

TSDS UPGRADE PROJECT - VENDOR



AGENDA

DATA STANDARDS

Submission Requirements and Technical Resources

PROJECT UPDATES

Pilot Program, Demonstration, Certification

NEXT STEPS

How to Prepare for Parallel Submission







DATA STANDARDS

TEXAS EDUCATION DATA STANDARDS





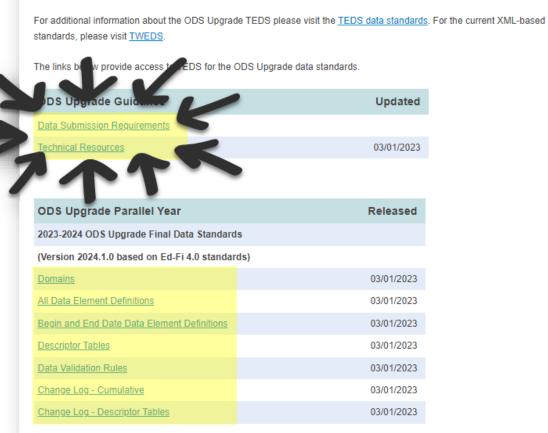
Texas Student Data System

tsos texas student data system **TPEIR Public** Education Data **TEDS Data** Technical News & FAQs Feedback About Warehouse Reports Standards Resources Current TEDS Data Standards Simpl r Futures. ODS 3 x Data Standards **IMPROVED ID** NEW SAVINGS EXPANDED REPORTS MORE DATA BETTER PLANNING



NEW RESOURCES

Operational Data Store (ODS) Upgrade Texas Education Data Standards





ODS Upgrade Data Standards







DATA SUBMISSION REQUIREMENTS



Data Submission Requirements

Data Submission Requirements (by domain)	
Education Organization	
School Calendar	
Staff	
Student Identification and Demographics	
Teaching and Learning	
Finance	
Enrollment	
Student Academic Record	
Alternative and Supplemental Services	
Student Attendance	
Discipline	
Restraint	
Student Cohort	03/06/2023
Assessment	03/06/2023
Student Special Education Program Eligibility Association	
Student Application	
Prior Year Leaver	

Entity	Entity Ref	Data Element	Collection/Submission	Length	Data Type	Descriptor Table	Elem
Cohort							
	Ø	EducationOrganization	РК	9			
		CohortIdentifier	РК	20	String		E11
		CohortDescription	PK	1024	String		E1:
		CohortType					N
ALL – Data element is use PF – PEIMS Fall PM – PEIMS Mid-year PS – PEIMS Summer PE – PEIMS Extended Yea NP – Data element is not	ır	CRW – Cla KG – ECDS PK – ECDS			CF — Chi RF — RF- SE —SEL/ 14 — SPF	Tracker A	
			udents for tracking, analy	sis, or inte	ervention.		
The Cohort Entity rep General Reporting F	Requiremen			sis, or inte	rvention.		
The Cohort Entity rep General Reporting F	Requirements	n <u>ts</u> that a teacher and studen		sis, or inte	rvention.		
The Cohort Entity repo General Reporting F The Cohort Entity repo	Requiremen orts cohorts equiremen	n <u>ts</u> that a teacher and studen <u>ts</u>		sis, or inte	rvention.		
The Cohort Entity repr General Reporting F The Cohort Entity repr Special Reporting R Currently, there are n Data Element Repo	Requiremen orts cohorts equiremen o special rep rting Requi	n <u>ts</u> that a teacher and studen t <u>s</u> orting requirements. rements		sis, or inte	ervention.		
The Cohort Entity repr General Reporting F The Cohort Entity repr Special Reporting R Currently, there are n Data Element Repor EducationOrganizatio	Requirement orts cohorts equirement o special rep rting Requi	n <u>ts</u> that a teacher and studen t <u>s</u> orting requirements. rements	t are associated with.	sis, or inte	ervention.		
The Cohort Entity rep General Reporting F The Cohort Entity rep Special Reporting R Currently, there are n Data Element Repo EducationOrganizatio The EducationOrganiz	Requirement orts cohorts equirement o special rep rting Requi on Reference tation Refere	n <u>ts</u> that a teacher and studen t <u>s</u> orting requirements. rements	t are associated with. ier assigned to a school.	sis, or inte	ervention.		



TECHNICAL RESOURCES: COURSE



2023-2024 Texas Education Data Standards – Technical Resources Final Version 2024.1.0 Updated March 1, 2023

<u>Course</u>

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The table listed below was formerly known as the SERVICE-ID (C022) table. In the upgraded data standards, the Texas Education Agency (TEA) will populate the Course Entity with the TEA approved Course information located below. All locally developed courses must be assigned an eight-digit course code. This number may be a combination of letters and numbers, the last three digits of which are assigned locally. The Local Education Agency (LEA) vendor will need to populate the Course Entity with any LocalCourseCodes.

The Course Code, Course Title, and Course Abbreviations of state-approved courses used on the Academic Achievement Record are listed in the table below. Use of these prescribed numbers, titles, and abbreviations is required for participation in the Texas Records Exchange (TREx) system.

