Arizona's Education Transformation

Presented to:

Data Governance Commission

October 17, 2014

Arizona
Department of Education

Agenda

- NIST Security Framework
- Data Governance Commission Statutory Goals
- Statewide Educational Data Plan
- School Readiness Plan Update
- Legislative Bill Review

Shyam Sunder

NIST SECURITY FRAMEWORK

Arizona Department of Education

National Institute of Standards and Technology (NIST)

Developed to address the need to protect Information and Information systems by implementing security controls for facilitating a more consistent, comparable, and repeatable approach for selecting and specifying security controls for information systems

Fundamentals

- Standards and guidelines developed in response to Federal Information Security Management Act (FISMA) & Federal Information processing standards(FIPS)
- *Holistic* approach to information security and risk management
- Provides organizations with the breadth and depth of security controls

Security Controls

- Provides guidelines for selecting and specifying security controls for organizations and information systems

Information Security Program Management Controls

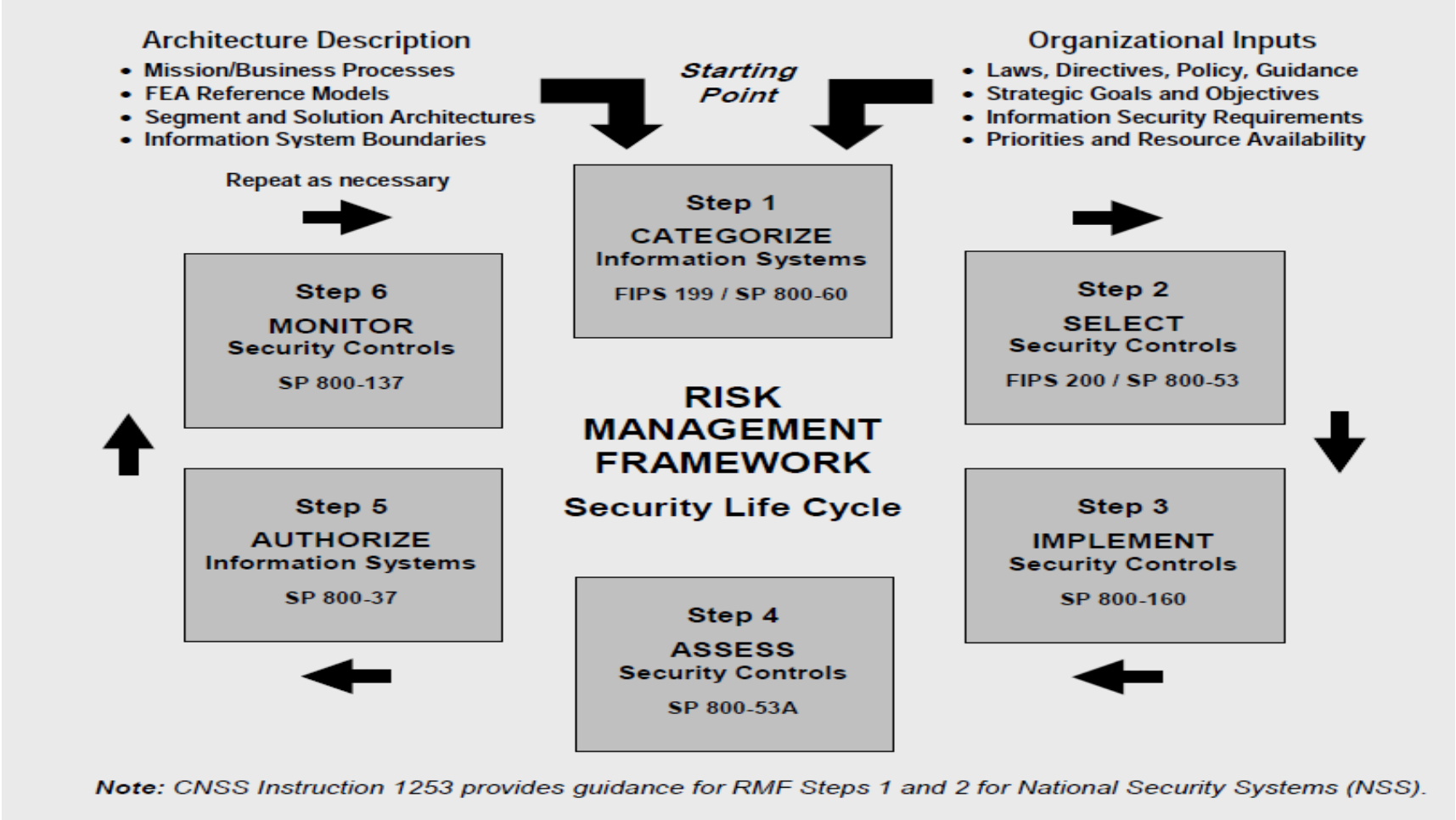
- Provides a set of information security program management (PM) controls that are typically implemented at the organization level

