

# ADE IT Modernization Effort Update



Presented to:

Arizona Data Governance Commission

May 18, 2012

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Chief Information Officer

Pamela Smith

Executive Director, Strategic Programs

# Agenda

- FY2013 Budget update and priorities
- Project Updates
  - SAIS Assessment Closeout
  - AELAS Business Case
  - Enterprise Architecture
  - Great Plains
  - Student-Teacher Connection
- Project/Budget Summary Update
  - Contingency request
- Formal CEDS/Ed-Fi data standards adoption
- SLDS Demo



Mark T Masterson

# FY 2013 PRIORITIES



Gus Felderhoff - Statêra

# **SAIS ASSESSMENT CLOSEOUT**

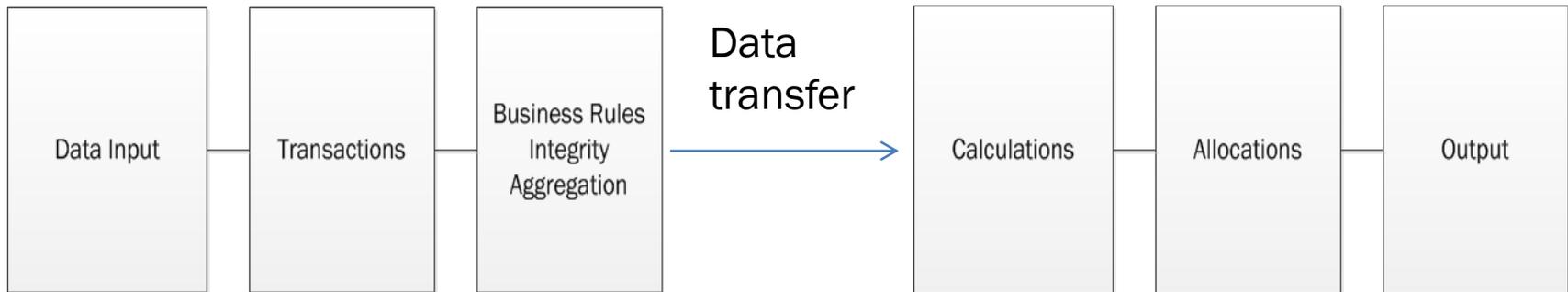
# SAIS Assessments (Reengineering)

- Identified core functions and processes
- Mapped SAIS processes from beginning to end
- Analyzed and documented all processes

# SAIS Reengineering

## SAIS Data Rules

## SAIS Funding Rules



- Problem domain is understood and documented
- Understanding what SAIS needs to be and how it has to work
- Critical data source and guide to requirements gathering phase



Jolene Newton, LearningMate

# **AELAS BUSINESS CASE**

# AELAS Business Case Survey

- \$350,000,000 on software licensing and integration every 5 years
- \$22,500,000 on SAIS personnel costs
- IT education administrative systems
  - Human Resources \$2,000,000
  - Financial Systems \$14,000,000
  - Student Information Systems \$2,000,000

## Challenges

- District systems **do not share data** with each other or with ADE
  - Average of **10** stand-alone systems per district
- Funding for IT minimizes funding for **curriculum, instruction and learning tools**

# AELAS Research

- Preliminary survey results are early justification
- AELAS early adopters (MCESA REIL Districts)
  - Assessment System
  - Content Management System
  - Learning Management System/Professional Development
  - Data Management System
  - Observation Tool (ADE Developed System)
- Increase LEA site visits through Educational Associations

# Private Cloud RFI

- Results are in from the RFI
  - 8 vendors responded
  - 5 vendors did not have sufficient time to respond
  - 3 vendors communicated interest but did not respond
  - 330 vendors associated with commodity codes
  - Insufficient time to respond
- Closely work with Chief Procurement Officer to re-issue RFI to increase quantity and quality of responses