Table Identification	Name	Date Issued		Date Updated		
C022	Course	03/01/2023				
Course Code	Course Title	Eligible for State HS Credit	Course Abbreviation	Units	CTE Course	
	Grades PK - 6, Elementary					
01010000	Pre-Kindergarten					
01020000	Kindergarten					
01020100	Transition (Pre-First Grade, Developmental First)					
02000000	Elementary, Grades 1-6					
02010000	Grade 1					
02020000	Grade 2					
02030000	Grade 3					
02040000	Grade 4					
02050000	Grade 5					
02060000	Grade 6					
01110000	Languages Other Than English, Kindergarten - Arabic					
02111000	Languages Other Than English, Grade 1 - Arabic					

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TECHNICAL RESOURCES: CTE INDICATOR



Final Version 2024.1.0 Updated March 1, 2023

2023-2024 Texas Education Data Standards - Technical Resources

Grades 6-8	
Grades 9-12	
PEIMS Career and Technical Education Indicator	



PEIMS Career and Technical Education Indicator

Beginning with the 2020-2021 school year, the Career and Technical Education Indicator is a calculated value based on the student's course completion data for all years in which the student could have taken a CTE course. The Career and Technical Education Indicator will be calculated by TEA for all students in grades 06-12.

The Career and Technical Education Indicator is calculated, once the PEIMS Summer Submission is in the Accepted status for all LEAs and once the PEIMS Extended-Year Submission is in the Accepted status for all LEAs. Reports that display the calculated value will be available approximately two weeks after each submission closes.

The possible calculated Career and Technical Education Indicator values are described below:

Table Identification	Name	Date Issued	Date Updated		
C142	Career And Technical Education Indicator	03/03/1993	09/01/2021		
Indicator	Description				
4	Not CTE: A student who never completed any high-school CTE courses.				
5	CTE Program Participant: A student who completes either one high school CTE course for any nu course for less than two credits (the student does not have to pass or		high school CTE		
E	CTE Program Explorer: A student who completes two or more high school CTE courses for a to Concentrator or Completer (the student does not have to pass or rece		t a Participant,		
			07 Dogo		







How should vendors report a local education agency (LEA) ID that begins with zeros? Ed-Fi requires an integer which removes the leading zero.

Vendors should publish the LEA ID number as an integer. TEA has implemented logic to replace the leading zeros. TEA is continuing to work with Ed-Fi on this and will provide additional guidance as needed.





Will SIS vendors still be expected to generate the Student Detail and District/Campus Summary Reports?

The Student Attendance Accounting Handbook requires LEAs to generate Student Detail Reports, Campus Summary Reports, and District Summary Reports for audit purposes.

Therefore, the SIS vendor will still need to provide the LEA with a method to generate these reports.





Which staff is reported for the following and can one staff be reported for both?

- StaffEducationOrganizationAssignmentAssociation
- StaffSectionAssociation

TEA is currently reviewing the Staff Responsibility data in TEDS. A staff member can have both a StaffSectionAssociation and StaffEducationOrganizationAssignmentAssociation.

Once TEA has completed a full review of each StaffClassification (E0721), TEA will publish a document outlining additional information.





How should HR/Finance vendors report payroll for employees that change positions during the year?

In the March 1, 2023, publication of the TEA Domain Document Final Version 2024.1.0, TEA added the data elements BeginDate (E3010) and EndDate (E3020) to the PayrollExt entity to allow an HR/Finance vendor to report payroll for employees that change positions during the year.

If the vendor reports the PayrollExt when employees change positions during the year, through these new data elements, TEA can promote the payroll information based on the last Friday in October (PEIMS Fall Snapshot).







TEA

PROJECT TIMELINE

September 2021 – August 2023

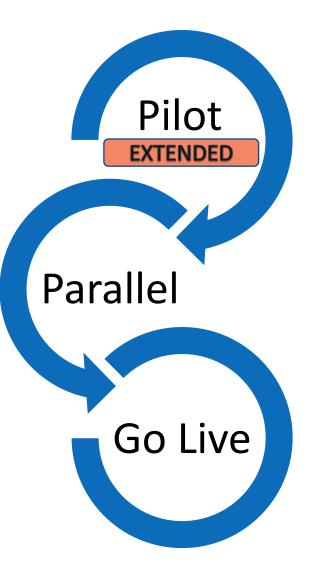
- **Optional**: TSDS vendors can participate in pilot program to develop and test their product solutions.
- Optional: LEAs can partner with their vendors to conduct end-to-end testing in preparation to parallel submission.

August 2023 – August 2024

- **Required**: All TSDS vendors test their product solutions.
- Optional: LEAs will submit both API transactions and XML submissions and compare results to ensure vendor readiness.

August 2024 – August 2025

- **Required:** All LEAs will submit their TSDS official data through API transactions.
- XML submissions no longer accepted for TSDS.



