

ED19002 - AELAS School Finance Payment Systems

State of Arizona – Department of Education

Project Closeout

July 17, 2024



Agency Mission

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

Agency Values

*Honesty and Integrity • Sense of Urgency • Spirit of Service •
Quality • Continuous Improvement*



Team Introduction

Roles Present at ITAC

- Art Harding – Chief Operating Officer/Project Sponsor
- Beth Neeley – Chief Information Officer
- Joe Carrillo – Chief Technology Officer / Deputy CIO
- Qur'an Nero – Director of IT Program Management
- Tim McCain – Chief Financial Officer
- Xin Liu – Deputy Associate Superintendent, School Finance (Product Owner)
- Venkesh Ethiraj – Project Management Office Manager
- Klyde Nieb – Architect
- Sachin Kale – .Net Developer

Business Need

The Arizona Department of Education (ADE) manages and administrates a School Finance Payment System (SFPS) which annually processes over six billion dollars in payments in State aid to support over one million students across Arizona. The previous Payment System, in use since 1999, was running on an unsupported Microsoft Windows 2000 platform, and daily challenges with data integrity and logic were impacting data integrity and effective business operations. Large portions of the system were unmaintainable, resulting in the system being used piecemeal, which impacted its auditability. Due to system inadequacies a substantial amount of manual testing and data intervention was occurring to ensure proper function.

Project Goals by Phase

- ◆ **Phase I:** Replace School Finance Payment systems, enabling payments to school districts (APOR) and charter districts (CHAR).
- ◆ **Phase II:** Replace the Budget and Annual Financial Report (AFR) legacy systems and automate manual payments for AZ Dept of Corrections (ADOC) and AZ Dept of Juvenile Corrections (ADJC).
- ◆ **Phase III:** Produce the Superintendent Annual Financial Report (SAFR), complete data sharing configurations, automate the remaining manual miscellaneous payments, conduct Budget and AFR Pilot Program, as well as other miscellaneous enhancements deferred from Phase I and II.

Summary of Work Completed

Modernization: IT and School Finance replaced an old and breaking system with a new set of modular systems that grant control to the staff and management of the School Finance program area.

Automated Calculations & Payments: Developed features to calculate payments to School Districts and Charter Districts, ADOC, ADJC, Certificate of Education Convenience (CEC), Unorganized Territory, County Small School, County Jail, and County Juvenile, Classroom Site Fund (CSF), Instructional Improvement Fund (IIF).

Automated Adjustments: The calculation and management of many complicated payment adjustments, previously handled manually.

Expanded Testing: Ability to apply acceptance and data quality tests that are applied to Budget and AFR document submissions. This gives the LEAs immediate feedback.

Supporting Subsystems Rewritten:

- Transportation application
- School District Employee Report (SDER) application
- Charter Estimate Counts application

Reporting Functionality: Program area can now independently create reports; monthly reports, annual reports, adhoc reports, SAFR report, etc....




Integration: ADE data input and warehouse system integration.

Data Sharing: Data share mechanism is available for use by other State agencies and authorized users.







Auditability: The system logs errors and issues, but also the layers of calculation inputs that were part of the calculation set that is producing the error. The ability to quickly see the value and source of various calculation inputs will save a lot of man hours in the long run.

Project Health Card

Ending Project Overall Health is **Green**

Schedule		<p>Project deliverables were deployed on time and within the 10% variance.</p> <ul style="list-style-type: none">• Start Date February 2022• Phase I Complete June 2022• Phase II Complete November 2023• Phase III Complete June 2024
Milestones		<p>Critical deliverables were within scope, on time, and approved in accordance with acceptance criteria.</p>
Budget		<p>Total Project Budget: \$9,000,000</p> <ul style="list-style-type: none">• Phase I Budget Spend: \$2,942,280• Phase II Budget Spend: \$2,495,147• Phase III Budget Spend to Date: \$3,148,944• Projected Spend (June 2024): \$230,332 <p>Estimated Budget at Completion: \$8,816,703 Estimated Under Budget by \$183,297</p>

IV&V Assessment Component Health Trend - Phase III

 Trend = Improved  Green = Strong Health
 Trend = Sustained  Yellow = Moderate Health
 Trend = Regressed  Red = Poor Health

Assessment Component		Report 7	Report 8	Report 9	Report 10	Report 11	Report 12	Report 13
Plan Viability	1. Completeness of Plan	→	↑	→	→	→	→	→
	2. Timeline	↓	↑	↑	↓	↑	→	→
	3. Staff Levels and Skills	↓	↑	↓	↓	↓	↓	→
	4. Solution Architecture	↓	↑	→	→	↓	↑	↑
	5. Technical Platform and Interfaces	→	→	→	→	↓	↓	↓
	6. Implementation Methodology	↓	↑	→	↓	↑	→	→
	7. Business Process Improvement	→	→	→	→	→	→	→
	8. Data Management and Migration	→	↓	↓	→	↑	↓	→
	9. Testing and Quality Assurance	→	↑	↑	→	↑	→	→
	10. Organizational Change	→	→	→	→	→	→	→
	11. Post-Implementation Readiness	→	↑	↑	→	↑	↑	↑
Project Delivery Practices	12. Project Governance	↓	↑	→	→	→	→	→
	13. Financial Management	↓	↑	→	→	→	→	→
	14. Vendor and Oversight Management	→	→	→	→	→	→	→
	15. Schedule Management	↓	↑	↓	↓	→	→	→
	16. Scope Management	↓	→	↑	→	→	→	→
	17. Risk Management	→	↑	→	↓	↓	↑	↑
	18. Resource Management	→	↑	↓	↓	→	→	→
	19. Communication Management	→	↑	↑	→	→	→	→
	20. Documentation and Deliverable Management	↓	→	→	→	→	→	→

Key Performance Indicators

The fragility of the legacy system resulted in many operations being interdependent and unable to execute concurrently. The prior system design was inefficient, incurring a significant burden on the infrastructure. Many manual processes were in place which caused days performing tasks that would otherwise require seconds or hours.