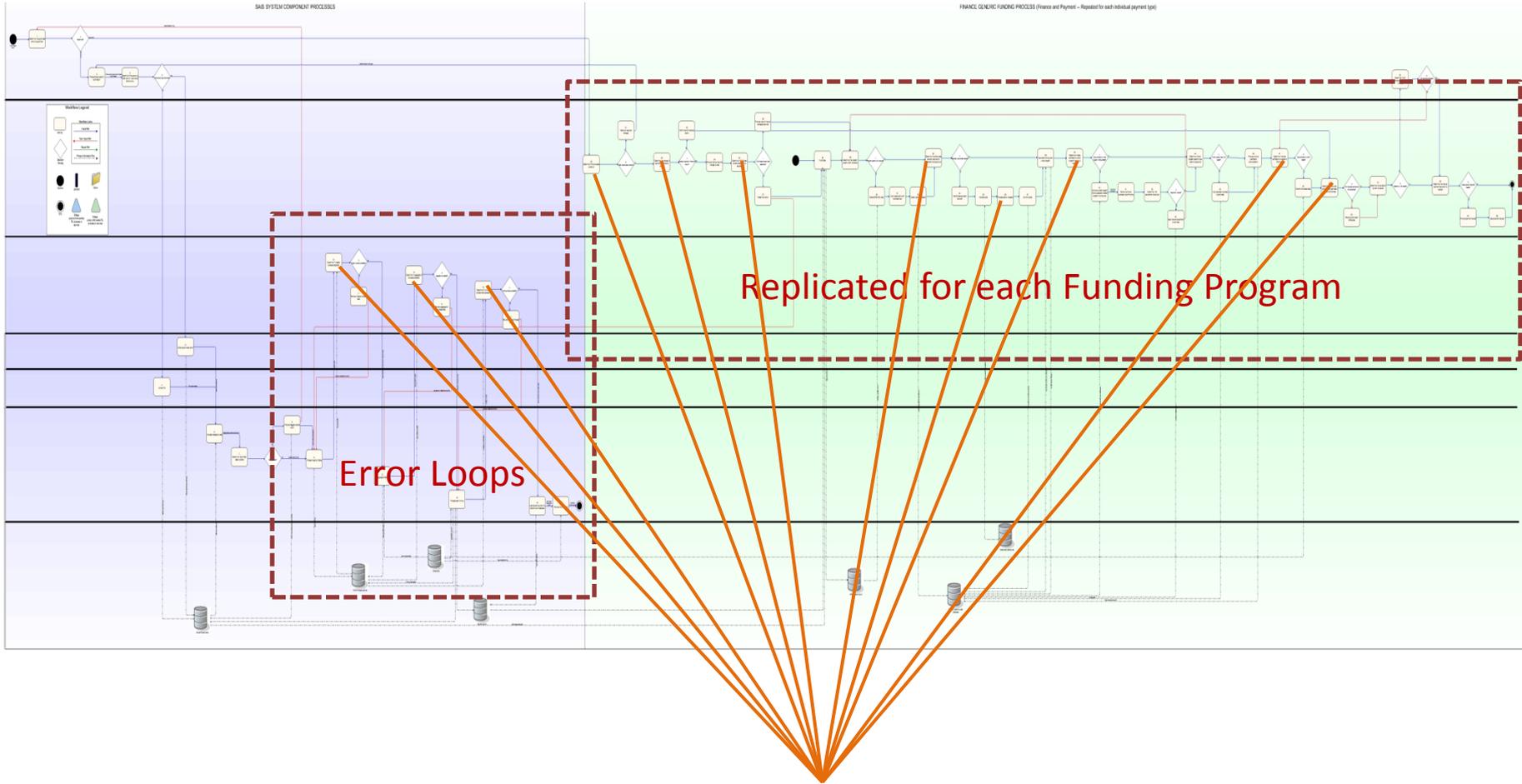
Ed Jung, LearningMate

# ENTERPRISE ARCHITECTURE

# Business Engagement

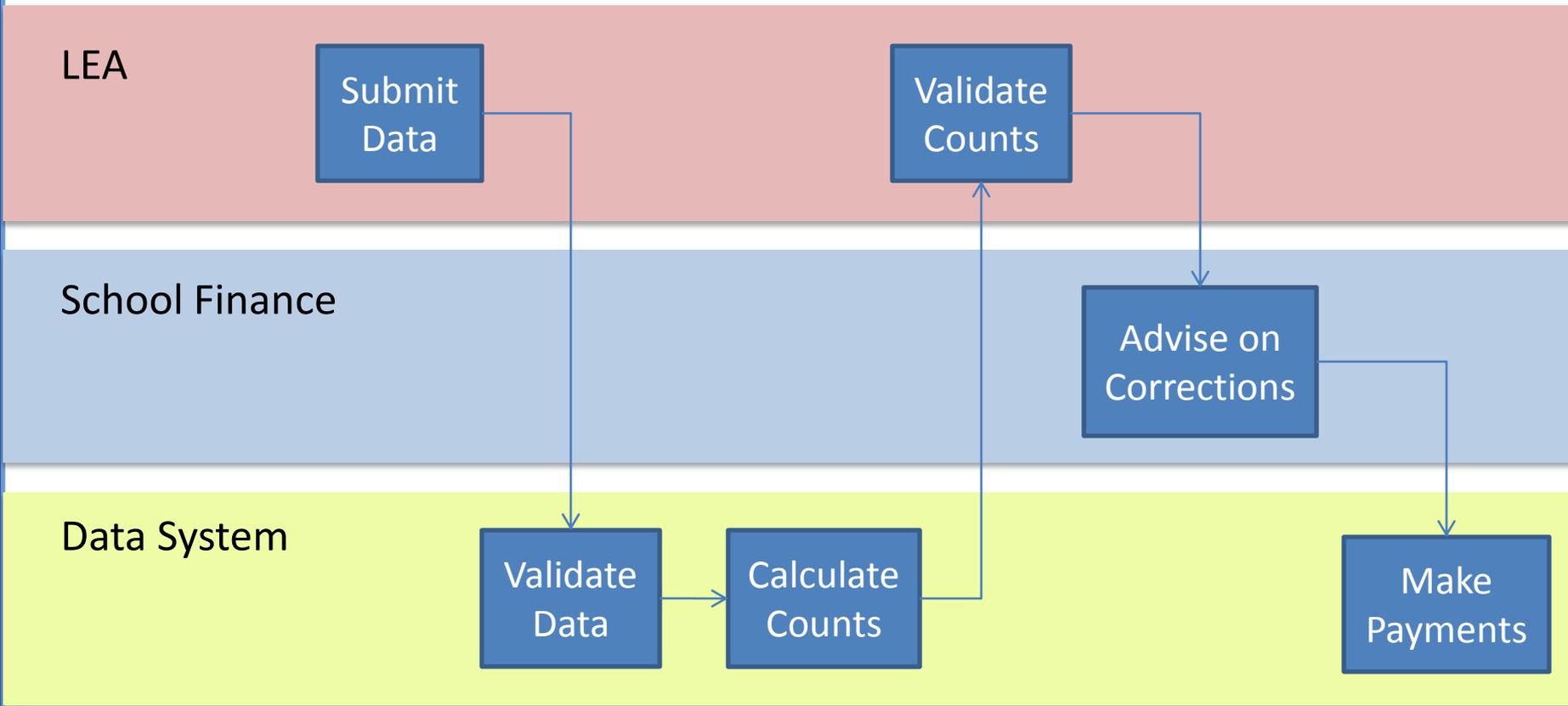
- Follow the money trail and audit areas
- School Finance
- Grants Management
- Exceptional Student Services

