

Meeting of the Arizona Data Governance Commission



May 27, 2016

9:00 am - 12:00 pm

Arizona Department of Education

1535 W. Jefferson St. room 416

Phoenix, AZ 85007

Agenda

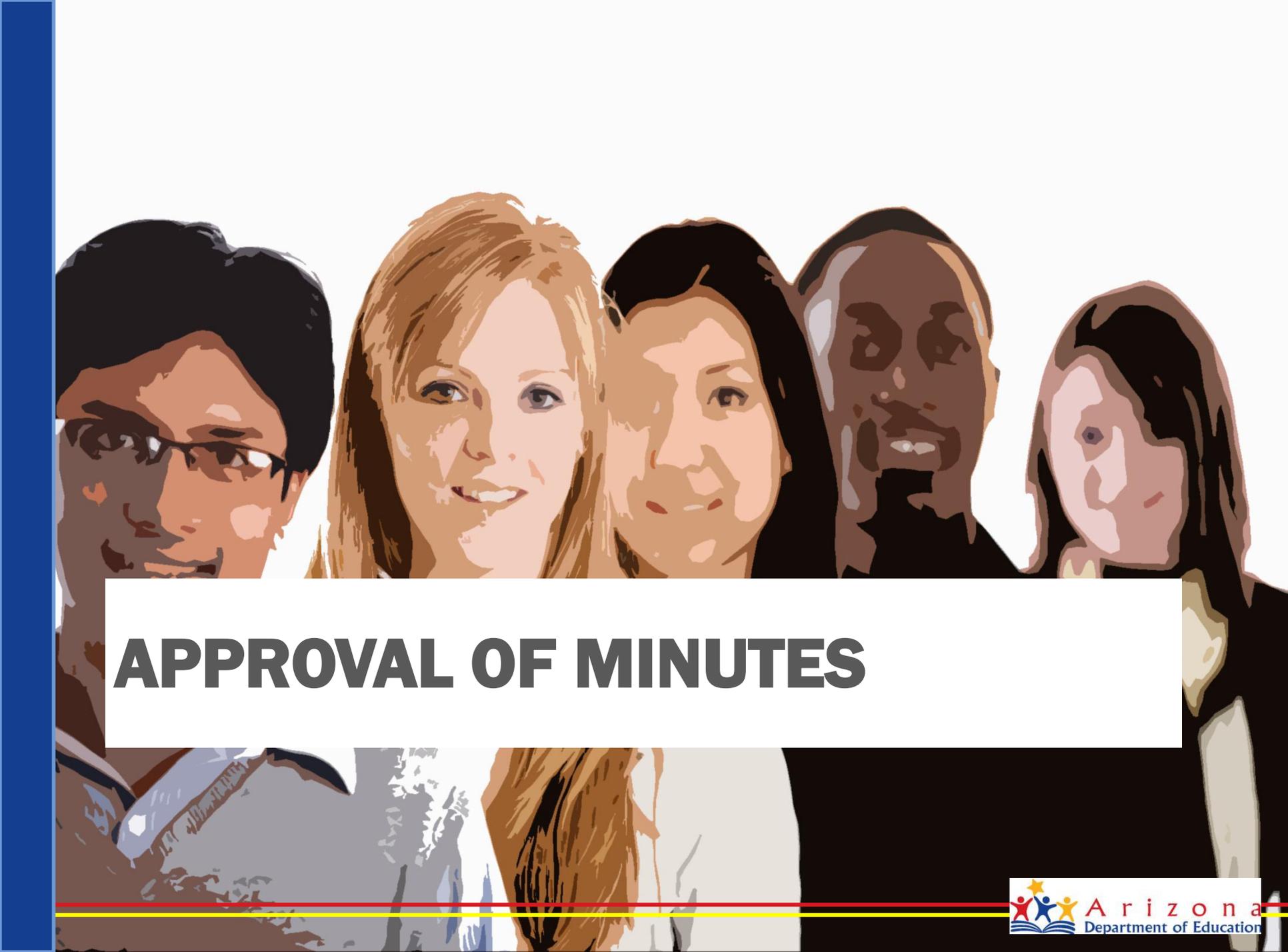
1. Call to Order
2. Roll Call
3. Election of Chairperson
4. Approval of Minutes
5. Member's Report
6. AZEDS Transition Discussion
7. AELAS FY16 review, FY17 Budget Proposal and Project Update
8. AELAS Data Architecture Review
9. IT and Data Security Update
10. ADE Data Request Policies
11. Adoption of Changes to K-12 Student Data Collections for FY18
12. 2016 Legislative Session Review
13. Public Testimony

A stylized, high-contrast illustration of five diverse individuals' faces in a row. From left to right: a man with dark hair and glasses, a woman with long blonde hair, a woman with dark hair, a man with a beard, and a woman with dark hair. The style is graphic and uses a limited color palette of browns, oranges, and blacks.

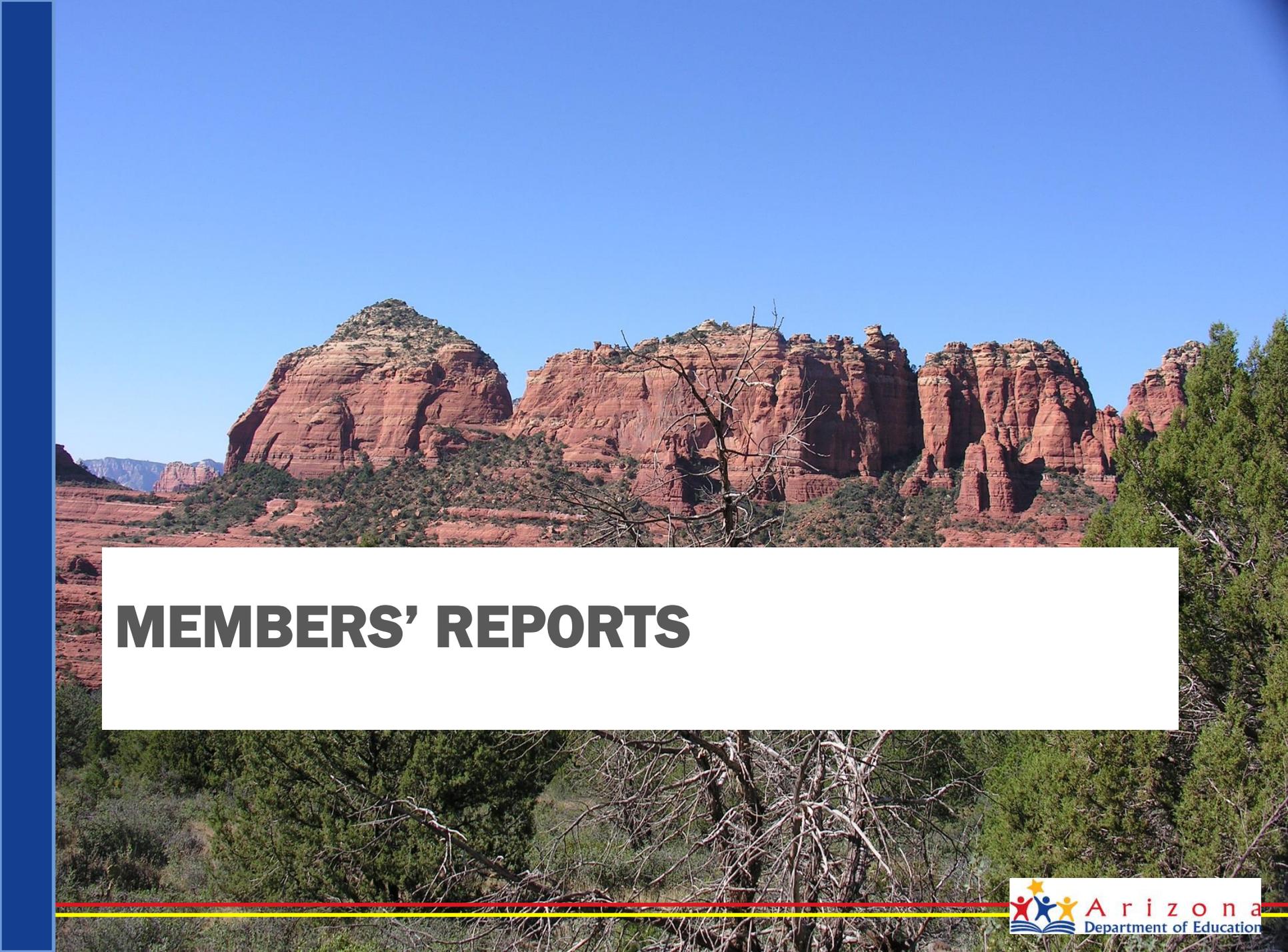
CALL TO ORDER; ROLL CALL



ELECTION OF CHAIRPERSON

A stylized, high-contrast illustration of five diverse individuals' faces in a row. From left to right: a man with dark hair and glasses, a woman with long blonde hair, a woman with dark hair, a man with a beard and dark hair, and a woman with dark hair. The style uses flat colors and bold outlines, giving it a graphic, poster-like appearance. A white rectangular box is overlaid on the lower portion of the faces, containing the text 'APPROVAL OF MINUTES'.