Privacy Controls

- Provides a set of privacy controls best practices that help organizations enforce privacy requirements derived from federal legislation, directives, policies, regulations, and standards

NIST provides guidance on managing information security risk.

NIST framework



Chris Kotterman

DATA GOVERNANCE COMMISSION STATUTORY GOALS & LEGISLATIVE BILL REVIEW

Arizona Department of Education

Dr. Rebecca Bolnick

STATEWIDE EDUCATIONAL DATA PLAN

Arizona Department of Education

Overview of data management at ADE

Data Management

Principles, Policies, Standards

- Streamlined Data Stores
- High Quality, Consistent Data
- Safe and Private Data
- Enable Data Driven Decisions

Data management efforts at ADE

Data Management

Data Governance

Streamlined Data Stores
- ODS
- Meta-Data management
- Data Lifecycle management

High Quality, Consistent Data
- AzEDS
- Statewide SIS

Enable Data Driven Decisions
- Data Warehouse v2.0
- AZDash
- IIS
- LMS

Safe and Private Data
- ADE Connect
- FERPA
- Quality Controlled Reporting

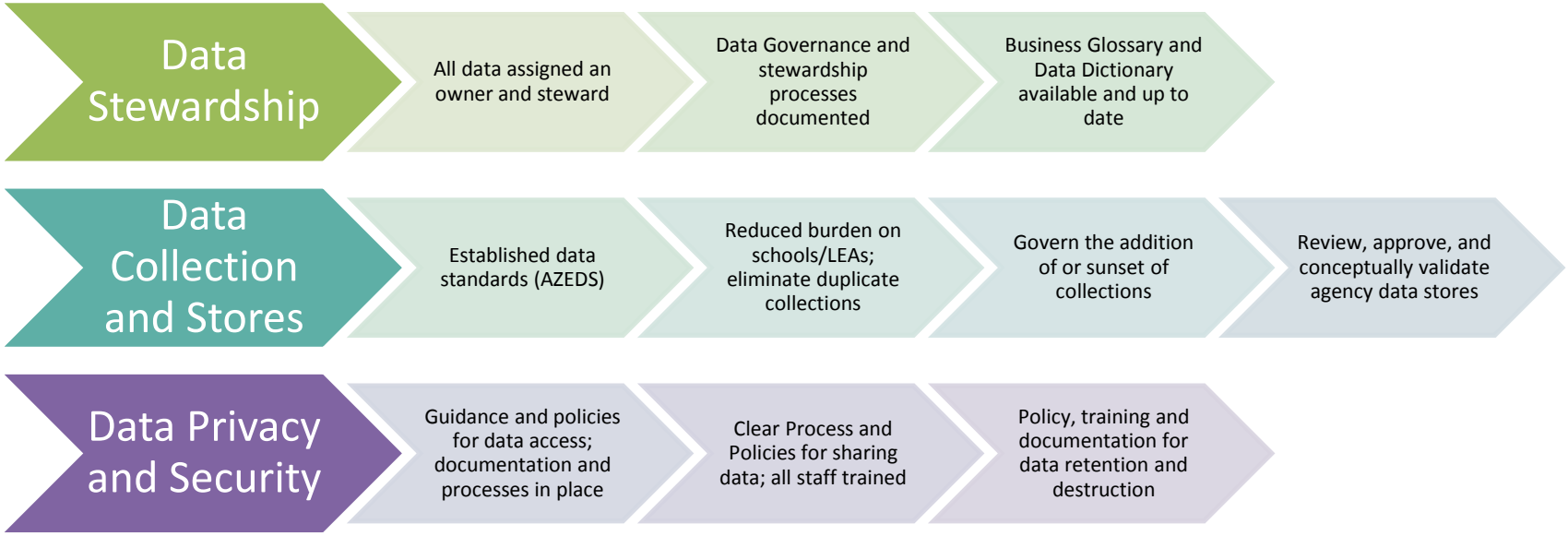
Data governance at ADE

The principals, policies, processes and standards that govern the quality, collection, management, and protection of ADE's data

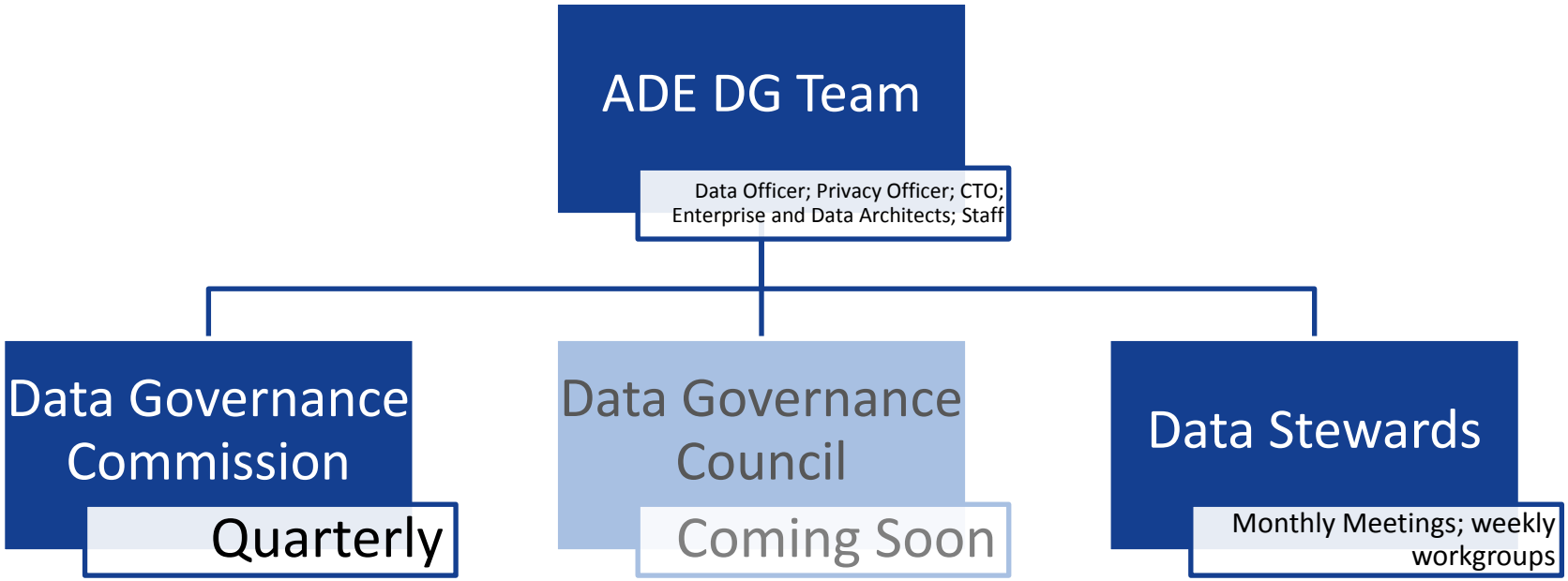
Goals

1. Enable better decision-making for ADE and K-12 education stakeholders
2. Improve operational efficiency through standard, repeatable processes
3. Champion the needs of data stakeholders
4. Ensure the security and privacy of students' and teachers' data