# School Finance - As Is



Determine if something went wrong and then determine how to fix it

# School Finance – To Be



# Impact of Poor Data Quality

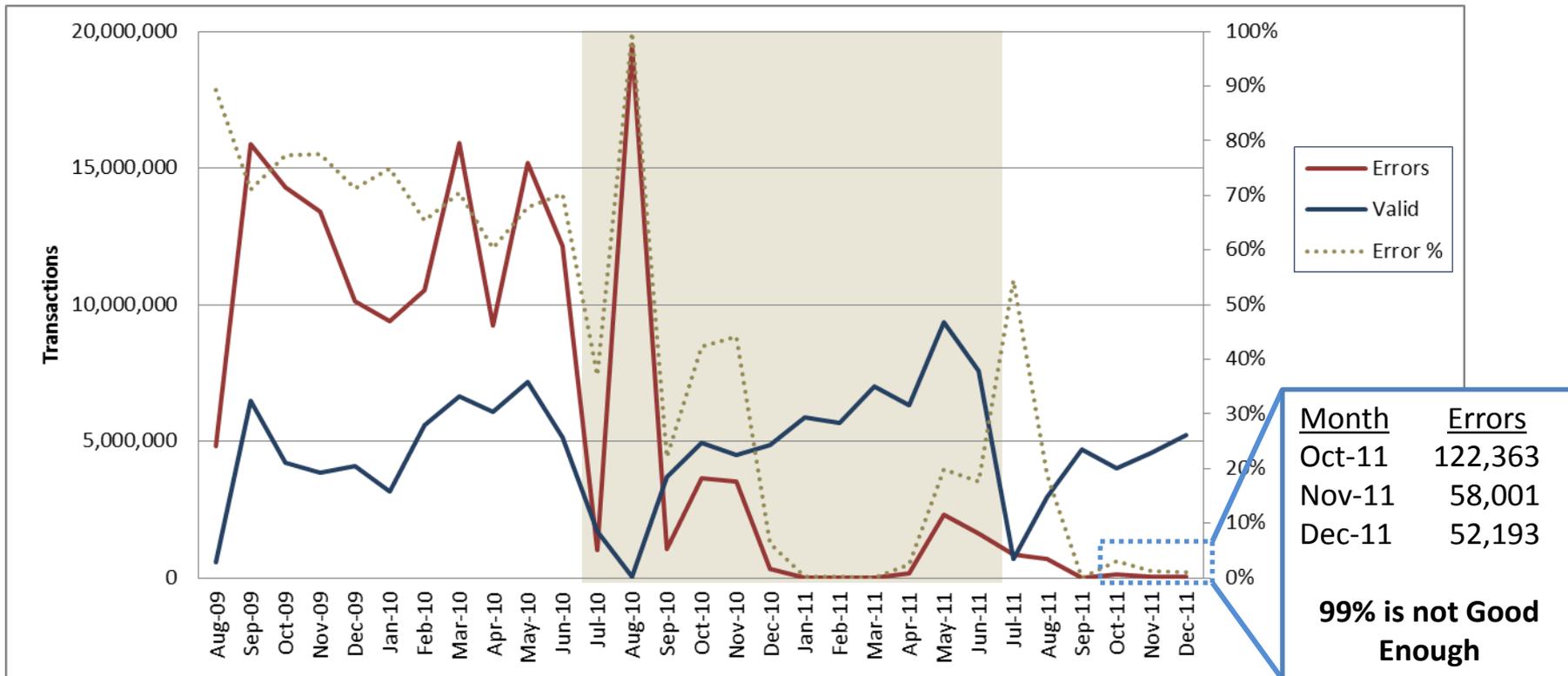
FY 2010-2011:

- 61M Valid transactions

Error Rate:

2009-2010 : 70%

1H2011 : 3%



# Irreconcilable Differences

137 Databases

8869 Tables

Student Details : 13 Copies

2,452,881	2,384,226
2,452,796	2,307,369
2,452,719	2,196,103
2,452,578	2,085,684
2,445,290	2,065,491
2,435,644	1,919,985
2,421,278	