APPROVAL OF MINUTES



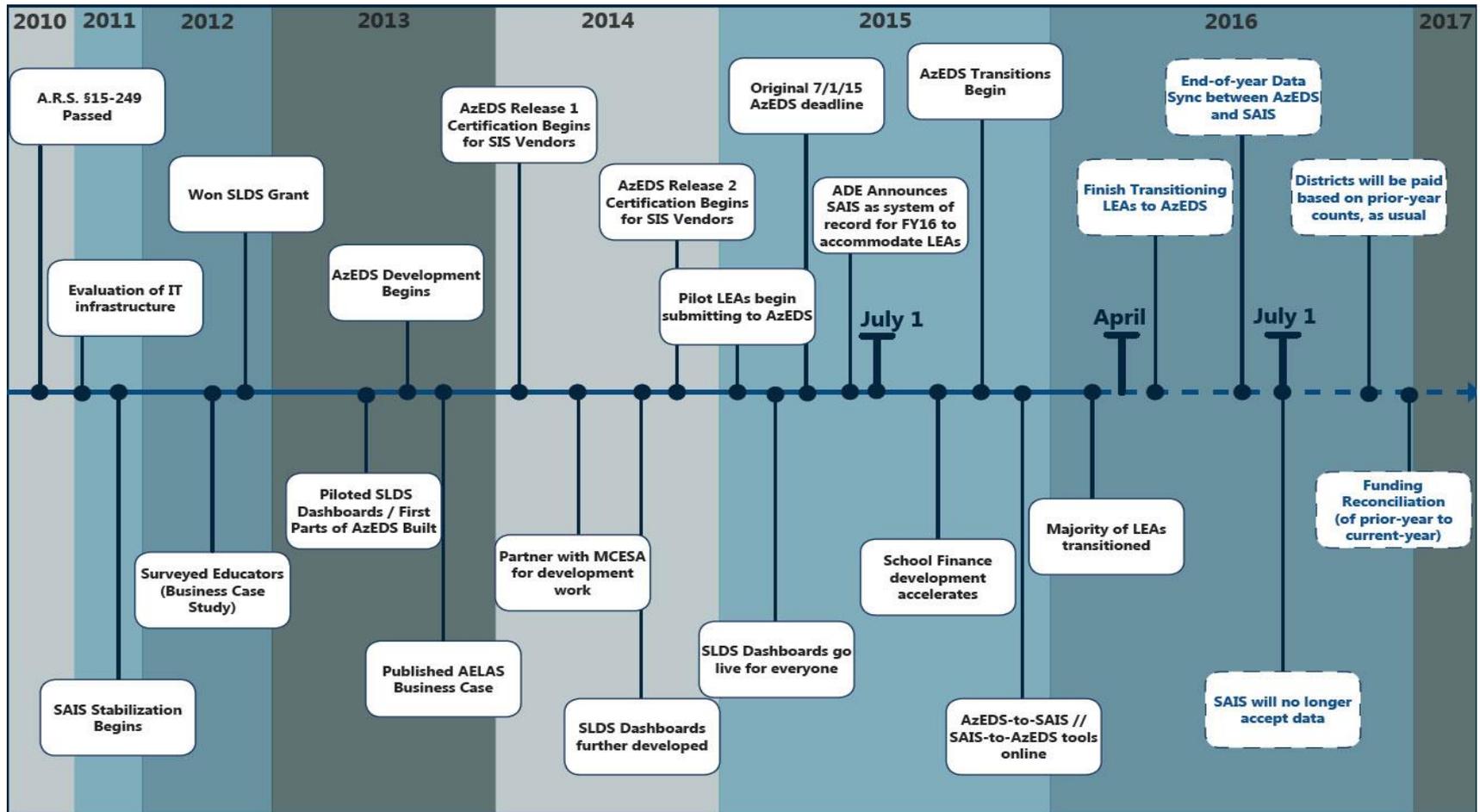
MEMBERS' REPORTS



Lisa Blyler

AZEDS TRANSITION DISCUSSION

AzEDS transition timeline



What was said about the transition

- Notified ASCUS that the transition was deferred on 4/23/15 allowing LEAs to adjust
 - Avoiding the big bang rollout we were heading towards
 - Moving from SAIS to AzEDS is not optional
- Outlined to the difficulties at the ASCUS meeting on 9/17/15
- Everyone from the legislature, to ADE, to ASCUS to the students are in this together
 - Support is in place
- Communicated that it will take time

Letter to LEAs in March 2016

- Reiterated that all LEAs must complete transition from SAIS to AzEDS by June 30, 2016
 - Extended using SAIS as system of record for one year
- 78% of state already transitioned and the legislature already invested too much to turn around
- The transition to SAIS years ago was far worse
 - All schools received payments back then!
 - We are ahead of where we were then (auditors agree)
- These two systems were never going to match!
 - Working on a solution to get to 99%

Transition to AzEDS

All Metrics as of 5/11/2016

		Counts for LEAs migrating to AzEDS								
Status Description (Multiple)		Closed, Future, or Inactive LEAs filtered								
5/11/16		Data from 5 AM								
Row Labels	LEAs	In Implementation	% Implementing	LEAs Submitting	% Implementation complete	% of Total submitting	Incomplete Implementations	Not yet Implementing		
⊕ Apex	6	6	● 100%	6	● 100%	● 100%	0	0		
⊕ AZDJC	1	1	● 100%	1	● 100%	● 100%	0	0		
⊕ Connexus	1	1	● 100%	1	● 100%	● 100%	0	0		
⊕ Edupoint	91	48	● 53%	39	● 81%	● 53%	9	43		
⊕ FlipSwitch	1	1	● 100%	1	● 100%	● 100%	0	0		
⊕ Hane Solutions	10	10	● 100%	10	● 100%	● 100%	0	0		
⊕ Illuminate	2	2	● 100%	2	● 100%	● 100%	0	0		
⊕ InfiniteCampus	13	8	● 62%	8	● 100%	● 62%	0	5		
⊕ JupiterEd	2	2	● 100%	2	● 100%	● 100%	0	0		
⊕ PowerSchool	166	157	● 95%	157	● 100%	● 95%	0	9		
⊕ Schoolmaster	318	271	● 85%	260	● 96%	● 85%	11	47		
⊕ Statewide SIS	47	24	● 51%	24	● 100%	● 51%	0	23		
⊕ Tyler V10	1	1	● 100%	1	● 100%	● 100%	0	0		
⊕ Unknown	1	-	● 0%	-	● 0%	● 0%	0	1		
Grand Total	660	532	● 81%	512	● 96%	● 81%	20	128		
		+ 3 LEAs since Yesterday		+ 4 LEAs for the week						
		Green Highlights changes from last report								