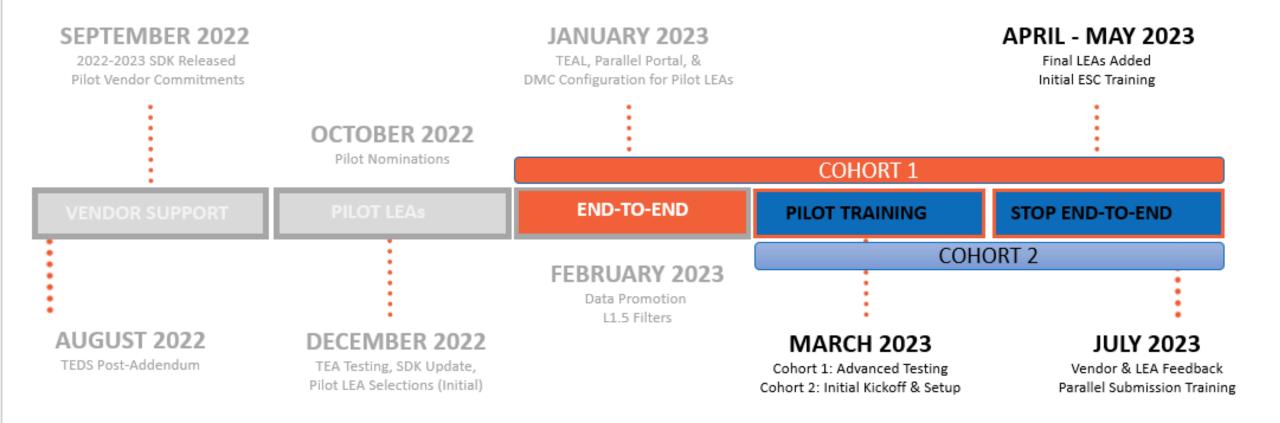






TIMELINE OF EVENTS







TEA

PILOT PROGRAM FUNCTIONALITY

RECENTLY RELEASED

- TEA-defined claim sets:
 - HR Vendor
 - Finance Vendor
 - HR/Finance Vendor
 - SIS/HR/Finance Vendor
- Data Management Center (DMC)
 - Level 1.5 Filter Details

IN PROGRESS

TEA-defined claim sets:

- Assessment Vendor
- Read Only All Resources
- Data Management Center (DMC)
 - Manage Claim Set Functionality
 - Level 2 Validations
- Software Development Kit (SDK)
 - Updates for 2023-2024 school year



TEA

SOFTWARE DEVELOPMENT KIT (SDK)

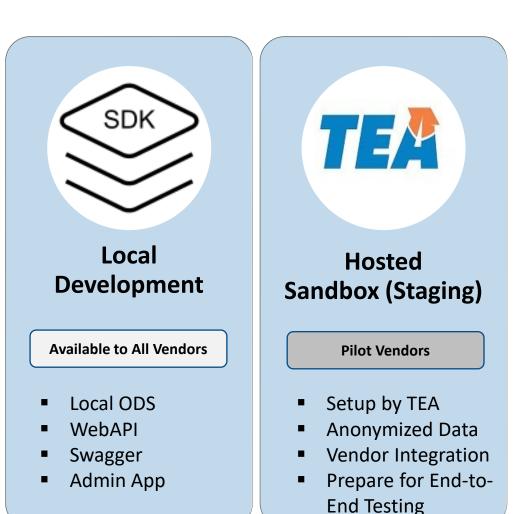
UPDATED VERSION

SDK version 1.0.3.1: March 23, 2023

- Still based upon TEDS 2023.2.2.3x published on August 19, 2023.
- Includes the following TEA claim sets:
 - SIS Vendor
 - HR Vendor
 - Finance Vendor
 - HR/Finance Vendor
 - SIS/HR/Finance Vendor
- Enabled PUT in the API and resolved several bug fixes. Refer to change log.

This SDK version is intended for pilot year. Changes for 2023-2024 Parallel Submission

coming Summer 2023.



DOWNLOAD: SDK version 1.0.3.1



3/27/2023



What is the difference between the SDK and the Hosted Sandbox (Staging) environment?

The SDK is provided to all vendors and is intended for the local development. It allows the most control of ODS management/configuration and includes the Ed-Fi Admin App. TEA recommends that vendors start their development and testing with this resource.

The Hosted Sandbox (Staging) environment is provided by TEA upon request. It is intended to be an additional testing resource to a vendor prior to sending Production data for their LEA(s) to conduct End-to-End testing. This environment does not include any ODS management features and may require TEA intervention for support.





Is the SDK, Hosted Sandbox (Staging), and the environment used for End-to-End Testing by LEAs all based upon the same TEDS publication?

Yes. TEA is continuing to make a dedicated effort to keep all these resources in sync. They all are currently built upon the <u>2022-2023 ODS 3.x Post-Addendum Data</u> <u>Standards</u>.

With the upcoming SDK release in March 2023, all resources will be aligned in terms of software updates.



PILOT PROGRAM ACCOMPLISHMENTS





PROGRESS REPORT

Data Published:

- 4 vendors have published for 7 LEAs
- 620,000 resources published to 30 entities

