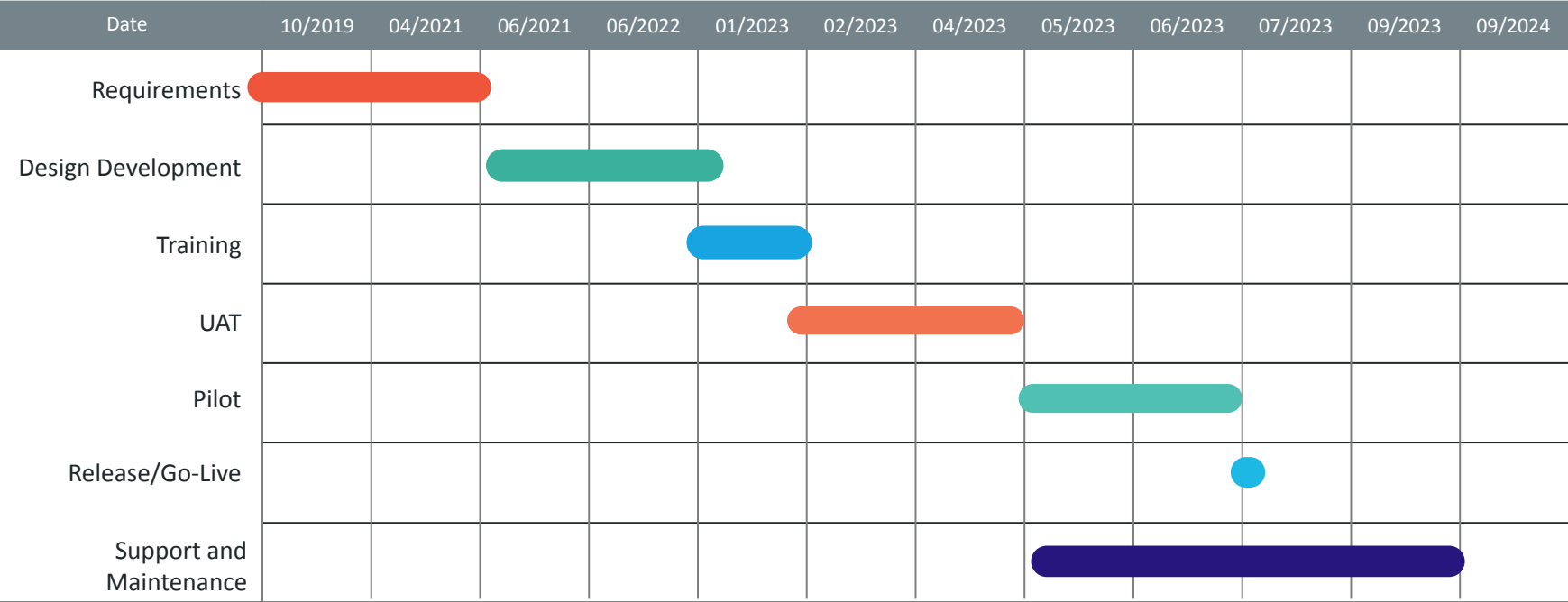
Original Development Budget	\$2,750,930
Actual Spend from <u>FY20</u> through <u>FY23</u>	\$2,512,627
Projected Spend for <u>FY24</u> through <u>FY25</u>	\$534,953
Revised Development Budget	\$3,047,580
Increase of:	\$296,650**

***Vendor contract has not changed, the increase in cost is to maintain internal ADE IT resources for the extended timelines.*

Noteworthy Fiscal Events:

- *FY19 – Original PIJ approved in September 2019.*
- *FY21 – Revised timelines & increased budget approved by ITAC via CR-0663.
– Development budget payments were distributed equally monthly and not based on deliverables.*
- *FY23 – New change request being requested for extended timelines via CR-0934.
– Payments are now based on milestone deliverables.*

Original Project Timeline



Revised Project Timeline

Identify any change in timeline and possible benefits:

Overall Development Completion (Milestones 1 thru 4) - 65%

Milestone Name	Milestone Health	% Complete	Original Start Date	Original End Date	Revised Start Date	Revised End Date
Milestone 1 (MVP)		91%	7/21/2021	1/31/2023	n/a	10/17/2023
Training		Not Started	12/1/2022	1/30/2023	10/18/2023	11/30/2023
Milestone 2		25%	7/21/2021	1/31/2023	5/17/2023	2/20/2024
Milestone 3		17%	7/21/2021	1/31/2023	5/3/2023	4/1/2024
MVP User Acceptance Testing (UAT)		Not Started	1/31/2023	4/28/2023	12/1/2023	4/26/2024
MVP Pilot Testing		Not Started	5/1/2024	6/2023	4/29/2024	6/28/2024
MVP Go-Live		Not Started	7/1/2023	7/1/2023	7/1/2024	7/1/2024
Support and Maintenance Begins		Not Started	6/1/2023	9/1/2024	7/1/2024	7/4/2025

Revised Project Timeline (cont.)

Identify any change in timeline and possible benefits:

Milestone Name	Milestone Health	% Complete	Original Start Date	Original End Date	Revised Start Date	Revised End Date
Milestone 4 (Phase 2)		Not Started	7/21/2021	1/31/2023	4/2/2024	2/3/2025
Milestone 4 UAT (Phase 2)		Not Started	1/31/2023	4/28/2023	7/1/2024	3/31/2025
Milestone 4 (Phase 2) Go Live		Not Started	7/1/2023	7/1/2023	4/1/2025	4/1/2025
PROD Warranty (post go live support)		Not Started	5/3/2023	9/5/2023	4/1/2025	6/30/2025
Product Acceptance		Not Started	4/26/2023	5/2/2023	n/a	7/1/2025

Actual and Projected Project Costs

Project Costs by Category	*FY20	*FY21	*FY22	*FY23	FY24	FY25	Total
Professional & Outside Services (Contractors)	\$449,677	\$237,894	\$995,298	\$422,938	\$67,500	\$283,093	\$2,456,400
Hardware	-	-	-	-	-	-	-
Software	-	-	-	-	-	-	-
License & Maintenance Fees	\$68,000	\$68,000	\$70,000	\$72,100	\$74,300	\$426,575 (Maintenance Only)	\$778,975
Other Operational Expenditures (ADE MOA's)	\$13,068	\$117,606	\$123,358	\$152,788	\$184,360		\$591,450
Total Development	\$462,745	\$355,500	\$1,118,656	\$575,726	\$251,860	\$283,093	\$3,047,580
Total Operational	\$68,000	\$68,000	\$70,000	\$72,100	\$74,300	\$426,575	\$778,975

*Actual project costs

Q & A Session

Recommended Conditions

ADOA-ASET Conditions

1. 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.
2. 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.
3. 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.
4. Prior to entering into any agreements related to system integrations with AFIS, The Department of Education shall work with The Department of Administration in order to ensure that project requirements can be met.

Appendix

Authentication Architecture Diagram