Vendor/students transition to AzEDS

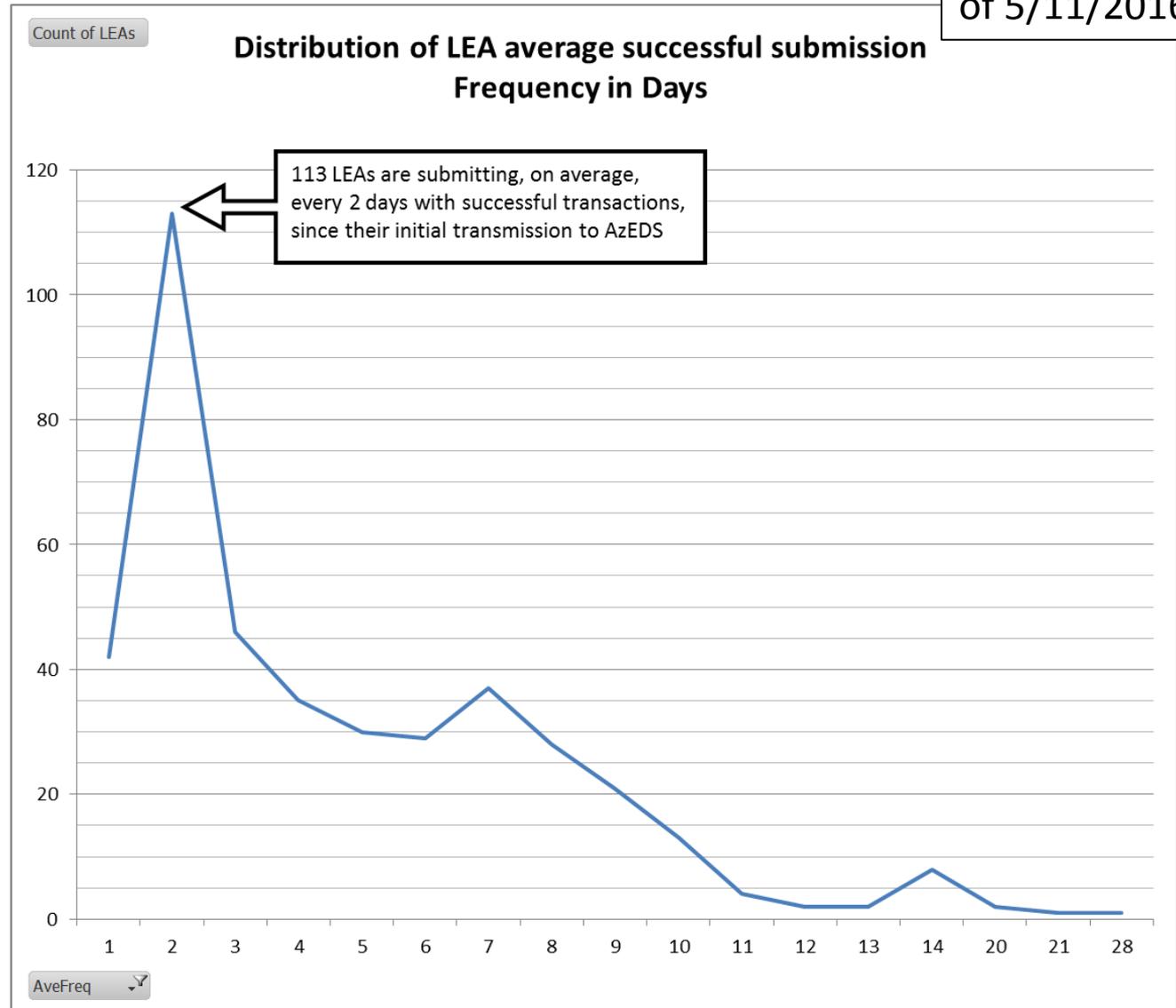
All Metrics as
of 5/11/2016

Vendors	Vendor % to total Students	Vendor % Students on AzEDS	Vendor % Students on SAIS
Apex	0.22%	0.22%	0.00%
AZDJC	0.04%	0.04%	0.00%
Connexus	0.24%	0.24%	0.00%
Edupoint	38.85%	17.99%	20.87%
FlipSwitch	1.16%	1.16%	0.00%
Hane Solutions	0.10%	0.10%	0.00%
Illuminate	1.66%	1.66%	0.00%
InfiniteCampus	13.32%	4.74%	8.59%
JupiterEd	0.02%	0.02%	0.00%
PowerSchool	19.92%	19.65%	0.27%
Schoolmaster	15.40%	13.28%	2.12%
Statewide SIS	7.80%	1.36%	6.44%
Tyler V10	1.27%	1.27%	0.00%
Unknown			0.00%
Grand Total	100.00%	61.72%	38.28%

Frequency of submission to AzEDS

All Metrics as of 5/11/2016

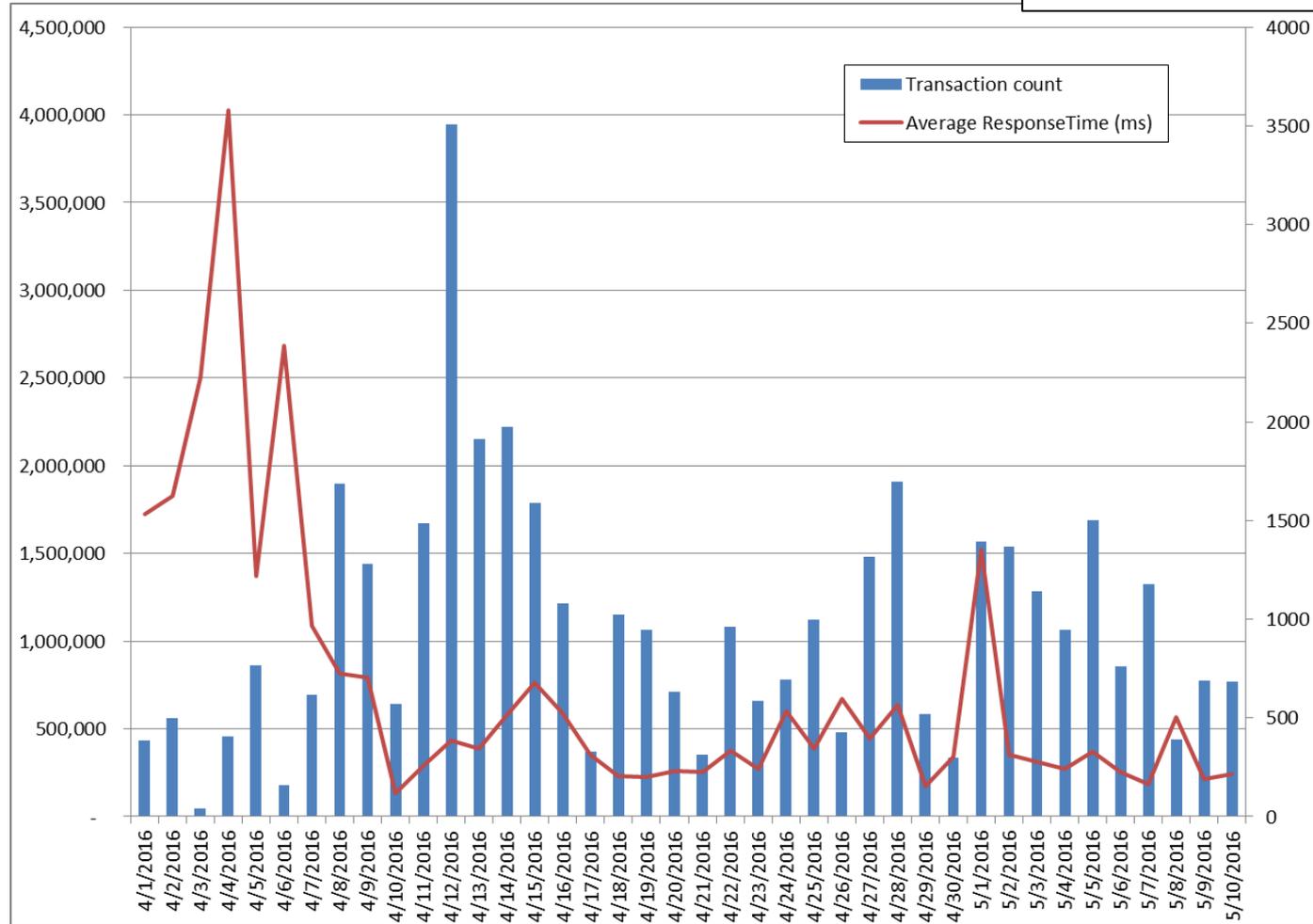
Ave. Freq. of Submission by LEAs	Count of LEAs
1	42
2	113
3	46
4	35
5	30
6	29
7	37
8	28
9	21
10	13
11	4
12	2
13	2
14	8
20	2
21	1
28	1
Grand Total	414