Data Promoted

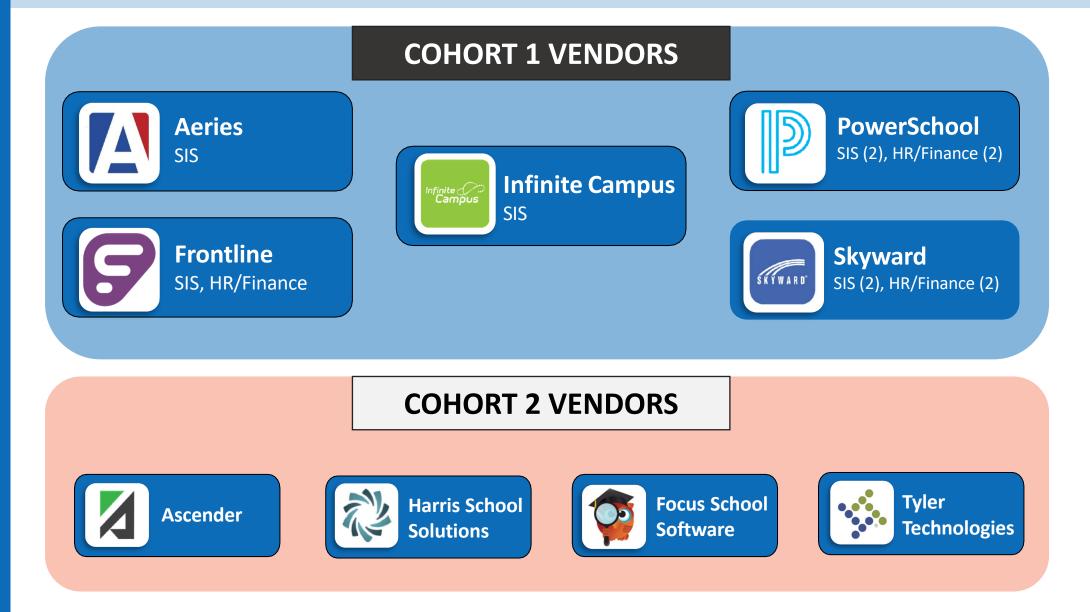
- 6 LEAs have promoted to PEIMS or CORE
- 90,200 records for PEIMS Fall
- 69,900 records for Class Roster Fall
- Support Tickets
 - ~100 <u>TSDS Vendor Support Portal</u> tickets





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PILOT PROGRAM VENDORS





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COHORT 1: PILOT LEAS

Edna ISD









Princeton ISD







San Benito CISD



Sharyland ISD



COHORT 2: PILOT LEAS



Cedars International Academy



ISD Coppell ISD



Perryton ISD

E Pass ISD



Sweetwater ISD

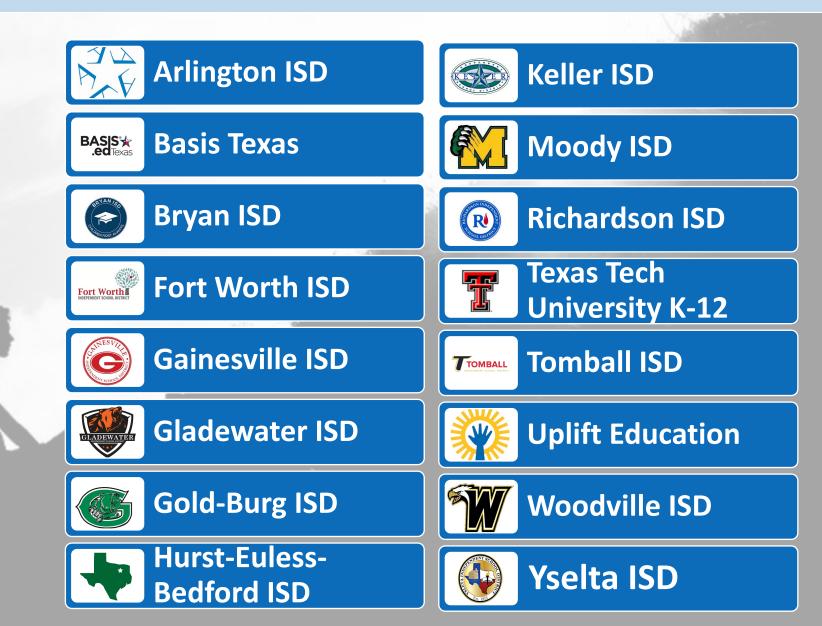




TEA

SCALING THE PILOT PROGRAM







tsds

BREAKDOWN OF LEAS BY VENDOR

Edna ISD, Keller ISD, **Moody ISD**



Eagle Pass ISD, Gainesville ISD, Gladewater ISD, Gold-Burg ISD, Leon ISD, Perryton ISD , Sweetwater ISD, Woodville ISD



Fort Worth ISD, Little Elm ISD, **Richardson ISD, Texas Tech University K-12**





Cedars International Academy





Basis Texas, Bryan ISD, Hurst-**Euless-Bedford ISD, Lorena ISD,** San Angelo ISD, Tomball ISD, **Uplift Education**



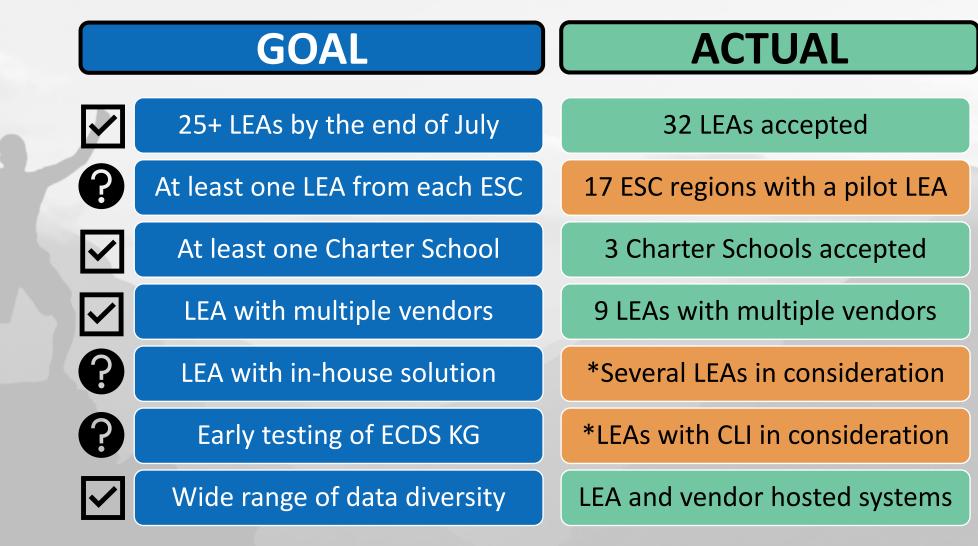
Lake Worth ISD, Royse City ISD, San Benito CISD, **Sharyland ISD**



Coppell ISD, Ysleta ISD

TEA

ACHIEVING PILOT PROGRAM GOALS



tsds

* TEA may add LEA(s) to fulfill this goal later in Pilot



Will additional LEAs be added to the Pilot Program?