Future state of ADE data governance



Data governance organizational structure



Implementation of data governance

- Data Stewards:
  - Data Stewards- general meeting monthly

- Work Groups meet to address specific issues:
  - ✓ Aligned data processing across multiple divisions and publishes annual calendar
    - Significantly decreased key processing times
    - No more “stepping on toes”
  - ✓ Created external data request process
    - Enabled tracking of requests
    - Eliminated duplication of efforts
    - Eliminated 3-month backlog of outstanding data requests
    - Centralized process of creating and maintaining data sharing agreements
  - ✓ Created master list of data collections
    - Calendar format coming soon
    - Analysis of data collections to eliminate duplicates in process
  - ✓ Engaged in governance of build of ODS
    - Data steward assigned to each domain of ODS build
    - Data stewards review, approve, and conceptually validate agency data store designs

Implementation

- Data Standard Adopted (AZEDS)
  - Beginning implementation/build in new standard during FY14 and FY15
- Workgroup creating policies and process for internal data access
  - Drafted process and form
  - Piloted with several requests for access
  - Centralized monitoring of access by applications
- Workgroup creating policies and process for governance of Data Collections
  - Drafted process and form for new collection and sunset of collections
  - Piloted with several requests for new collections and for sunset of collections (part of ongoing work replacing SAIS)

Implementation

- Data Privacy policies and training
  - Policies drafted
  - In-person training for all major data stewards and key ADE divisions
  - Webinar under development
  - Ad-hoc in-person training for the field

- Records/Data retention policies and training
  - Data backup policy completed and implemented
  - Data retention schedules being revised, policies being drafted
  - Training under development

Komal Dubey

AZEDS SCHOOL READINESS PLAN

Arizona Department of Education

Elements of AzEDS readiness plan

- Development Activity
- Communication to LEAs
- Outreach to LEAs
- Vendor Certification
- LEA Verification
- Focus Groups Process
- Q&A

Development activity

In Queue

- Support Processes and Tools
- Knowledge base articles and FAQ
- Researching Alternative for LEAs who will not be able to meet compliancy for submissions on AzEDS

In Progress

- Performance Testing
- Vendor Support Activities
- Report/Feature Requirement from Focus Group
- Creation of Reports
- Integration of Ed-Fi model into the environment (ODS)
- Implementation of InRule Engine
- Vendor Certification

Completed

- Availability of Sandbox and Testing environment for Vendors
- Availability of Testing environment for LEAs
- Production environment ready to accept LEA submission
- Security Testing
- Published Use Cases for Releases

Communication events

Pre Implementation

- **Letter to SIS Vendors** - Mandate from Superintendents office
- **Letter to LEAS** - Compliance Letter from School Finance
- **Technical Artifacts** - Environment Details, Use cases, Certification Scenarios
- **Certification Process** - Process SIS vendors need to adhere to get certified
- **LEA Submission Process** - Process LEAS need to adhere for data submissions

Implementation

- **Q&A with SIS Vendors** - Calls with SIS Vendor to resolve any questions technical or process related
- **SIS Vendors Score Card** - Report SIS Vendor Progress against ADE Certification Process
- **LEA Verification Reports** - Reports for LEAS to validate their data submissions
- **Product Release to LEAS** - Make LEAS aware on upcoming product releases
- **Project Review** - Internal Planning, Reporting, and Auditing

Post Implementation

- **Outreach to LEAS** - Encourage LEAS to upgrade their systems and submit data
- **Knowledge Base** -Wiki, FAQ, and help documents