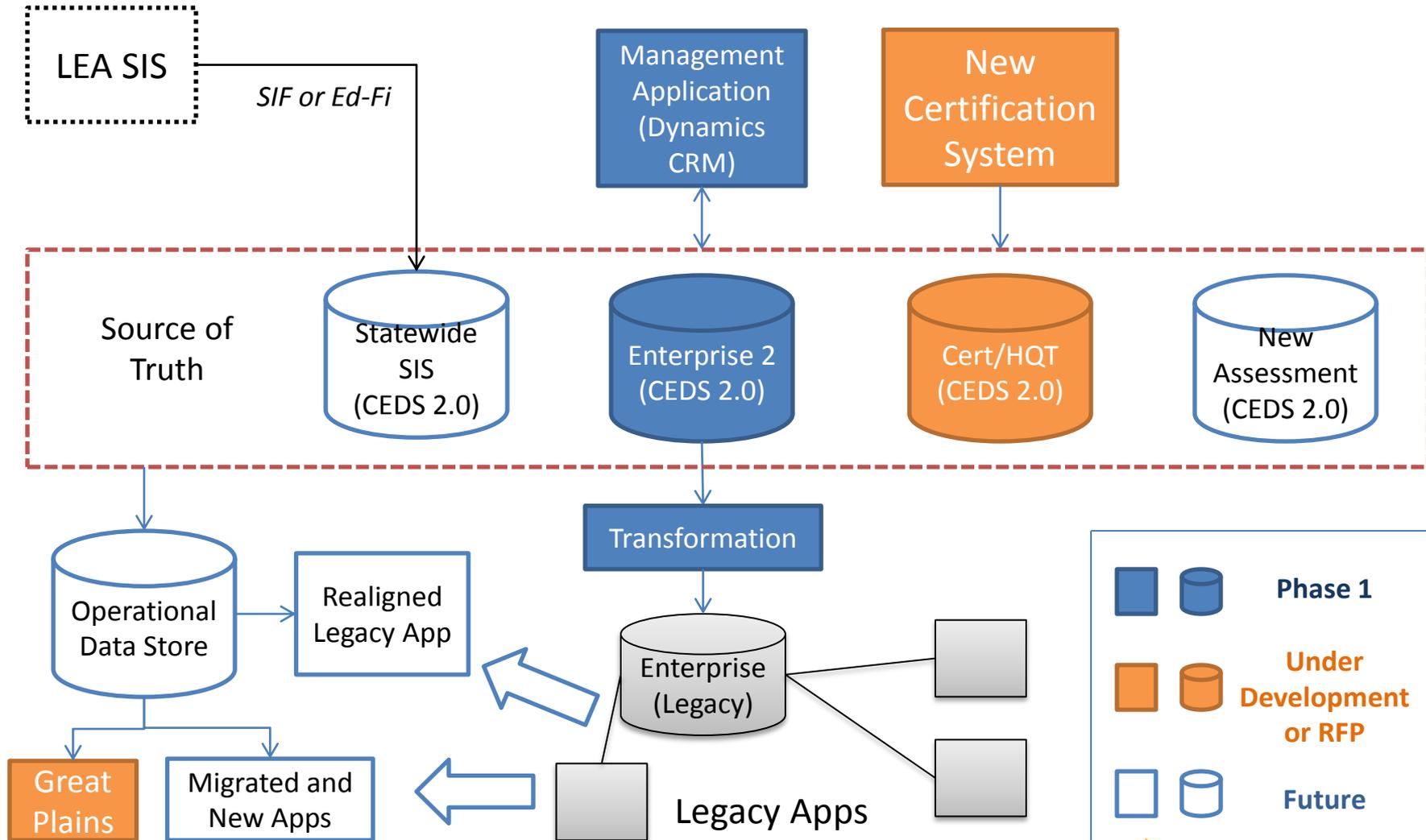
6 Copies on our  
Primary  
Production Server

# Recommendations

- Develop and implement Data Governance Policies, Procedures and Process
- Data Architecture aligned with standards
- Capture application data flow models converting tribal knowledge into tacit knowledge
- Enable the formal capture of embedded Business Rules with existing data and applications

Culture of Zero Data Defects

# Clean Data Approach



A photograph of a teacher and two students in a library. The teacher, a woman with short brown hair wearing a grey blazer over a green top, is leaning over a table. Two students, a boy and a girl, are looking at a tablet together. The boy is in the center, and the girl is on the right. They are in a library with bookshelves filled with books in the background.

Lisa Levy

# **STUDENT-TEACHER COURSE CONNECTION**

# Presentation Overview

- Program background
- AZ Course Catalog and Mapping
- State Report Manager
- Timeline and Support

# Program background

States receiving funds under State Financial Stabilization Fund (SFSF) must provide assurances in four key areas of education reform

1. Achieving equity in teacher distribution
2. Improving the collection and use of data
3. Standards and assessment
4. Supporting struggling schools

# Arizona Course Catalog

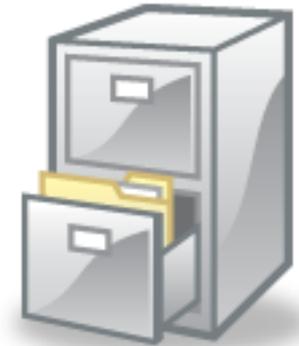
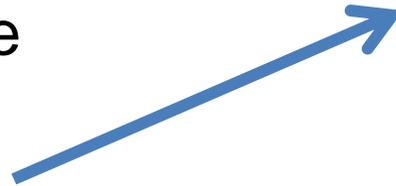
- School Codes for the Exchange of Data
  - Developed by National Center for Education Statistics
- Added unique Arizona courses
  - Given codes and mapped to SCED
- CourseWalk tool used to map and maintain course codes
  - LEAs retain local course catalogs
  - Standard courses
    - Assist in evaluating student performance
    - Review the rigor of courses taken by students
    - Help improve instruction
    - Improve the placement of students when they move
    - Provide consistent information in transcripts to postsecondary institutions