TEA is not expecting to accept any additional LEAs to the 2022-2023 Pilot Program after April 2023. All accepted LEAs were informed on or before March 20, 2023. LEAs were accepted based upon discussion and coordination with their pilot vendor(s) and the goals of the pilot program.

Any LEA that has previously expressed interest through the LEA Nomination Form and was not included in the 2022-2023 Pilot Program will be accepted for the 2023-2024 Parallel Submission.





Will LEAs currently participating in the Pilot Program be automatically included for the 2023-2024 Parallel Submission?

Yes. All LEAs currently participating in the Pilot Program will be included in the list of accepted LEAs for the 2023-2024 Parallel Submission. They will be informed of their acceptance prior to the start of school year.





How and when will LEAs be accepted for the 2023-2024 Parallel Submission?

TEA will be sending additional correspondence in May 2023 to all LEAs to solicit participation for the 2023-2024 Parallel Submission. Any LEA that has previously submitted their interest through the LEA Nomination Form will not need to apply again. TEA will coordinate with their vendor(s) and ESC prior to LEA acceptance. LEAs will be informed of their acceptance prior to the start of the 2023-2024 school year.

More information will be shared in the upcoming FCN webinars as it becomes available.





When will vendors need to be ready support the TSDS data submission by our education support centers (ESCs)?

TEA is expecting all twenty ESCs to participate in the 2023-2024 Parallel Submission. They will be provided their own IODS and DMC application in order to test their PEIMS Fall and PEIMS Mid-year data submissions.

For vendors that currently provide a technical solution for TSDS reporting by an ESC, please begin communicating and coordinating with them to ensure they are prepared for the 2023-2024 Parallel Submission.







TEA

LEVELS OF VALIDATIONS

LEVEL 1

Includes basic data integrity checks that occur during the process of loading data via API transactions into the Individual Operational Data Store (IODS) in the Landing Zone. Data that fails Level 1 validations does not enter the IODS.

LEVEL 1.5

Includes filters that prevent invalid or non-TSDS data from being loaded into TSDS. These filters include Unique ID checks, descriptor value checks, Do Not Report flag checks, and Course ID checks.

LEVEL 2

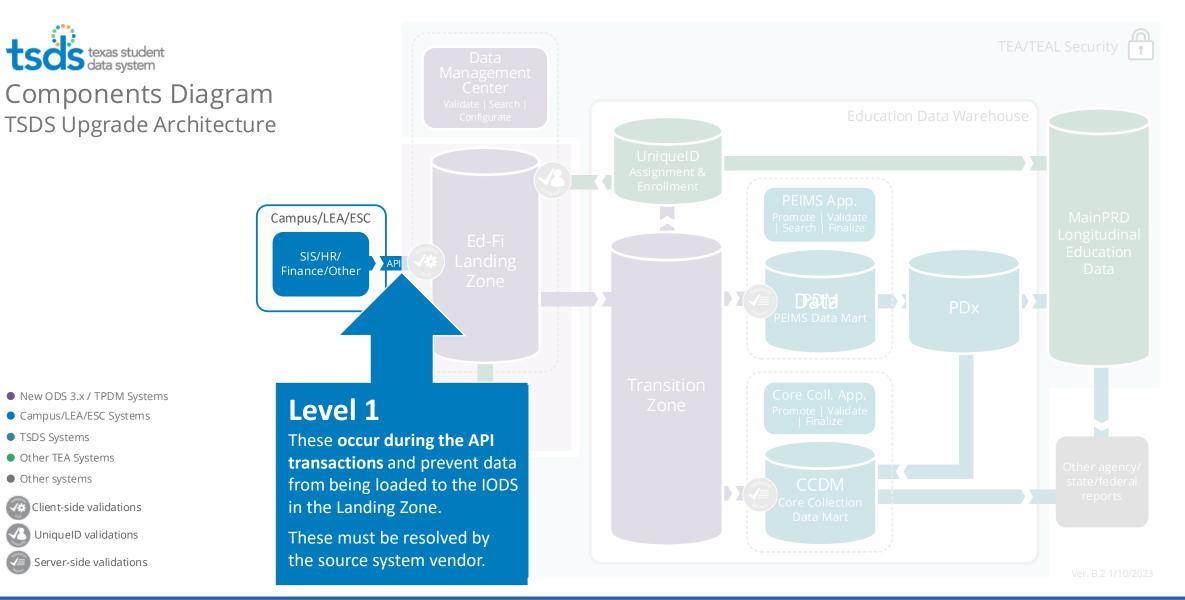
Business rules that are executed on the data destined for TSDS. Fatal, Special Warning, and Warning validation errors do not prevent data from being loaded to TSDS.