Response time to AzEDS submissions

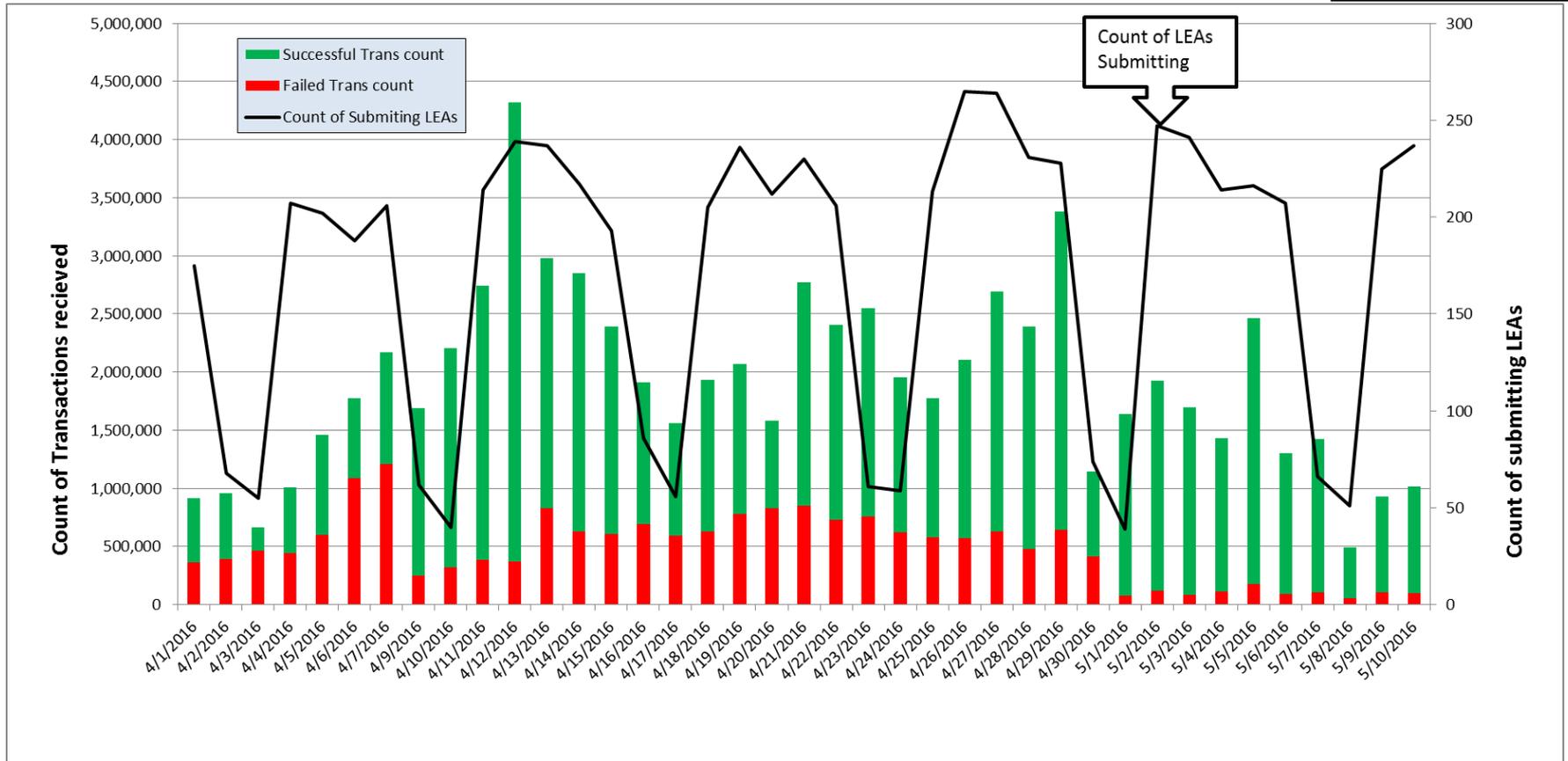
All Metrics as of 5/11/2016

Date	Transaction count	Average ResponseTime (ms)
4/1/2016	433,496	1533.696
4/2/2016	560,733	1626.435
4/3/2016	44,433	2228.000
4/4/2016	458,699	3577.870
4/5/2016	863,696	1221.130
4/6/2016	181,296	2383.565
4/7/2016	696,730	966.478
4/8/2016	1,895,408	722.478
4/9/2016	1,440,731	706.870
4/10/2016	643,946	118.870
4/11/2016	1,673,557	257.435
4/12/2016	3,946,459	384.833
4/13/2016	2,151,577	344.083
4/14/2016	2,221,272	512.064
4/15/2016	1,789,320	676.750
4/16/2016	1,216,798	525.240
4/17/2016	370,356	315.222
4/18/2016	1,151,030	206.043
4/19/2016	1,063,546	200.870
4/20/2016	709,310	233.042
4/21/2016	353,027	228.000
4/22/2016	1,082,409	336.000
4/23/2016	658,755	239.261
4/24/2016	778,405	535.864
4/25/2016	1,124,226	342.826
4/26/2016	477,574	595.739
4/27/2016	1,478,649	395.667
4/28/2016	1,908,324	565.400
4/29/2016	582,986	152.542
4/30/2016	334,790	304.217
5/1/2016	1,568,172	1350.167
5/2/2016	1,536,508	315.417
5/3/2016	1,285,895	279.750
5/4/2016	1,067,084	242.417
5/5/2016	1,688,933	331.500
5/6/2016	856,249	223.833
5/7/2016	1,321,840	163.333
5/8/2016	437,570	505.043
5/9/2016	777,749	192.292
5/10/2016	771,970	215.000
Grand Total	43,603,508	646.799



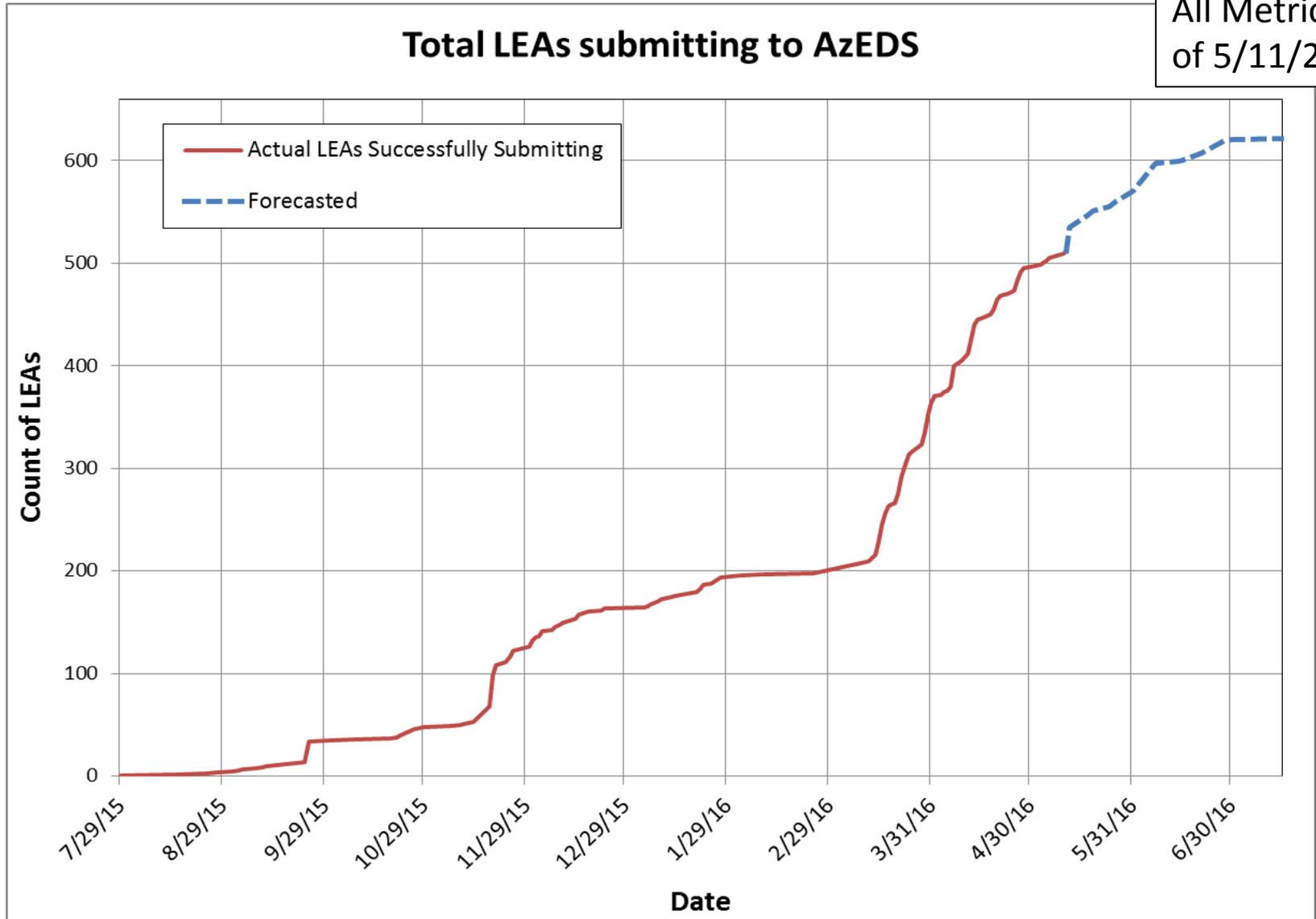
Successful submissions to AzEDS

All Metrics as of 5/11/2016



Migration of LEAs submitting to AzEDS

All Metrics as of 5/11/2016



SAIS to AzEDS comparisons

	SAIS	AzEDS
LEAs submitting data to system (59 LEAs are currently transitioning from SAIS to AzEDS)	142	518
Number of rules that may be updated or changed	0	315
Time required to run Integrity (validation of data)	2 days	Less than 4 hours
Time required to run end-of-month Integrity (statewide aggregation)	5 days	Less than 5 hours
Time required to recalculate statewide ADM	5 days	<1 hour
Ability for LEAs to audit transaction history	Not Auditable	Auditable
Total transactions processed in last 30 days	15,000,000	31,000,000