# State Report Manager



## Course Sections

- Course Title
- Period
- Teacher(s)
- Other Characteristics



HQT System



## Student section enrollment

- Section match information
- Student ID
- Credits earned/grade marks
- Other characteristics



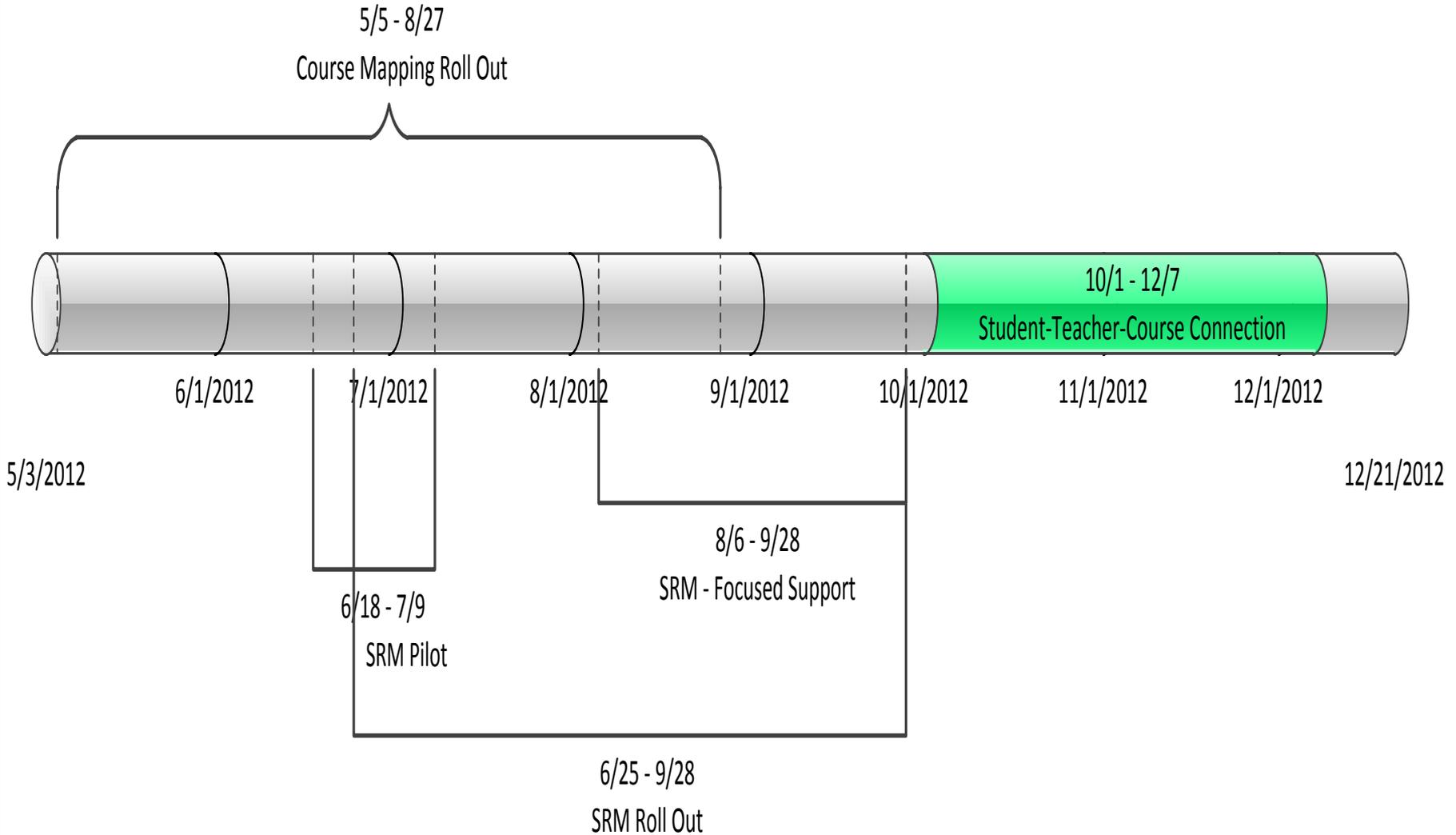
SAIS

# Automated data collection

- State Report Manager from ESP Solutions Group
- Upload CSV or TAB file
- Immediate Data Validation prior to Certification
- Friendly Interface
- Common Log-on

The screenshot shows the user interface for the State Report Manager. At the top left, it identifies the user as 'Aleutian Region School District' and 'District User'. The main content area displays a 'Latest Trial' section with a 'Generated' date of '10-17-2008 1:27pm'. Below this are buttons for 'Save', 'Download', 'Revalidate', 'Send to State', and 'Delete'. To the right, there are three icons representing data: 'Errors (3) Warnings (0)', 'Records (54)', and 'Reports'. A blue banner at the bottom of the interface states: 'Submitted: This state report has not yet been sent to the State.'

