Arizona Education Learning and Accountability System

ITAC AELAS

Program Review

May 27, 2014

FY2015 AELAS projects overview $12,000,000

- AELAS Program Support Office (PSO) - $1,500,000
- AELAS Production Services - $2,200,000
- AELAS School Finance - $1,500,000
- AELAS Arizona Education Data Standards (Ed-Fi/AzEDS) – $2,200,000
- AELAS AZ Dash/Statewide Longitudinal Data System (SLDS) - $ 1,500,000
- AELAS Opt-In Student Information System $800,000
- AELAS Shared Services (including OEM) $1,000,000
- AELAS Opt-In Teacher and Learning Services $450,000
- AELAS Data Governance - $850,000

Project Name	FY14 Objectives	FY14 Key Accomplishments (through 3/31/14)	FY15 Deliverables
Program Support Office (PSO)	-Deliver projects on time and within budget -Increase communication and outreach efforts to build support among users, to ensure ADE builds what LEAs need and to notify users on how to use tools as they become available -Provide quality control for AELAS projects and funding including financial oversight, vendor management of ADE IT's contract laborers and standards creation for project design, development and implementation	-Completed IT Portfolio Review template and training materials -Created issue mgmt log and dashboard to ensure adequate communication between ADE and ASET Oversight Team -Developed PIJ reporting user interface to streamline monthly PIJ status report submission, ensuring timely delivery to ASET Oversight Team -Updated IT Project Portfolio metadata for internal applications -Developed and conducted training on writing business goals for IT PMs and PCs & developed procedures and standardized reporting documents for project oversight -Created and published AELAS transparency website	-2 Personnel to manage risk to ensure projects on time and within budget -2 Personnel increased communication and outreach efforts to build support among users -3 Personnel for Finance and Procurement for management of opt-in contracts/invoicing and vendor management -$175,000 third-party independent assessment -Staff to manage RFPs, IGAs, ISAs and other contractual obligations
Production Services	Not Applicable	Not Applicable	-3 FTEs (Network, Security, Operations, Database) to provide ongoing customer support for new services -3 FTE support for ADEConnect to ensure sustainability -3 FTE support for AZ Dash to ensure sustainability -Azure project, replace obsolete back up system to ensure agency data security -FTE Data Governance support for FERPA compliance and data literacy
ED14002 - AELAS School Finance	-Complete discovery of existing CSF manual processes/systems -Design Solution Architecture and reporting solutions -Finalize Business requirements -Develop work flow and business rules -Test and deploy CSF application to production	-Obtained sign off on business requirements -Completed Test Plan -Completed 75% development of work flow and business rules -Started Quality Assurance	-Automate and decommission 8 manual payment calculation tools -29 of 48 manual tools will be decommissioned by end of FY14 -Decouple aggregation functions from legacy SAIS and land in the new School Finance payment system

ED14004 - AELAS Ed-Fi (AzEDS)	-Create a standard way to receive student-related data
	-Create Student ODS, a single source of student data, based on national standards (Ed-Fi and CEDS)
		-Provided vendor specifications for the Ed-Fi mapping
		-Created specifications for the student-related operational data store
		-Created high-level design for Ed-Fi connectors and Extract, Transform and Load framework
		-Created high-level design for rules and error processing
		-Completed 15% of development
			- Complete 6 of 10 remaining operational data stores
			  - 5 complete and 2 partially complete in FY14
			  - 4 remaining data stores complete in FY16
			- Populate database environment built in FY14 pilot to comply with Data Governance Commission data collection policy
			- More student transactions will be collected in this format (determined by Phase 1 implementation)