Outreach process

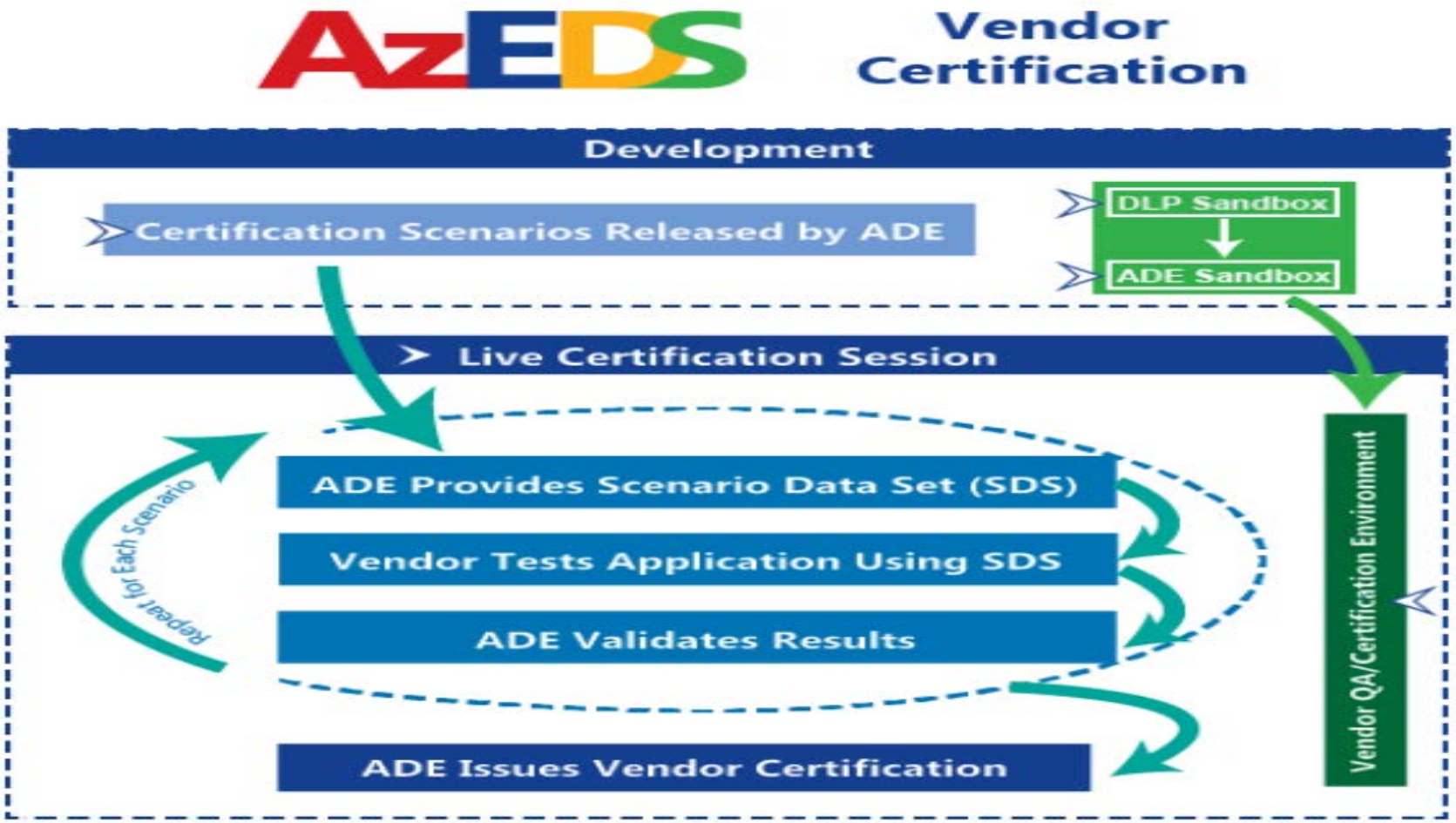
- Initial Outreach Emails and Calls to LEAs
- Overview of AzEDS and compliance

- Outreach Kickoff meeting complete with various stakeholder within the LEA
- Kickoff meeting is to provide more details around AzEDS and LEAs deployment of their SIS Vendor upgrades

- Follow-up with LEA for their Data Submission

- Continuous Outreach to LEAs via emails, calls, meeting to follow-up on their implementation and submission

Vendor certification process



Vendor scorecard

AzEDS Vendor Certification Scorecard

Vendor: ADE SIS: JSON Dry Run 2 Date: 10/08/2014

		Attempted	Passed
1	**Student & Responsible Party - Add a New Student**		
	Get Student Identifier (no action)		
1.1	Add Student	YES	YES
2	**Student Enrollment**		
2.1	Enroll a Student in a High School	YES	YES
2.2	Student Membership		
2.2.a	Add Student Membership FTE	YES	YES
2.2.b	Add Tuition Payer Code	YES	YES
17	**Student Attendance**		
17.1	Add Session	NO	NO
17.2	Add Student Attendance	NO	NO
17.3	Update an AttendanceEventReason (Student was submitted as Excused Absence	NO	NO
17.4	Delete an AttendanceEventReason reported erroneously (an Absence was	NO	NO