# Timeline



# Deeper Look

<b><u>CourseWalk</u></b>	<b>Start</b>	<b>End</b>
<b>Statewide Roll-out Kick-off</b>	<b>Thu 5/3/12</b>	<b>Mon 8/27/12</b>
LEA Early Adopter Support	Fri 5/4/12	Fri 6/15/12
<b>Regional Support Roll-out</b>	<b>Fri 5/4/12</b>	<b>Mon 8/27/12</b>
Region 1: Apache, Coconino, Navajo	Mon 5/14/12	Tue 7/10/12
Region 2: Maricopa	Tue 5/22/12	Wed 7/18/12
Region 3: Cochise, Pima, Santa Cruz	Tue 5/29/12	Tue 7/24/12
Region 4: Gila, Graham, Greenlee, Pinal	Mon 6/4/12	Mon 7/30/12
Region 5: La Paz, Mohave, Yavapai, Yuma	Mon 6/11/12	Mon 8/6/12
Clean-up	Tue 8/7/12	Mon 8/27/12
<b><u>STUDENT REPORT MANAGER (SRM)</u></b>	<b>Mon 3/12/12</b>	<b>Fri 9/28/12</b>
<b>SIS Vendors(School Information Systems)</b>	<b>Mon 5/7/12</b>	<b>Mon 6/4/12</b>
<b>SRM Pilot</b>	<b>Mon 6/18/12</b>	<b>Mon 7/9/12</b>
LEA SRM Early Adopter Support	<b>Mon 6/25/12</b>	<b>Mon 7/30/12</b>
<b>Regional Support Roll-out</b>	<b>Mon 8/6/12</b>	<b>Fri 9/28/12</b>
Region 1: Apache, Coconino, Navajo	Mon 8/6/12	Fri 8/31/12
Region 2: Maricopa	Mon 8/13/12	Mon 9/10/12
Region 3: Cochise, Pima, Santa Cruz	Mon 8/20/12	Mon 9/17/12
Region 4: Gila, Graham, Greenlee, Pinal	Mon 8/27/12	Mon 9/24/12
Region 5: La Paz, Mohave, Yavapai, Yuma	Tue 9/4/12	Fri 9/28/12
<b><u>STUDENT-TEACHER-COURSE CONNECTION</u></b>	<b>Mon 10/1/12</b>	<b>Fri 12/7/12</b>
<b>LEAs submit data to SRM (40th Day)</b>	<b>Mon 10/1/12</b>	<b>Fri 11/9/12</b>
ID LEAs that are non-compliant	Thu 10/25/12	Thu 11/29/12
Clean-up	Thu 11/1/12	Fri 12/7/12

# We are Here to Help!

- Single Point of Contact
  - [stconnection@azed.gov](mailto:stconnection@azed.gov)
- Website
  - [www.azed.gov/racetothetop/stc](http://www.azed.gov/racetothetop/stc)
  - FAQ's
  - Training Videos
  - Documentation Library
- Project Team
  - ADE
  - ESP



# Questions



Contact

[stconnection@azed.gov](mailto:stconnection@azed.gov)

[www.azed.gov/racetothetop/stc](http://www.azed.gov/racetothetop/stc)

(602) 364-1987



Lisa Levy

# **GREAT PLAINS UPDATE**

# Presentation Overview

- Project Re-cap
- Where are we today?
- What's next?

# Project Re-Cap

- Business Objectives
  - Increase the efficiency and effectiveness of existing personnel
  - Increase transparency
  - Streamline operational reporting
- Business Benefits
  - Integration of financial systems
  - Increase accuracy and timeliness of reporting
  - Getting money to LEAs faster

# Where are we?

- User Acceptance Testing
  - School Finance
  - Grants Management
  - Health and Nutrition
  - Accounting
- Training
  - Help Desk
  - Reporting
  - Go-Live Process

# What's next?

- Implementation Plan Review
- Production environment 5/25/2012
- **Go-Live 5/31/2012**
- Project closure



Mark T Masterson

# **DEVELOPING TECHNOLOGY STANDARDS**

# Developing Best Practices

- Survey of other states
- Data Quality Campaign recommendations
- Meeting with ABOR and higher education reps
  - Understand impacts K-12 data standards will have



Providing “Knock your socks off service”

# SLDS DASHBOARD DEMO

## SLDS Dashboards

- Users view important information about schools and students throughout the state
- Provides fiscal year information on schools, student progress, AIMS scores and more

**Arizona Department of Education**

Font+ | Font-

AZ.GOV  
Arizona's Official Web Site

SEARCH

**School Types**

All  District  
 Online  Charter

**Grades Served**

All  Kindergarten  
 1  2  3  4  
 5  6  7  8  
 9  10  11  12

**Enrollment**

All  
 0 - 99  100 - 199  
 200 - 299  300+

**School Letter Grade**

All  
 A  B  C  D  F

Clear All

bing

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Mark T Masterson

# **BUDGET UPDATE**

# Green projects – no intervention

- AELAS Business Case
- IMS
- ITIL ChangeGear
- AZ-SLDS Dashboards
- SAIS Assessment
- Application Lifecycle Management
- Project Support Office
- Enterprise Architecture
- Student-Teacher Course Connection