LEVEL 3

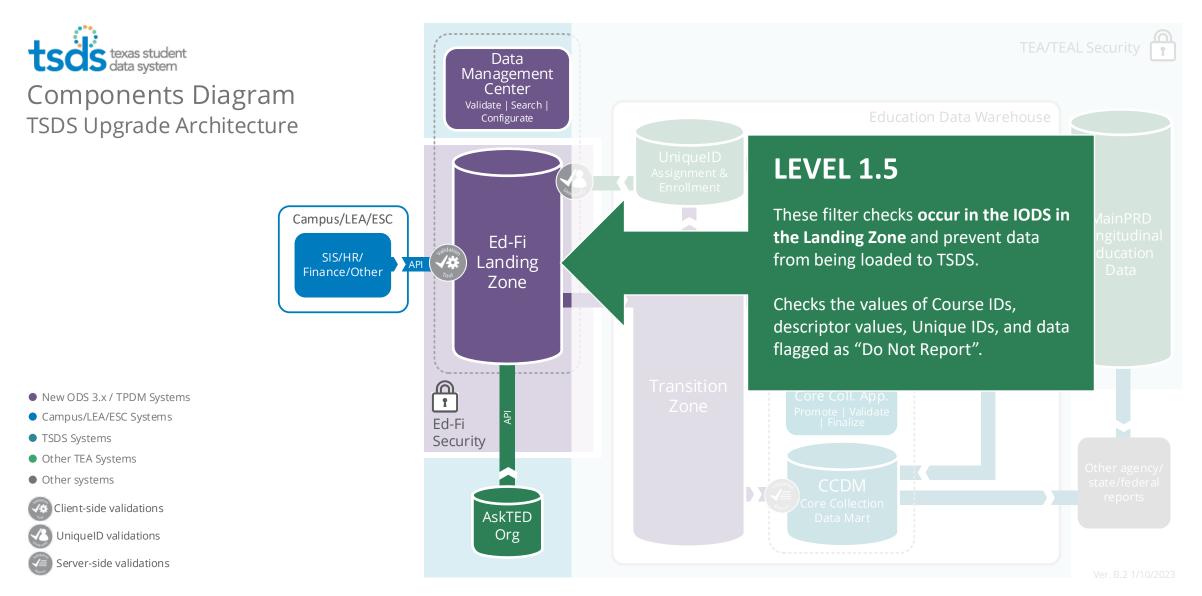
Business rules that are executed in TSDS. Level 3 validations contain all Level 2 validations, plus any additional validations required for the TSDS submissions. Fatal errors prevent TSDS submissions from being completed or finalized.