Lisa Blyler

FY17 BUDGET PROPOSAL

FY16 recap and deliverables

- Emphasis on completing Student portion of SAIS replacement
 - 78% of student population now submitting to AzEDS
 - AzEDS becomes system of record in FY17
 - Deployed new School Finance processing engine
- Continue rollout of Statewide Student Information System
- Ongoing technical support for AELAS tools
 - ADEConnect, AZDash, SSIS, AzEDS support personnel
 - Ensures education community of state's commitment to sustainability

What was tabled in FY16

- Integrating existing systems that use SAIS for data
- 1-year implementation for SAIS replacement
- New dashboards for AZDash
- Adequate software/hardware needs for AELAS development
- Roll out of opt-in teaching and learning tools that have been developed

FY12-16 budget expenditures

Project	FY2012	FY2013	FY2014	FY2015	FY2016	Project Spend Total
SAIS Replacement	\$2,817,422	\$2,978,442	\$2,012,168	\$3,791,082	\$1,629,175	\$13,228,291
School Finance	\$0	\$577,633	\$771,427	\$1,222,344	\$1,367,224	\$3,938,627
SLDS	\$986,236	\$716,800	\$1,048,242	\$1,884,615	\$0	\$4,635,893
SSIS	\$0	\$64,724	\$176,316	\$808,783	\$660,373	\$1,710,195
Production Support	\$316,440	\$2,115,858	\$2,507,015	\$3,407,485	\$3,689,137	\$12,035,935
Teacher Tool (LMS, CMS, etc.)	\$0	\$298,366	\$403,613	\$611,983	\$76,022	\$1,389,983
					*as of 4/30/16	
FY Total	\$4,120,099	\$6,751,823	\$6,918,780	\$11,726,292	\$7,421,931	\$36,938,925

FY17 original AELAS request

(as submitted 08/2015)

AELAS Initiative	FY17 Proposed	Project goal
New state aid payment calculator	\$2,500,000	Replace SAIS's 48 poorly-developed manual state aid calculation tools
Overhauled student details databases	\$3,800,000	Replace SAIS's poorly-developed databases that collect student data for state aid payments
Statewide Student Information System	\$500,000	Leverage state contract for student information system resulting in significant savings for districts; Funds used to support system implementation
Student performance reporting tool	\$500,000	Turning data into useable information to improve classroom instruction
TOTAL	\$7,300,000	
ADE IT support	FY17 Proposed	Goals
Project goal Program Management	\$500,000	Interface with local school districts; Financial accountability; Contract oversight; and Software development management
AELAS maintenance and support	\$2,675,000	\$2,675,000 Personnel and software licenses to run system; Without this line item, none of this will function.
TOTAL	\$3,175,000	

Future proofing our tech investments

- The move to cloud-based processing/storage has minimized:
 - Security risk
 - Financial investment
 - Falling behind with patches and upgrades
 - Allowed applications to scale with unforeseen growth
 - Allowed ADE to pay only when they develop
 - Created a long-term, economical solution for hardware upgrades
 - Allowed ADE to rent hardware instead of buying it
 - Allowed ADE to avoid building on obsolete hardware

AELAS support costs

- Increased external-facing systems require manpower to perform day-to-day operation and management of existing services
- ADE IT has been capturing costs to maintain complex system like AELAS since FY13
- State legislature has not included funding for ongoing support
 - SAIS fell into disrepair because of lack of funding and technology advancements
 - AELAS will suffer same fate with same treatment
- ADE will not squander the investment

FY17 support costs

- Ongoing program and financial management
- Network and infrastructure improvements
 - release management, patch administration, systems security, monitoring, server maintenance, administration, and network operations,.
- Continued emphasis on support center
- Hardware maintenance and software license renewals
- \$3,175,000

Priorities for FY 2017

- Complete SAIS student replacement and decommissioning
 - APOR and CHAR will not be completed in FY 2017
 - Business requirements for AELAS School Finance applications
- Build internal connections to AzEDS to reduce burden on LEAs
- Ensure proper support and management of overall project and newly-developed tools
- Continue implementation of opt-in tools to interested LEAs
 - Statewide Student Information System

Remaining AELAS work beyond FY17

- **Most critical is ongoing support for new data system**
- New AZDash dashboards based on user input
- AELAS School Finance development and release
- Transition applications from old to new system
- SALS replacement 'clean up' work based on unknown variables

FY18 forecast for financial applications

- Reduced appropriation delays refactoring of APOR and CHAR
 - Core School Finance calculations
 - Discovery and modest design work to be completed
- Prior improvements have allowed ADE to reduce processing time from days to mere minutes
- SAIS continues to be operating on borrowed time

AELAS cost estimates for ongoing operations in FY17

PROJECT NAME	FY2017	Headcount (FTE)
AZDash Ongoing support and maintenance of student data stores and data refreshes of AZDash	\$400,000	3.0
ADEConnect Maintain 24 hour access to ADE systems and reports for all stakeholders	\$240,000	2.0
AELAS Program Support Office (PSO) Program level management of AELAS development and Operations	\$600,000	8.0
AELAS Operations Services Ongoing operations support of AELAS infrastructure	\$1,835,000	15.0
AELAS Operations subtotal	\$3,075,000	28.0
AELAS Ed-Fi (AzEDS) Support, maintenance, diagnostics and repairs of software issues pertaining to students and organization management systems (OEMs)	\$465,000	4.0
School Finance Technical support, verification, maintenance of school payment engines	\$535,000	5.0
Prop 301 Funding subtotal	\$1,000,000	9.0
TOTAL	\$4,075,000	37.0

AELAS cost estimates for ongoing operations in FY18

PROJECT NAME	FY2018
AZDash Ongoing Support and Maintenance of Student Data Stores and Data Refreshes of AZDash	\$750,000
ADEConnect Maintain 24 hour access to ADE systems and reports for all stakeholders	\$700,000
AELAS Program Support Office (PSO) Program Level Management of AELAS Development and Operations	\$750,000
AELAS Operations Services Ongoing Operations Support of AELAS Infrastructure	\$2,200,000
AELAS Operations subtotal	\$4,400,000
AELAS Ed-Fi (AzEDS) Support, maintenance, diagnostics, repairs of software issues pertaining to students and organizational management systems.	\$1,050,000
School Finance Technical support, verification, maintenance of school payment engines	\$400,000
Required SAIS Replacement Support Funding subtotal	\$1,450,000
TOTAL	\$5,850,000

AELAS cost estimates for FY17 completion

PROJECT NAME	FY2017
AELAS School Finance Completion and warranty of Current Year Funding effort. Discovery and Design of replacement of SAIS's 48 manual state aid calculation tools including APOR/CHAR and budget applications	\$740,000
AELAS Ed-Fi (AzEDS) Full LEA implementation of student data collection system and additional development/release of 150 remaining business rules to support federal/state reporting. Continued development and deployment of data services, migrating more than 80 existing ADE applications to AzEDS.	\$3,305,000
AELAS Opt-in SIS Leverage state contract for student information system resulting in significant savings for districts; Funds used to support system implementation	\$180,000
CEDS Development tasks closely related to AzEDS deliverables in FY2017. Will submit new PIJ for FY 2018 addressing standalone efforts	\$0
TOTAL	\$4,225,000