The following KPIs were achieved at the conclusion of the three-year development and implementation period:

- Reduced the payment processing time from **48 hours** to approximately **6-10 minutes** per pay period and payment type.
- Reduced SAFR report generation time from **3 months** to **2 weeks**, including reviews and approvals.
- Improved Budget System and Payment System auditability by adding audit log tables.

Lessons Learned

Challenges

Lack of Scoping or Feasibility Study: This would have been helpful to understand the breadth and depth of the project.

Aggressive Timeline: The accelerated project schedule and underestimated UAT hours allowed little time for schedule slippage. Missed and/or misunderstood requirements stressed the timeline and came close to causing burnout.

Change Control: A lack of adherence to the change management process during Phase I and part of Phase II resulted in a strain on resources.

Business Bandwidth: Business SMEs juggling job duties, as well as spending a considerable amount of time in requirements and UAT causing stress on the team and project timeline.

Funding Constraint: Delays obtaining critical deliverable demo approvals caused occasional delays in APF funds transfers and challenges paying invoices on time.

Successes

Collaboration/Teamwork: The collaboration, dedication, and commitment of the IT Project Team and highly knowledgeable School Finance Team, plus extraordinary oversight partnership led to the success of one of ADE's largest and most demanding IT projects.

Performance Improvements: Phase III scope was changed to include a .Net upgrade, which allowed ADE to benefit from performance enhancements in time for the FY25 budget submission window.

Resource Changes: Despite major resource changes, the team kept their continuity of purpose and always met project timelines and deliverables.

Technical Advisor/DRC Reviews: Tethering document updates to the Critical Deliverable schedule ensured documents were regularly reviewed, maintained, and fit for purpose.

Current Team Members

School Finance Team

- Tim McCain – Chief Financial Officer
- Xin Liu – Deputy Associate Superintendent (Product Owner)
- Monica Paz – Director of Operations Support (SME)
- Ryan Young – Budget Analyst (UAT Lead)
- Rashmi Chandra – Budget Analyst
- Sarah Hung – Payment Analyst
- TJ Howard – Budget Analyst
- Kalaf Blake – Budget Analyst

IT Project Team

- Sudha Mantripragada – Project Manager
- Klyde Nieb - Architect
- Kumar Bysani – Lead Developer
- Sachin Kale – Sr. Developer
- Sailaja Kolukuluri – Developer
- Mukesh Kumar – Developer
- Sindhu Gopisetty – Lead Quality Assurance Analyst
- Krishna Devarakonda – Quality Assurance Analyst
- Lakshmi Kulkarni – Quality Assurance Analyst
- Bhargavi Nallamothe – Business Analyst



ADOA-ASET

- Lisa Marshall Meyerson - Chief of Enterprise Services and Consulting
- Lesley Carey – Sr. Oversight IT Analyst
- Michael Carpenter – Former Engagement Manager
- Justin Modglin – Engagement Manager
- Sudhakar Adda - Executive IT Consultant



Info-Tech Research Group - IV&V Consultants

- Raymond Hamlyn – Senior Manager, Consulting
- Sarah Clappison – Sr. Consultant

Document Review Committee

- Thomas Bogart (Chairman)
- Dan Bigler – Voting Member
- Dale Ponder – Voting Member
- Jeremy Calles – Voting Member
- Norman Purdy – Voting Member
- Sean Rickert – Voting Member
- Ricky Hernandez – Voting Member
- Kimberly Dugdale – Voting Member
- Daniel Obrien – Voting Member
- Darren Devereaux – Technical Advisor
- Simon Strong – Technical Advisor
- Tracy Williams – Technical Advisor

Former Team Members

IT Project Team Members:

- Nan Nesvig – Project Manager
- Britto Augustine – Contributing Architect
- Jagan Gajjala – Lead Developer
- Jyothi Vaddhireddy – Sr. Developer
- Pramod Dharma – Developer
- Saritha Pulimamidi – Developer
- Rajesh Govindarajan – Developer
- Usha Vagasena – Business Analyst
- Himu Mandava – Business Analyst
- Priyanka Chandan – Business Analyst
- Radhika Bukka – Business Analyst
- Sri Kolli – Quality Assurance Analyst
- Latha Kothapalli – Quality Assurance Analyst
- Anand Arora – Quality Assurance Analyst
- Jeff Lewis – Tech Writer

School Finance Team

- Lyle Friesen - Associate Superintendent (Product Owner)
- Charlie Martin – Deputy Associate Superintendent (Product Owner)
- Chelsea Jamison – Payment Analyst
- Kristen Ramsay – Budget Analyst
- Brandon Sullivan – Budget Analyst
- Katie Kenny – Sr. Business Analyst

ADOA-ASET

- Michael Carpenter – Former Engagement Manager

Document Review Committee

- Kenneth Hicks - Chairman
- Dr. Chuck Essigs - Vice Chairman
- Scott Thompson – Voting Member

Thank you



Q & A Session