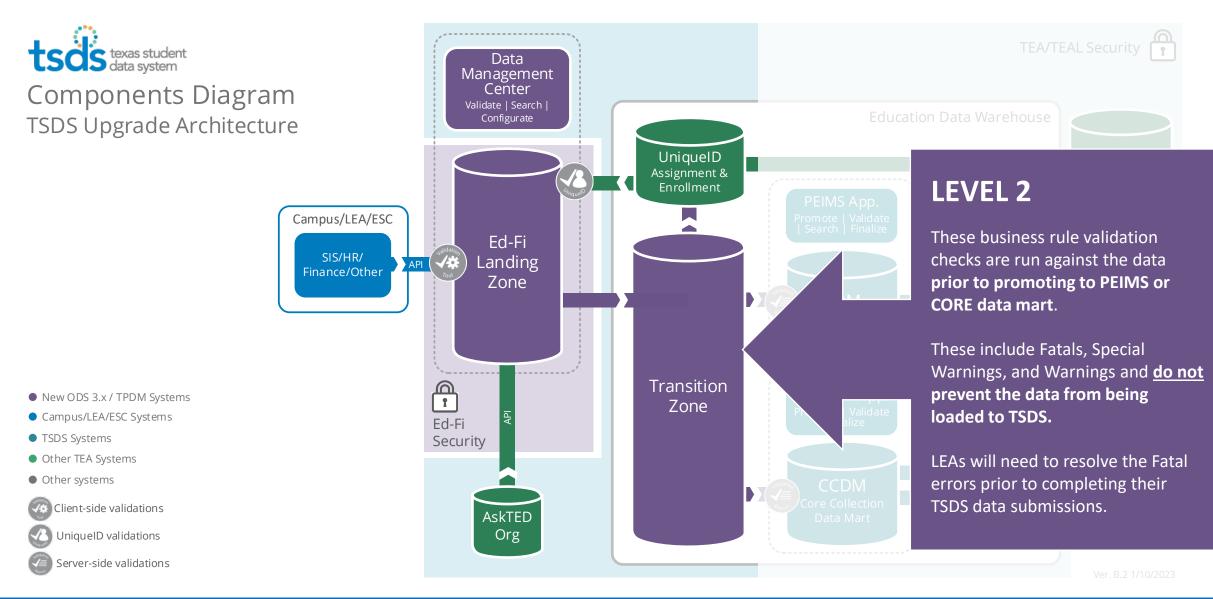
HIGH-LEVEL ARCHITECTURE



HIGH-LEVEL ARCHITECTURE

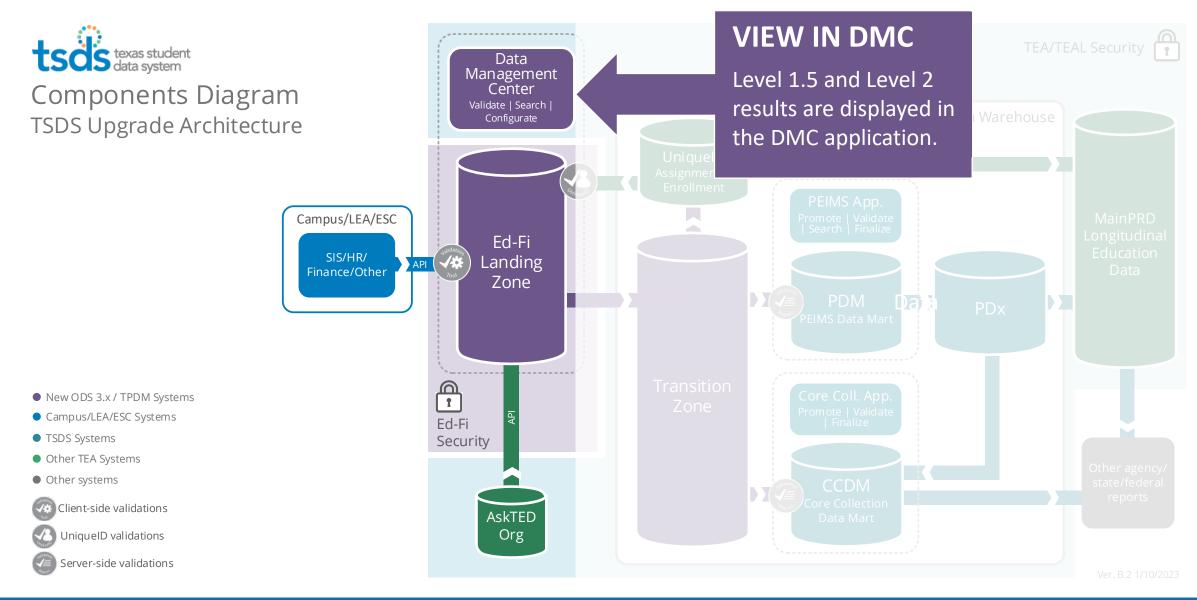


HIGH-LEVEL ARCHITECTURE





HIGH-LEVEL ARCHITECTURE



HIGH-LEVEL ARCHITECTURE





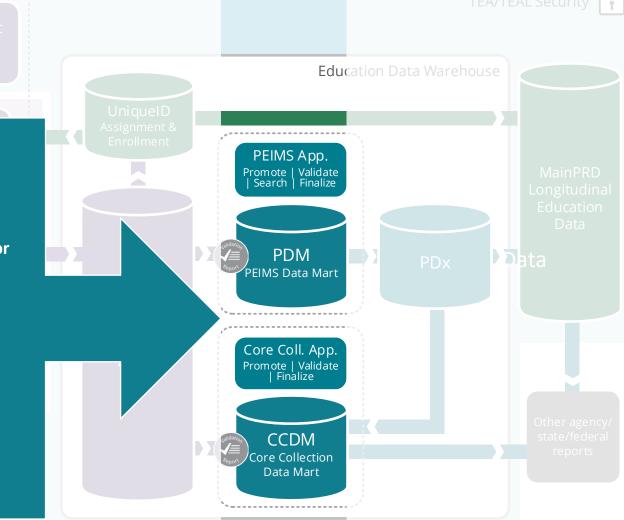
Components Diagram TSDS Upgrade Architecture

LEVEL 3

These business rule validation checks are run against the data **after promoting to the PEIMS or CORE data marts**. These will include some validations that could not be run at Level 2.

These include Fatals, Special Warnings, and Warnings.

LEAs will need to resolve the Fatal errors prior to completing their TSDS data submissions.



- Campus/LEA/ESC Systems
- TSDS Systems
- Other TEA Systems
- Other systems

Client-side validations

B UniqueID validations

Server-side validations

Ver. B.2 1/10/2023



Will vendors be responsible for capturing and reporting upon Level 1 validation errors?

Yes. Level 1 validations occur during the API transactions from the LEA's source system(s) to the IODS in the Landing Zone. Vendors would be responsible for informing the LEA of any Level 1 validation errors through their products or own reporting.

Any data that results in a Level 1 validation error will <u>not</u> be loaded into the IODS in the Landing Zone.





Will vendors have access to the DMC for Level 1.5 filter results?

No. Vendors will need to rely upon their LEA to provide any information on Level 1.5 filter results. Any data identified in the Level 1.5 filter results will <u>not</u> be loaded to TEA's Transition Zone and will <u>not</u> be made available for TSDS reporting purposes.





How do Level 2 and Level 3 validation differ?

Level 2 validations are the business rules that are run against the data prior to promoting to the PEIMS and CORE data marts. These validations do not prevent the data from being loaded to TEA's Transition Zone and do not need to be resolved. An LEA would be able to view the Fatals, Special Warnings, and Warnings in the DMC application.

Level 3 validations include all Level 2 validations, plus any additional business rule validations required for the TSDS submissions. These validations are executed when promoting the data to the PEIMS and CORE data marts. Fatal errors would need to be resolved prior to completing any TSDS data submission.