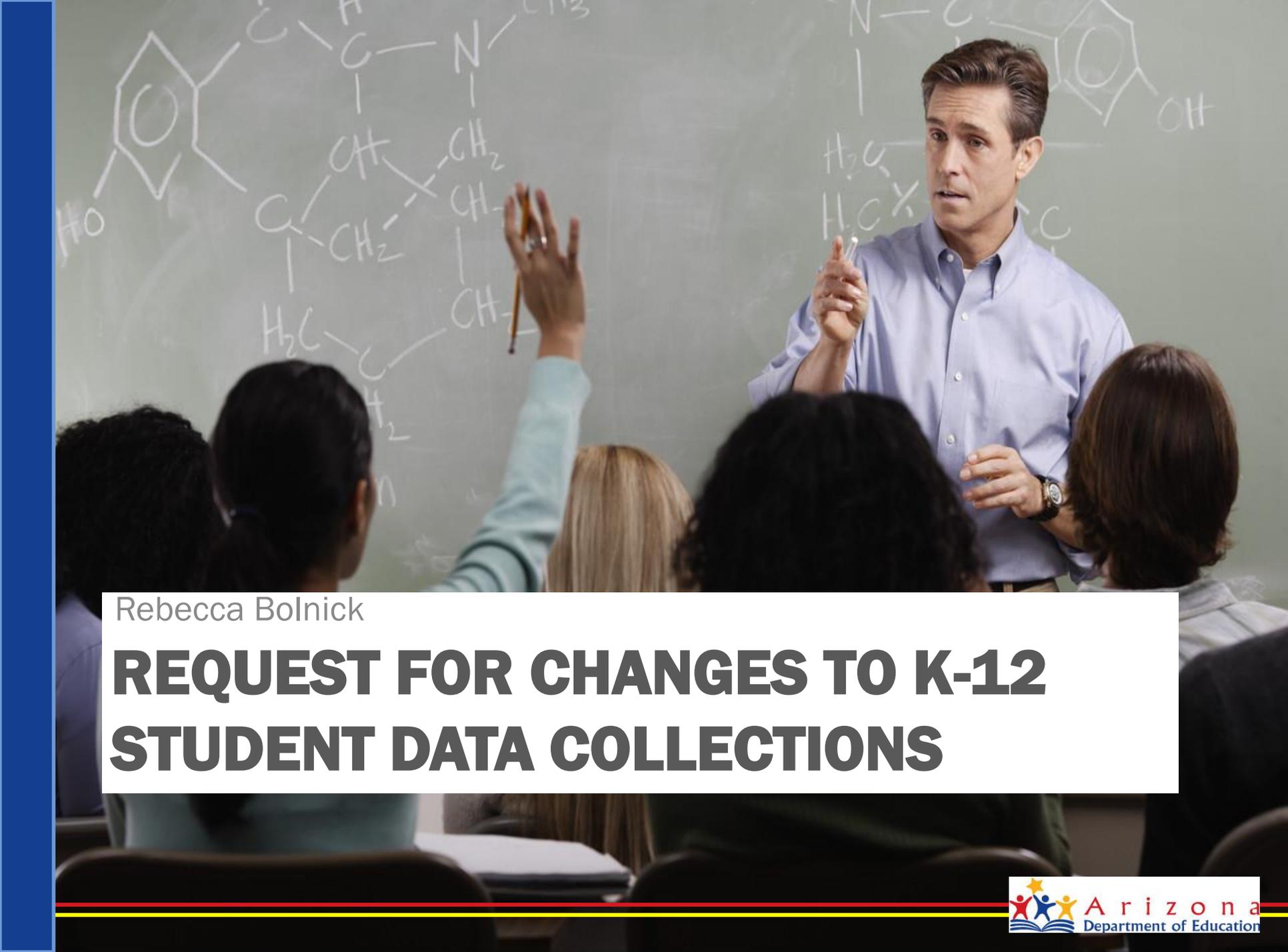
AELAS cost estimates for FY18 completion

PROJECT NAME	FY2018
AZDash Prioritize, Develop, test, and deploy new dashboards to AZDash.	\$500,000
AELAS School Finance Development and implementation of replacement of SAIS's 48 manual state aid calculation tools including APOR/CHAR and Budget applications	\$2,800,000
AELAS Ed-Fi (AzEDS) Develop/deploy new rules for student data collection per statute. Complete discovery, design, development and deployment of support system replacements (Enterprise). Includes 7 unsupported high use SAIS applications	\$3,000,000
AELAS Opt-in SIS No new funding required. Project sustainability estimated in FY 2018	\$0
CEDS Convert and Transition Existing application connections from Enterprise to ODS	\$2,500,000
TOTAL	\$8,800,000

FY17 AELAS allocation of state funding

Motion Needed

- Motion to recommend FY17 AELAS allocation of state funding as presented



Rebecca Bolnick

REQUEST FOR CHANGES TO K-12 STUDENT DATA COLLECTIONS

Request for Changes to Student Data Collection

Proposed Change: **Additional Code Value**

Data Element:

Withdrawal code

Code Value:

W22- “moved out of country”

Frequency:

In perpetuity

Method of Collection:

AzEDS

Year of Change:

2016-2017 (by year end)

Dependencies:

SIS Vendors

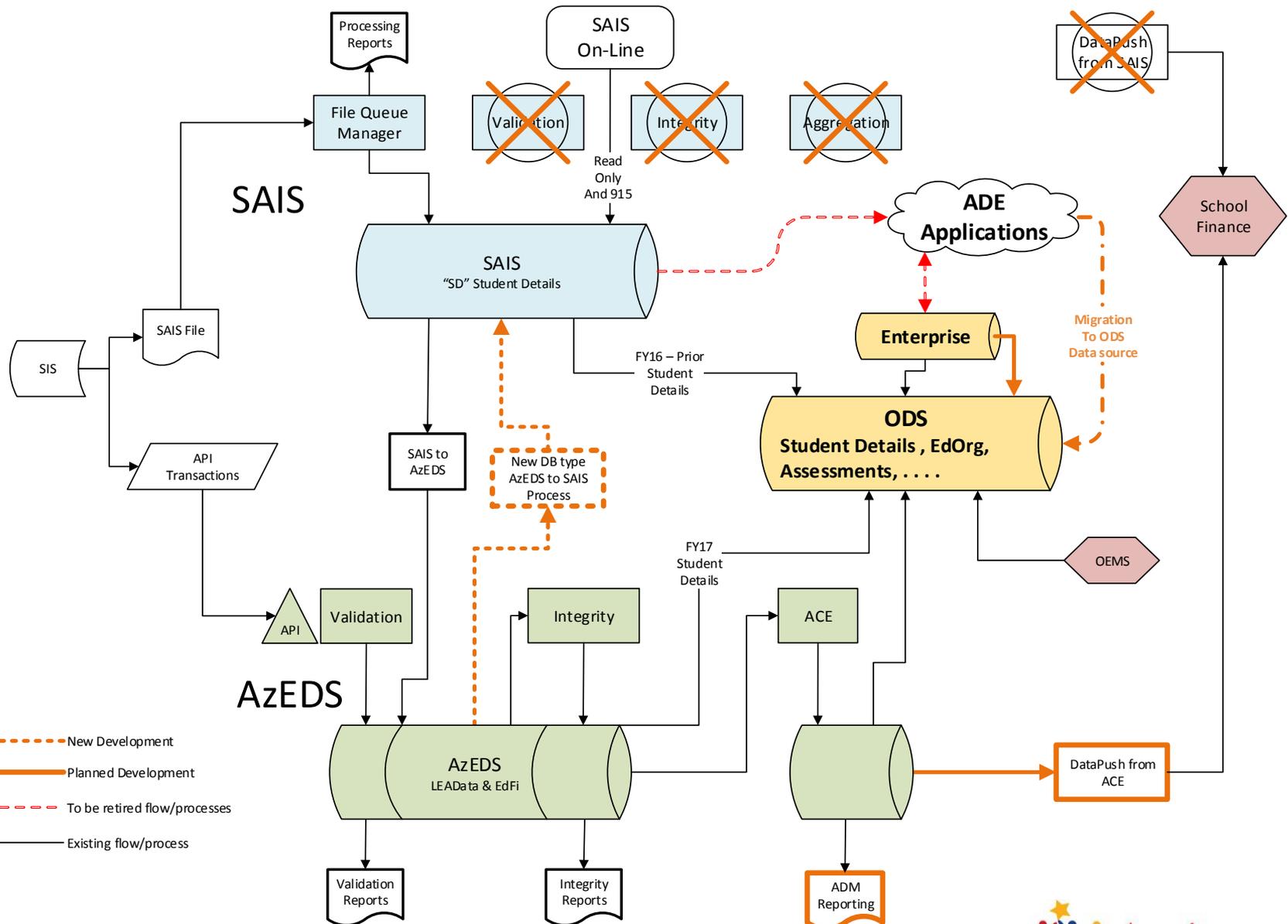
Motion Needed

- Motion to approve addition of withdrawal code W22- moved out of country to the AzEDS student data collection by year end of school year 2016-2017