# AELAS Budget Snapshot thru May 1, 2012

## ADE IT FY12 ACTUALS

## ADE IT FY12 FORECASTS

Project	Approved Budget (thru 3/16/12)	YTD Spend	YTD Remaining Budget Authorization	Forecasted Spend thru FY12	Forecasted Year End Balance (YTD Approved Budget MINUS Forecasted Spend)
AELAS Business Case	\$826,720	\$174,717	\$652,003	\$229,824	\$596,896
Identity Management System/FIM	\$800,000	\$405,382	\$394,618	\$476,482	\$323,518
ITIL Tool (Change Gear)	\$110,830	\$110,852	(\$22)	\$110,852	(\$22)
AZ-SLDS Dashboards	\$417,600	\$320,965	\$96,635	\$379,321	\$38,279
ADE Financial System - Great Plains	\$685,920	\$464,358	\$221,562	\$577,758	\$108,162
SAIS Assessment	\$1,497,726	\$1,260,503	\$237,223	\$1,260,503	\$237,223
ALM	\$183,975	\$209,322	(\$25,347)	\$209,322	(\$25,347)
Program Support Office	\$727,000	\$449,785	\$277,215	\$611,281	\$58,143
Enterprise Architecture	\$650,000	\$111,820	\$538,180	\$250,312	\$399,688
SAIS RFP Requirements Gathering	\$500,000	\$0	\$500,000	\$198,300	\$301,700
<b>Total</b>	<b>\$6,399,771</b>	<b>\$3,507,704</b>	<b>\$2,892,067</b>	<b>\$4,303,955</b>	<b>\$2,038,240</b>

TOTAL AELAS BUDGET SNAPSHOT	
AELAS Total Authorization	\$6,600,000
Approved Budget	\$6,399,771
AELAS Total Authorization MINUS Approved Budget	\$200,229

YTD FORECAST SNAPSHOT	
YTD Approved Budget (as of 3/16/12)	\$6,399,771
Forecast Spend	\$4,303,955
Forecast Balance (AELAS Total Authorization MINUS Forecast Spend)	\$2,095,816

# Future Budget Plan

- Flexibility to respond to issues in timely manner
- Contingency built into budget
- Continued monthly budget reporting
- Request: 10% contingency for entire project before returning for authorization

# Questions



Contact

Lisa M Blyler

Business Liaison

(602) 542-3144

[Lisa.Blyler@AZED.gov](mailto:Lisa.Blyler@AZED.gov)

# Green Projects

For review only



# AELAS Business Case

Total Authorized

YTD Spend

Remaining Authorization

\$ 826,720

\$ 174,717

\$ 652,003

## Project Overview 5/1/2012

- Market research and feasibility study for statewide data system
- ADE leadership and key stakeholders promote program participation with outreach campaign

**Objective: Involve stakeholders in proposed design for statewide data system**

## Key Milestones

Milestone	Target
Execute Outreach Campaign	Jan-Feb 2012
Private Cloud Architecture	Mar 2012
Systems Requirements	May 2012
AELAS Business Case	June 2012
RFP Release/Analysis	July-Aug 2012

## Key Accomplishments

Accomplishment	Target
Project schedule, budget, plan and charter complete	Dec 2011
Draft and execute a marketing outreach campaign, and survey	Jan 2012
Private Cloud RFI issued by Procurement and eight responses returned by vendors	Feb 2012 - Mar 2012
District research ramp up	Apr 2012

## Risks

Risk	Mitigation
District participation of AELAS system	Execute outreach campaign. Leverage partnerships with key stakeholders. Capture district needs and design a statewide data system that is easy to adopt.
Vendor participation	Gauge interest from RFI and RFP responses. Show interest in vendor product demos that districts view.

# Identity Management Solution

Total Authorized

YTD Spend

Remaining Authorization

\$800,000

\$ 405,382

\$ 394,618

## Project Overview 5/1/2012

Establish and implement an identity management solution providing a single sign on as well as increased system security

**Objective: Improve and simplify security with federation capability, providing users single logon capability and improved compliance with FERPA**

## Key Milestones

Milestone	Target
Requirements	4/5/12
Envision	5/11/12
Build	7/6/12
Stabilization	8/3/12
Deployment	8/31/12
Phase 2	
Phase 3	

## Key Accomplishments

Accomplishment	Target
Design work of proposed solution, work continuing	5/2012

## Risks

Risk	Mitigation
Common Logon applications require modification to support single sign on goal	Close review with Clients and systems
Application challenges associated with age and unsupported, antiquated technology	Review current and new system development on how it will fit into the new model

# Great Plains

Total Authorized

YTD Spend

Remaining Authorization

\$685,920

\$ 464,358

\$ 221,562

## Project Overview 5/1/2012

- Tool to integrate 50+ ADE Financial Systems into 1 to improve School Payments and agency operations.
- Reduce the ADE usage of disparate databases and central financial information.
- Distribute money to the schools faster

## Key Milestones

Milestone	Target
Training & UAT Documents	04/27/2012
Reports & UAT	04/27/2012
Testing	05/04/2012
Production Environment	05/25/2012
Go Live	06/01/2012

## Key Accomplishments

Accomplishment	Target
ADE IT Product Owner Assigned	04/19/2012
Created New Data Store	04/13/2012
Data Migration Mapping	04/11/2012
AFIS to GP Payment Extract	04/10/2012
Validated GP to AFIS Code Base	04/05/2012
Finalized Payment Extract with GAO	04/05/2012

## Risks

Risk	Mitigation
Funding Profile may not be complete for testing timeline	Divide testing and training into 2 iterations
Training Guides & UAT scripts may not be complete for testing timeline	Divide testing and training into 2 iterations

# SAIS Assessment

Total Authorized

\$1,497,726

YTD Spend

\$ 1,260,503

Remaining Authorization

\$ 237,223

## Project Overview 5/1/2012

Student Accountability Information System “re-engineering” and optimizing system performance