		Attempted	Passed
TOTAL:	60	46	46

- Sample vendor certification scorecard
- Four-page document that summarizes the scenarios they attempted and passed
- Vendor needs to pass all 60 scenarios to be consider certified

Vendor status

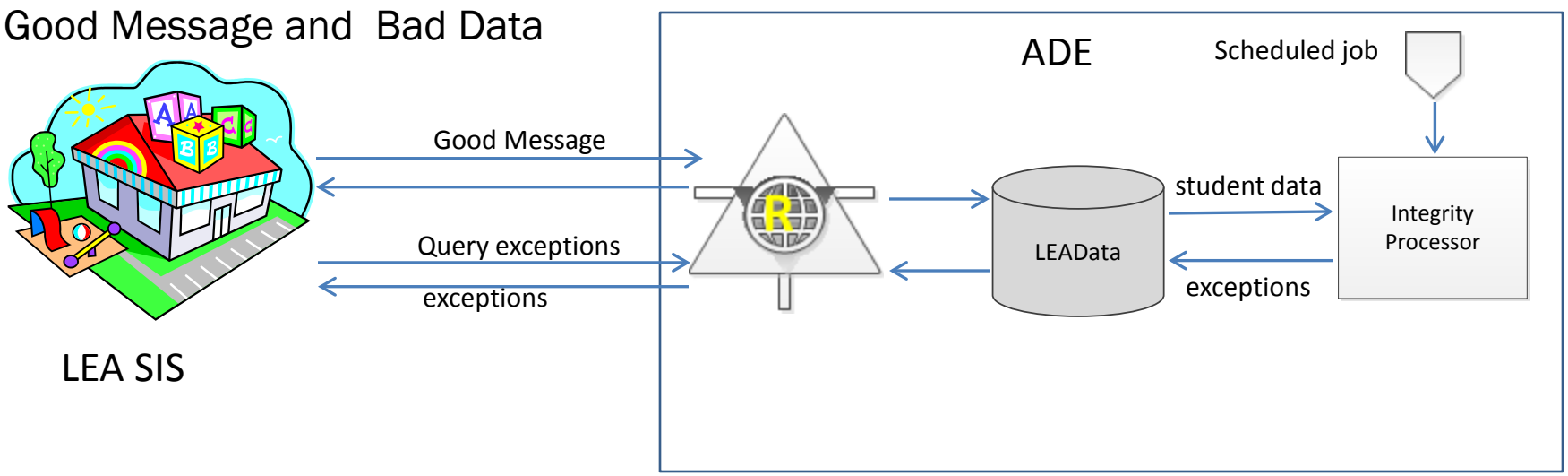
Information below is self-reported by vendors and is subject to change.

Green	Release 1 certified and available for LEAs
Yellow	Development (Release 1 API integration with SIS) in progress AND certification testing scheduled
Red	No commitment received or Design (Data Mapping) not started

- **Tyler SIS by Schoolmaster (Tyler Technologies)**
- **SchoolDex (Hane Solutions)**
- **Synergy (Edupoint)**
- **Infinite Campus District Edition (Infinite Campus)**
- **Connexus (Connections Education)**
- **PowerSchool (Pearson)**
- **SchoolLogic SMS (SchoolLogic)**
- **Jupiter iO (Jupiter Ed)**
- **CoolSIS (Apex Educational Services)**
- **Illuminate Student Information (Illuminate Education)**
- **FlipSwitch SIS (FlipSwitch)**

- Posted to http://www.azed.gov/aelas/azeds/

LEA verification process



- ADE will provide verification reports for LEAs – Submission and Integrity
- Report will drill down to the exception so that LEA can resolve
- Report requirements are gathered through focus groups

Focus groups

- Identify and gather requirements from LEA and ADE stakeholder for AzEDS Reporting and Features
  - Reports
  - SAIS Online
  - Calendar Application

- Comprised of 17-21 individuals made up of representative LEAs and ADE stakeholders

- Groups meet every other week to review 43 reports
  - Reviewed 15
  - Have to sunset 5
  - Finalized 2

Questions

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