ED14006 – AELAS AZ Dash (SLDS)	-Roll out to 200 LEAs -Implement ADEConnect (IMS) capability for 620 LEAs -Implement Data Governance Practices for ADE and LEAs	-Outreach calls completed for 343 LEAs -271 LEAs have signed up for ADEConnect and AZDash -135 LEAs have installed and tested ADEConnect -79 LEAs have received training on AZDash	- Complete dashboard rollout and training to remaining 520 LEAs - Decommission legacy data warehouse
ED14009 - AELAS OEM	-Replace current ADE Enterprise databases -Create Customer Relationship Management (CRM) based change management interface that will act as a single authoritative source for all changes	-Obtained sign-off on business requirements -Completed Test plan -Started work on wireframes and Use Cases	- Complete implementation of role attributes and relationships in CRM for OEMS Phase 2
ED14005 - AELAS Opt-In SIS	-Complete SIS RFP and award -Integrate SIS to Student Operational Data Stores -Implement and integrate six LEAs (includes data migration)	-Completed review, evaluation and scoring of RFP responses -Started contract award negotiations, pending ITAC approval to proceed with award	- Stand up and implement Opt-in SIS to at least 24 LEAs
AELAS Shared Services	Not Applicable	Not Applicable	-Rollout ADEConnect to additional 280 LEAs -Create IMS portal for easy customer use -Transition to FTE support for sustainability
AELAS Opt-In Teacher and Learning Services	Not Applicable	Not Applicable	-Teacher and Learning tools implementation at least 6 LEAs -Learning Management, Teacher Observation and Content Management Systems
AELAS Data Governance	Not Applicable	Not Applicable	-Define and build master data dictionary -Identify reporting requirements -Reduce need for external data requests by 80% -Consolidate 285 agency data requests to LEAs by 50%

PROJECT NAME	PIJ ID	Action	ITAC Required – Est. Month	JLBC Required - Est. Month	FY 14 Allocation	Est. FY 14 Carryover	FY 15 Appropriation
Program Support Office (PSO)	No PIJ	Info Item	No	Yes/June	$1,000,000	$0	$1,500,000
Production Services/Support	PIJ(s) TBD	Info Item	Not at this time	Yes/June	$0	$0	$2,200,000
AELAS School Finance	ED14002	Amend PIJ	Yes/June	Yes/June	$800,000	$0	$1,500,000
AELAS Ed-Fi (AzEDS) Standardized Student Data Store	ED14004	Amend PIJ	Yes/June	Yes/June	$1,550,000	$574,330	$2,200,000
Student Longitudinal Data System (SLDS) - AZ Dash	ED14006	Amend PIJ	Yes/June	Yes/June	$2,750,000	$339,934	$1,500,000
AELAS Ed-Fi (AzEDS) OEM	ED14009	Amend PIJ	Yes/June	Yes/June	$450,000	$0	$600,000
AELAS Student Information System (Opt-in SIS Pre-PIJ)	ED14005	Full PIJ to be submitted	Yes/June	Yes/June	$450,000	$118,308	$800,000
AELAS Ed-FI (AzEDS) Shared Services	New PIJ	PIJ to be submitted	No	Yes/June	$0	$0	$400,000
AELAS Opt-In Teacher and Learning Services	New PIJ	PIJ to be submitted	No	Yes/June	$0	$0	$450,000
AELAS Data Governance	New PIJ	Pre-PIJ to be submitted	No	Yes/June	$0	$0	$850,000
TOTAL Appropriation					**$7,000,000**	**$1,032,572**	**$12,000,000**

Program Support Office $1,500,000 No PIJ required

- Create standards for project design, development and implementation as well as financial oversight for ADE IT's contract laborers
  - Manage risk to ensure projects on time and within budget
  - Increased communication and outreach efforts to build support among users
  - Finance and Procurement for management of opt-in contracts/invoicing and vendor management

- $175,000 third-party independent assessment

- Staff to manage RFPs, IGAs, ISAs and other contractual obligations
  - Prepare reports and other materials required for AELAS program oversight

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Production Services $2,200,000
No PIJ required for FTE support

- Sunset legacy services and infrastructure
  - Replace obsolete back up system to ensure agency data security

- Transition application support to full-time employees to ensure that long-term agency vision and strategic direction is maintained
  - Infrastructure and network staffing support
  - ADEConnect
  - AZ Dash
  - Data Governance
  - SIS Opt-In

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AELAS School Finance $1,500,000 Amend ED14002 for ITAC review

- Target manual processes for automation to reduce time-consuming manual effort and analyze core business needs

- Continue automation of manual calculation processes and decoupling of legacy SAIS payment functions from student transactions
  - Automate and decommission 8 manual payment calculation tools. Will have completed 29 of 48 by end of FY14