**Objective: ‘Map the mess’ to identify core functions and processes and understand what SAIS needs to be and how it has to work**

## Key Milestones

Milestone	Target
SAIS Assessment Completion and Close Out	Apr 2012

## Key Accomplishments

Accomplishment	Target
Detailed assessment for Integrity and proof of concept	Nov 2011
Transactions assessment	Jan 2012
Aggregations assessment	Jan 2012
Payments assessment	Apr 2012

## Risks/Mitigation

Risk	Mitigation
Complex technical manual and applications processes	Review with clients
Existing systems are prone to human/manual error and inability to separate one 'Module' from the rest of the system in a meaningful way	Detailed review process developed
Turn over in subject matter experts	Review with clients

# ITIL Tool – Change Gear

Total Authorized

YTD Spend

Remaining Authorization

\$110,830

\$110,852

(\$22)

## Project Overview 5/1/2012

Help Desk Ticketing Tool – Hardware

**Objective: Implement industry standard tool for ADE Support that will give customers enhanced help desk support**

## Key Milestones

Milestone	Target
Internal Rollout for Desktop Support and Common Logon Password Resets	Apr 2012
Internal Rollout for DBA, Network Services and Operations Self-Service Portal Configuration and testing	May 2012
Internal and External Rollout for Application incidents	June 2012

## Key Accomplishments

Accomplishment	Target
Project underway	Nov 2011
DEV environment up and running	Dec 2011
Software purchased	Jan 2012
Enhancements and customization effort underway	Jan 2012
Began internal rollout	Apr 2012

## Risk/Mitigation

Risk	Mitigation
Behind schedule on incident management process and sub-process definitions	Mitigation plan under review

## Project Overview 5/1/2012

- Create and implement a vendor management framework for IT program.
- Develop and implement communications plan for various strategic and ongoing programs.

**Objective: Bring professional management and oversight to IT programs**

## Key Milestones

Milestone	Target
Implement strategic and project controls policy	Apr/May 2012
Implement communications plans for AELAS projects	Apr/May 2012
Implement project administration policies, processes and procedures.	Apr/May 2012

## Key Accomplishments

Accomplishment	Target
Developed strategic and project controls policy and procedure documentation	Mar/Apr 2012
Implemented Student-Teacher Connection, PARRC, AELAS Business Case, IDEAL, Great Plains, ADE/MCESA Partnership communication plans	Mar/Apr 2012
Created project policy/procedures documentation	Mar/Apr 2012

## Risk/Mitigation

Risk	Mitigation
Manual processes make identifying single source of financial truth difficult.	Develop single repository for financial documents.

# Enterprise Architecture

Total Authorized

\$ 650,000

YTD Spend

\$ 111,820

Remaining Authorization

\$ 538,180

## Project Overview 5/1/2012

- Overall improved IT landscape guided by governance, roadmaps, SLAs, and documentation
- Align ADE Business and IT units for planning and execution
- Completion of project in Oct 2012

**Objective: Create IT process and policy roadmap to increase efficiency and effectiveness**

## Key Milestones

Milestone	Target
Formal EA Kickoff with Executive team	3/2012
School Finance Business Process Maps version 1	5/2012
SAIS Components Mapped to School Finance Business Process	5/2012
Kickoff of Process Mapping with H&N	5/2012

## Key Accomplishments

Accomplishment	Target
Kickoff of Process Mapping with School Finance, Grants Management, and ESS	4/2012
Drafted CEDS/Enterprise 2/CRM Recommendation	4/2012
Delivered EA Orientation for ADE Data Stewards	4/2012

## Risks

Risk	Mitigation
Lack of support for business process mapping and data analysis due to delayed kickoff with executive team.	<ul style="list-style-type: none"><li>• Meetings with Directors directly to engage teams.</li><li>• Internal Marketing plan being created.</li></ul>

# Student-Teacher-Course Connection

Total Authorized	YTD Spend	Remaining Authorization
\$ 2,500,000	\$ 62,495	\$ 2,437,505

## Project Overview 5/1/2012

- Defining the AZ Standard Course Codes
- Mapping LEAs, CHs and CSs to the AZ Standard Course Codes
- Establish link between Students, Teachers and Courses

*Combined Course Mapping and Student Teacher Data Link*

## Key Milestones

Milestone	Target
Define Statewide Rollout Plan	04/30/2012
Kick-Off Statewide Rollout – Course Mapping	05/01/2012
SRM Technical Environment	05/11/2012
SRM Pilot Completion	07/16/2012
SRM Rollout	10/15/2012
40 <sup>th</sup> Day Student-Teacher-Course Connection	11/16/2012
Hand Over to Operations	12/21/2012

## Key Accomplishments

Accomplishment	Target
Staffing Model Defined	04/25/2012
Course Mapping Training Videos	04/24/2012
Defined SPED Approach	04/23/2012
Course Mapping Pilot Lessons Learned	04/16/2012
SRM Technology Review	04/16/2012
Superintendent Communication	04/11/2012
1 <sup>st</sup> Pass Data Elements for SRM	04/09/2012

## Risks

Risk (High Probability)	Mitigation
LEA availability for training over the summer months and the early part of the school year will be limited.	The project team will accommodate LEA schedules as well as provide recorded training sessions and other materials.