Henry Williams

AELAS DATA ARCHITECTURE REVIEW

AELAS FY16-17 architecture



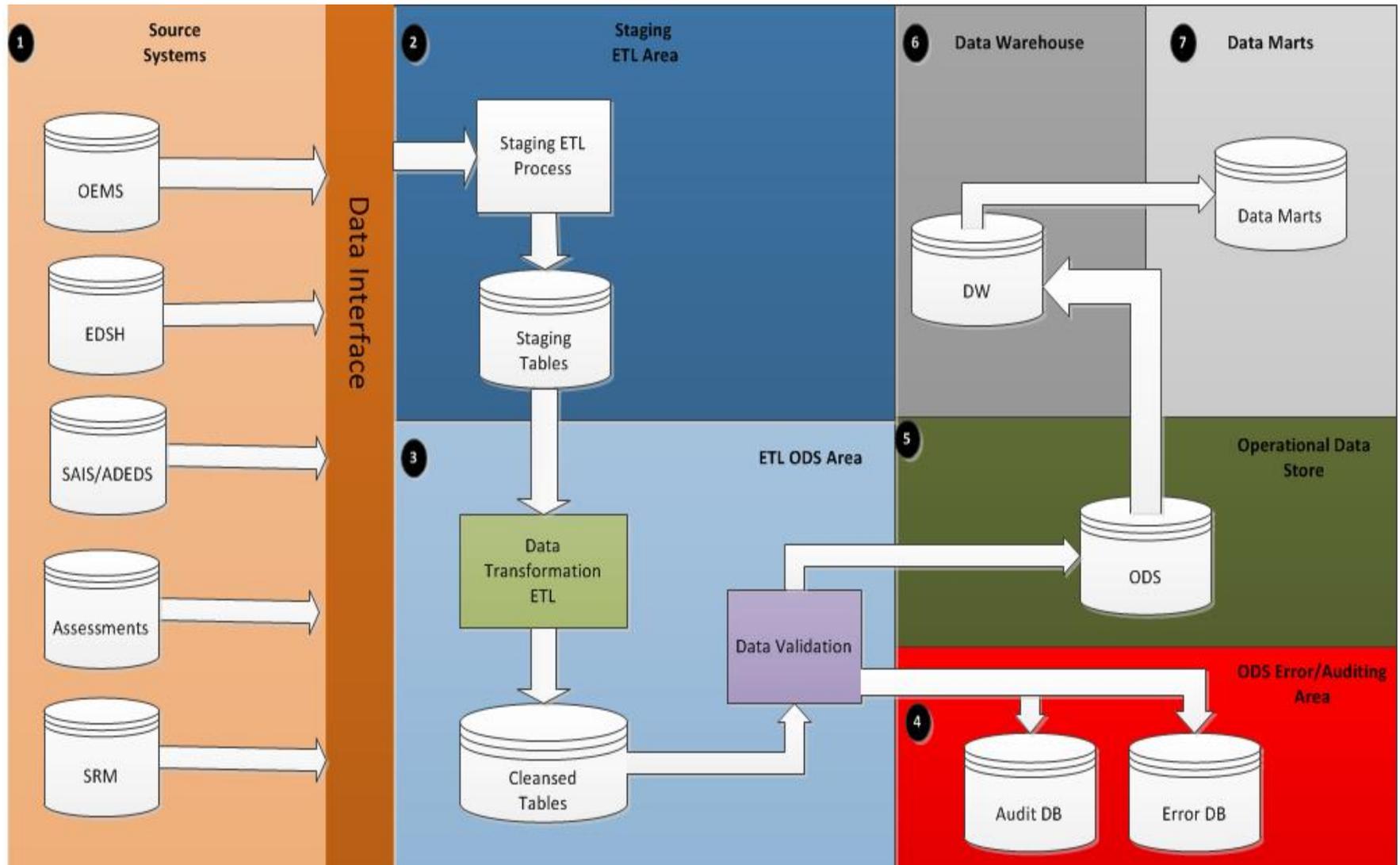
Agency ODS Ed-Fi domains FY16 deliverables

Education Organization	Enrollment	School Calendar	Staff	Student Attendance
<p>The Education Organization domain defines the organizational structure of the Education Organizations within the scope of the Ed-Fi application. The entity Education Organization serves as an abstraction for common attributes and associations</p>	<p>The Enrollment domain represents students' enrollments in Schools, as specifically designated by the Student School Association. The model supports two cases of enrollment. The first case limits enrollment to one school at a time whereas the second case supports multiple school enrollments.</p>	<p>The School Calendar domain represents the instructional days, sessions, and grading periods defined for a school year. The defined Sessions for a school year are associated with the SEA, LEA, or school that defines the calendar</p>	<p>Staff: is a specialization of Person and captures additional information about experience and credentials Teacher: is a specialization of Staff and captures additional information and associations relating to instructional duties</p>	<p>The Student Attendance domain represents both daily and class period (section) attendance. This model supports two approaches for collecting attendance data:</p> <ul style="list-style-type: none"> • Attendance Events • Exception Only
Enterprise/OEMS	Student Details	Enterprise	EDSH	Student Details

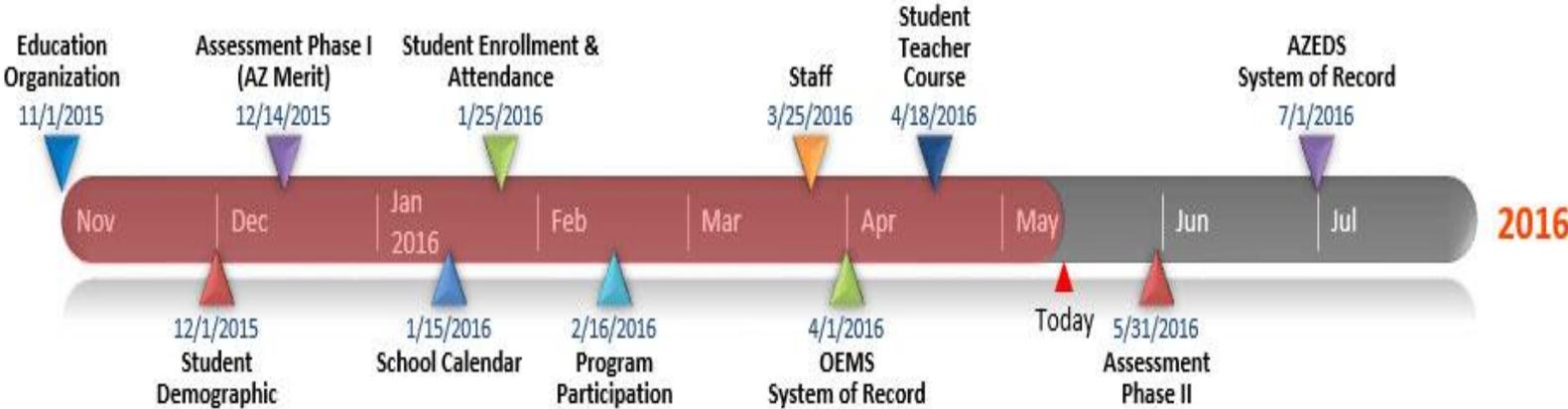
Agency ODS ED-FI domains (cont)

Assessment	Student Identification and Demographics	Teaching and Learning	Program Participation
<p>This domain defines a model that can be used for a wide variety of assessments, including early childhood assessments, state standardized assessments, college entrance exams, benchmark assessments and course assessments</p>	<p>The Student Identification and Demographics domain represents the core information about Students and Parents:</p> <ul style="list-style-type: none"> • Student is a specialization of Person; the Person entity defines a PersonUniqueStateId when a single identity spans all types of persons • Parent is also a specialization of Person, and naturally spans all variants of parent, guardian 	<p>The Teaching and Learning domain represent the following concepts:</p> <ul style="list-style-type: none"> • Course Catalog representing the Course definitions and Course Offerings • The student's class enrollments in Sections and the Teacher(s) assigned to that Section • The early childhood enrollments in Programs and associated Staff members 	<p>This domain defines the model for a range of programs, including education programs, alternative programs, extracurricular programs, supplemental programs</p> <ul style="list-style-type: none"> • Program defines programs with services offered by an Education Organization • Student Program Association links Programs to participating Students • Staff Program Association links Programs to assigned Staff
<p>Multiple DB's & Flat Files</p>	<p>Student Details</p>	<p>SRM Student Details EDSH</p>	<p>Student Details</p>