  - Aggregation functions must be decoupled from legacy SAIS and land in the new School Finance payment system

- Complete SAIS School Finance capability replacement is out of scope for FY15, and SAIS sustainability remains a significant risk

AELAS Ed-Fi $2,200,000
Amend ED14004 for ITAC review

- Complete 6 of 10 remaining operational data stores
  - 5 complete and 2 partially complete in FY14
  - 4 remaining data stores complete in FY16

- Populate database environment built in FY14 pilot to comply with Data Governance Commission data collection policy
  - More student transactions will be collected in this format (determined by Phase 1 implementation)

AELAS Statewide Longitudinal Data System $1,500,000 Amend ED14006 for ITAC review

- AZ Dash provides dashboards using the newly-constructed data stores

- Complete dashboard rollout and training to remaining 400+ LEAs

- Decommission legacy data warehouse

AELAS Opt-In SIS $800,000
AELAS Opt-In Teacher/Learning $450,000

- Stand up and implement Opt-in SIS to at least 24 LEAs
  - Amend ED14005 to full PIJ for ASET review

- Teacher and Learning tools implementation at least 6 LEAs
  - Create new PIJ for ASET review
  - Learning Management System
  - Teacher Observation
  - Content Management System

AELAS Shared Services $1,000,000 ASET review required

- Organizational Entity Management Phase 2 $600,000
  - Amend ED14009 for ASET review
  - Complete implementation of role attributes and relationships in CRM

- ADEConnect (Identity Management Solution) $400,000
  - Create new IMS PIJ for ASET review
  - Rollout to remaining 280 LEAs
  - Create IMS portal for easy customer use
  - Transition to FTE support for sustainability
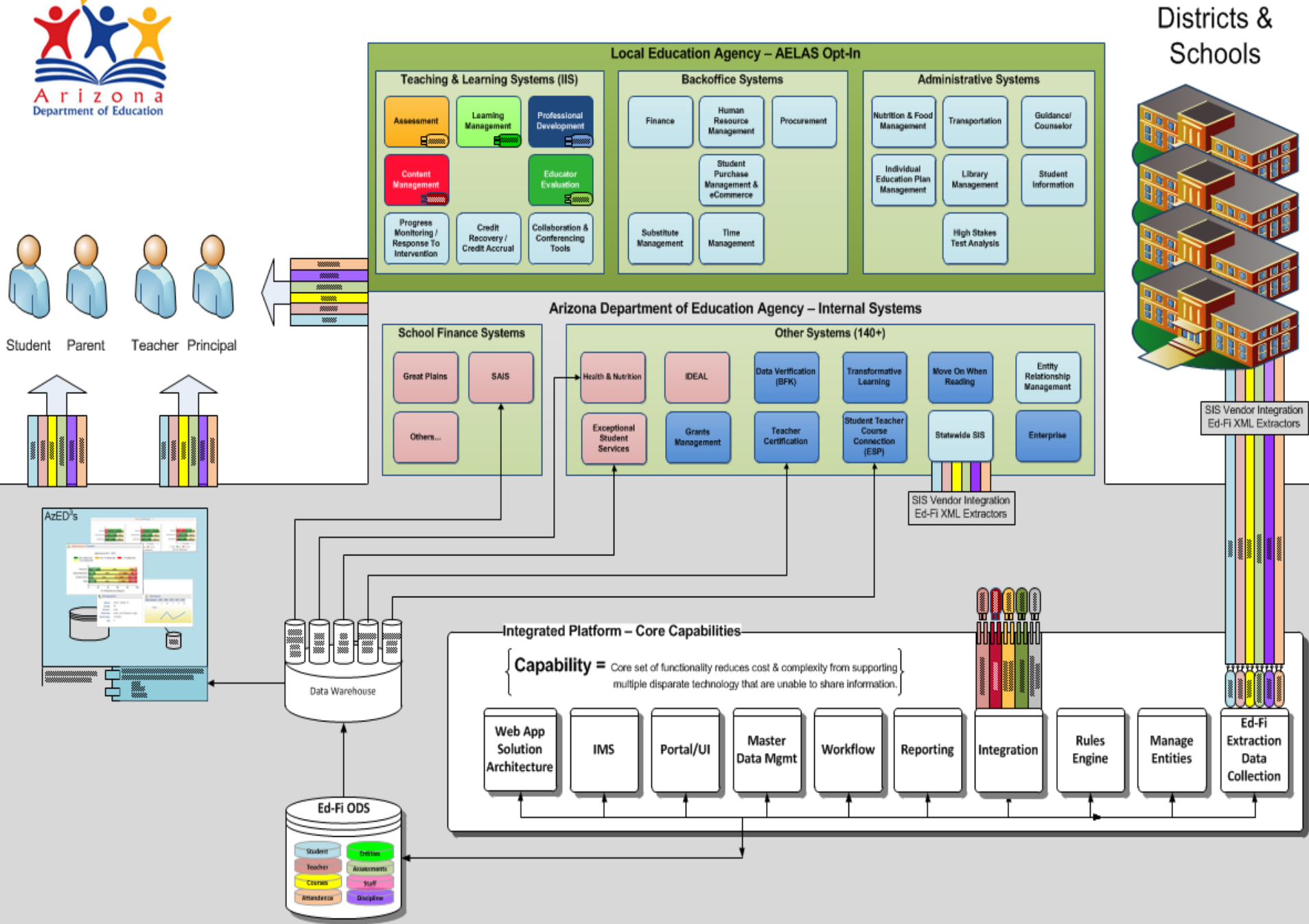
AELAS Data Governance $ 850,000 Pre-PIJ required for ASET review