High-level ODS architecture



Timeline of ODS transition



Robert Callahan

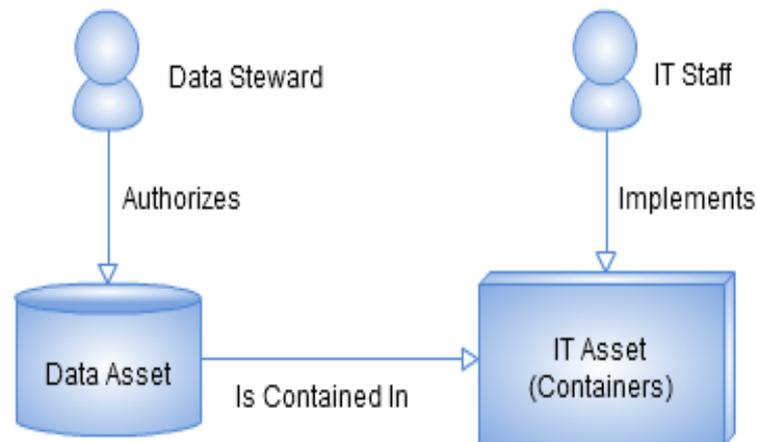
IT AND DATA SECURITY UPDATE

Data access dependent on compliance

- ADE needs to provide access to data in compliance with policy
- Data owners do not have the complete picture of the technology used to host their data
- ADE does not know if an access request is approved by the data owner for implementation
- Audit record is incomplete
- No process exists for data owners/stewards to review currently assigned data access

Suggested solution for data access

- Use Service Manager to document the relationship between Data Assets and IT Assets
- Use automation to translate requests for access to IT Assets to data owners and data stewards



Data management forms created

Data asset

DA36 Owner: Lippert, Carol Created By: Date Created: Last Modified:

General Containers Permissions Revocations History

^ DataAsset Profile

Asset Name:
Student ELL Status

Owner: Lippert, Carol (clipper) ADE Division: High Academic Standards for Students Data Domain: ELL English Language Learners

Description: (this will be shown in the catalog)
Description written in customer approachable language

▼ Risk Profile

^ Approval:

Approval Required Unanimous Approval

Approver(s): Gutier, Micky

Add Remove View

▼ Misc

OK Cancel Apply

Technical asset

DC26 Owner: Callahan, Robert

General Permissions Revocations History

^ Data Container

Asset Name:
Internal Data Warehouse

Owner: Callahan, Robert (rcallab) Container Type: Database

Description:
Example of a database container. Description would be written for access requests. Database Instance would be in the technical details below

^ Technical Details

Select Database Ins...

^ Authorization /Task Assignment

Data Asset	Add	Remove	View	Approval Required
School Improvement				<input checked="" type="checkbox"/>
School Support				<input type="checkbox"/>

Support Staff: AZED\DBA Group

Approval Required: Unanimous Approve:

▼ Misc

OK Cancel Apply

Data access requests created

Application data request

4586 Owner:

General History

Access Request

Requester: Request Type:

Grant access rights to data on the following systems:

Data Container	Add
Internal Data Warehouse	Remove
	View

Select Application(s) that requires access:

Affected Appli...	Add
AZDash	Remove
	View

Details:

Description:

Notes:

OK Cancel Apply

User data request

4596 Owner:

General History

Access Request

Requester: Request Type:

Grant access rights to data on the following systems:

Data Container	Add
The Hub	Remove
	View

Select User(s) that requires access:

Affected User	Add
Marten, Rod	Remove
Low, Robin	View

Details:

Description:

Notes:

OK Cancel Apply

Options for processing requests

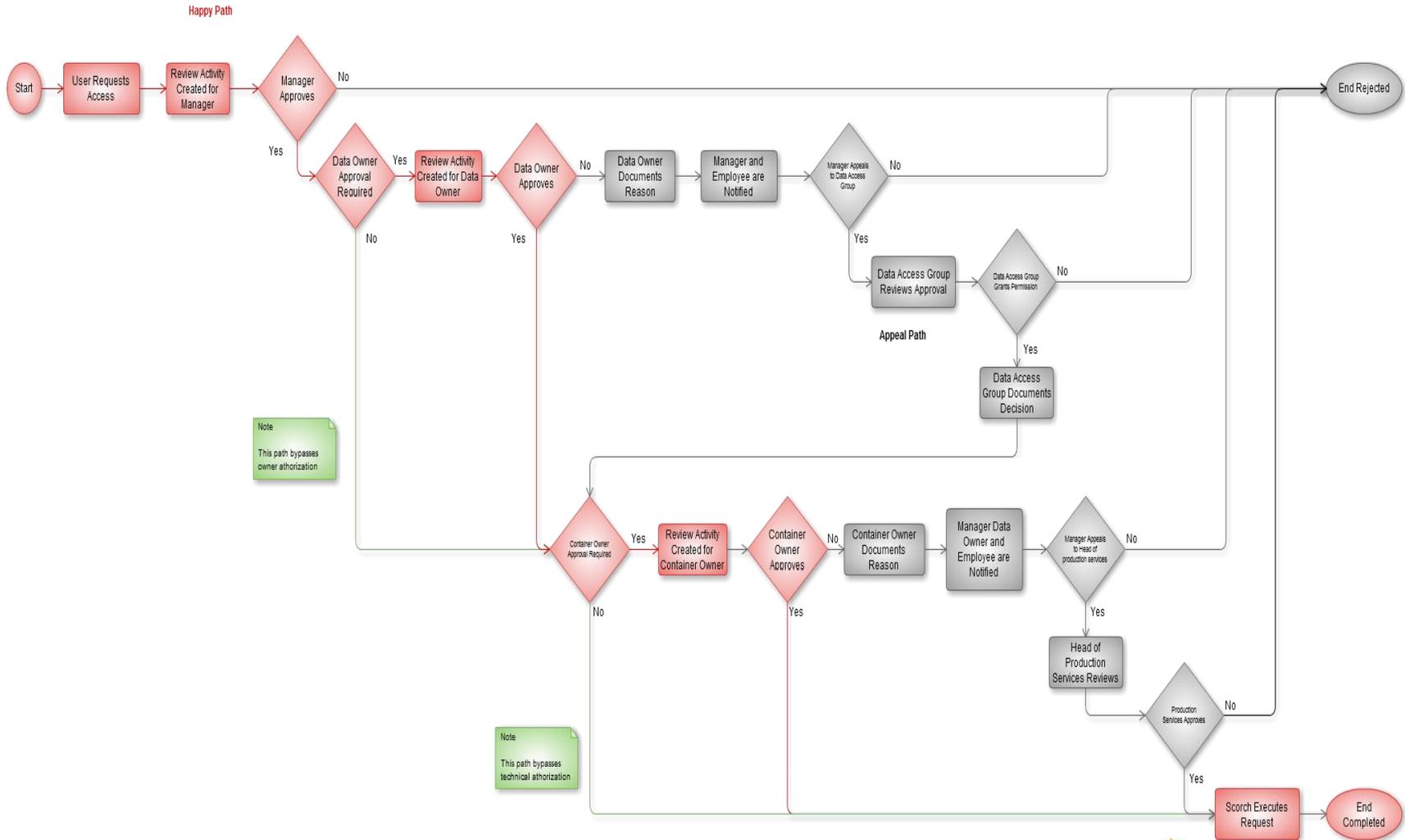
User requests

- Web portal
- Service Manager console
- Web services (for application integration)
- Support call center

Approving requests

- Email reply
- Web portal
- Service Manager console

Track the progress of a request





Rebecca Bolnick, Carrie O'Brien

ADE DATA REQUEST POLICIES UPDATE

DEPARTMENT OF EDUCATION



“Restricted Access Research Data”



ADE Government Relations

LEGISLATIVE SESSION REVIEW

A stylized, high-contrast illustration of five diverse individuals' faces, arranged horizontally. From left to right: a man with dark hair and glasses, a woman with long blonde hair, a woman with dark hair, a man with a beard and mustache, and a woman with dark hair. The style uses flat colors and bold outlines, giving it a graphic, poster-like appearance. A white rectangular box is overlaid on the lower portion of the faces.

CALL TO PUBLIC