- Define and build master data dictionary

- Identify reporting requirements (internal, external, state, federal, etc.)

  – Reduce need for external data requests by 80%

  – Consolidate 285 agency data requests to LEAs by at least 50%

Arizona Department of Education - Conceptual Architecture

Districts & Schools

Local Education Agency – AELAS Opt-In

Teaching & Learning Systems (IIS)
- Assessment
- Learning Management
- Professional Development
- Content Management
- Educator Evaluation
- Progress Monitoring / Response To Intervention
- Credit Recovery / Credit Accrual
- Collaboration & Conferencing Tools

Backoffice Systems
- Finance
- Human Resource Management
- Procurement
- Student Purchase Management & eCommerce
- Substitute Management
- Time Management

Administrative Systems
- Nutrition & Food Management
- Transportation
- Guidance/ Counselor
- Individual Education Plan Management
- Library Management
- Student Information
- High Stakes Test Analysis

Student   Parent   Teacher   Principal

Arizona Department of Education Agency – Internal Systems

School Finance Systems
- Great Plains
- SAIS
- Others...

Other Systems (140+)
- Health & Nutrition
- IDEAL
- Data Verification (BFK)
- Transformative Learning
- Move On When Reading
- Entity Relationship Management
- Exceptional Student Services
- Grants Management
- Teacher Certification
- Student Teacher Course Connection (ESP)
- Statewide SIS
- Enterprise

SIS Vendor Integration Ed-Fi XML Extractors

SIS Vendor Integration Ed-Fi XML Extractors

AzED³s

Data Warehouse

Integrated Platform – Core Capabilities

Capability = Core set of functionality reduces cost & complexity from supporting multiple disparate technology that are unable to share information.

- Web App Solution Architecture
- IMS
- Portal/UI
- Master Data Mgmt
- Workflow
- Reporting
- Integration
- Rules Engine
- Manage Entities
- Ed-Fi Extraction Data Collection

Ed-Fi ODS
- Student
- Entities
- Teacher
- Assessments
- Courses
- Staff
- Attendance
- Discipline

AELAS
Current known risks and mitigation

- Size and magnitude of ADE IT project
  - ADE is implementing phase gate and code review processes in each phase of the project to ensure immediate identification of any issues and to audit the progress and deliverables to ensure quality and confirm on-time delivery
  - Team is utilizing industry best practices, as well as highly skilled and senior developers to close the gap in our experience for this type of effort

- Reliance on outside vendors
  - Maintain constant communication through meetings, scope tracking, management and status reports and re-baseline as necessary

- Potentially difficult technical challenges and determination of how to approach challenge
  - ADE has implemented an architectural review team to maintain adherence to overall AELAS architecture and design requirements

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Thank You

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