TEA

DATA MANAGEMENT CENTER

What the demo will be covering:



Monitor Validations

f <u>Home</u>

Welcome to the DMC

Admin

The Data Management Center (DMC) is the application that allows users t Individual Operational Data Stores (IODSs) and to perform configurations

The DMC and IODSs benefit local education agencies (LEAs), Education : stakeholders by:

- · automating data loading and eliminating bulk load processes
- · improving performance
- · providing robust validations early in the data submission process
- aligning to Ed-Fi vendor products by using the latest Ed-Fi standards
- allowing LEAs and ESCs to store non-TSDS data in their IODSs for lo



- Administrator Functionality:
 - Manage Claim Sets
 - Manage Keys and Secrets
 - Map Descriptors
- Monitor Validations Functionality:
 - View L1.5 Filter Details





CLAIM SET DOCUMENTATION



Download Here

TEA Custom Claim Set Definitions



SIS Vendor

Resource	Read	Create	Update	Delete
assessmentMetadata (Group)	Х			
educationContent (Group)	Х	X	Х	Х
educationOrganizations (Group)	Х	Х	Х	Х
educationStandards (Group)	Х	X	Х	X
managedDescriptors (Group)	Х			
systemDescriptors (Group)	Х			
types (Group)	Х			
people (Group)	Х			
student	Х	Х	Х	Х
parent	X	X	X	X





Will vendors have access to the DMC application?

No. The DMC application relies upon TEA Login (TEAL) security and will require the proper TEAL role(s) and privilege(s) by the LEA for access.

The LEA will be responsible for managing claim set(s), generating the key and secret, and providing it to their vendor.





Does the key and secret need to be generated every school year?

No. The LEA will not need to generate a new key and secret every school year. The LEA would only need to generate a key and secret when a new application is added or if they switch vendors.





When does the LEA need to perform descriptor mapping?

The LEA would need to perform the necessary descriptor mapping for any descriptor value that is loaded into the IODS that does not match a TEDS defined code value and is intended to be used for TSDS reporting.

Example: "*High School Diploma*" is loaded to the IODS, but the LEA wants to report "No Degree" for TSDS purposes. The LEA would map "High School Diploma" to "0 (No Degree)" in the DMC application.



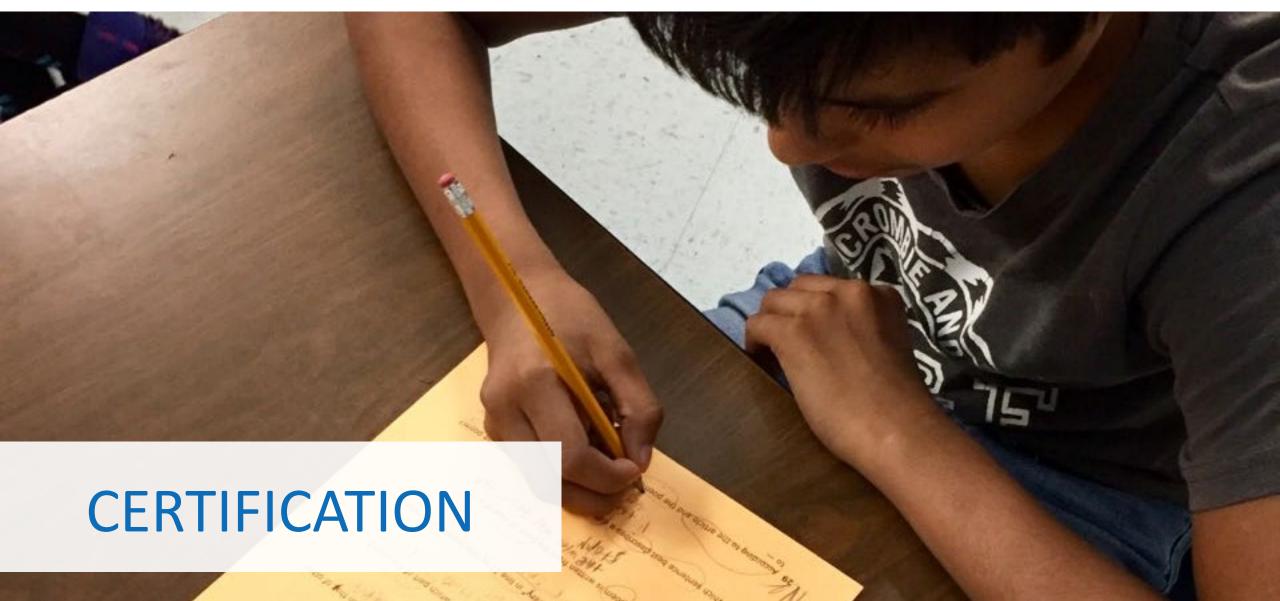


If the source system vendor loads the TEDS defined code values to the IODS, does the LEA need to perform descriptor mapping in the DMC application?

The LEA would not need to perform descriptor mapping in the DMC application for data loaded into the IODS with TEDS defined code values. Additionally, if the LEA and/or vendor performs cross-walks or mapping of the data prior to sending to the IODS, then descriptor mapping in the DMC application may not be needed. LEAs should verify and confirm any descriptor values marked as "unmapped" in the DMC application.







ENSURING VENDOR READINESS





CERTIFICATION & BADGING

COMPATIBLE DESIGNATION



CERTIFICATION VS DESIGNATION



Ed-Fi Certification:

- Provided through the Ed-Fi Alliance
- Includes all required and optional Ed-Fi Core entities
- <u>Student Information Systems API for</u> <u>Data Standard v4 Certification</u>
- <u>Badging</u> (API Provider/Consumer) for ERP and other vendors

DECEMBER 2023

TSDS Compatible Designation

- Provided through TEA
- Includes all required and optional entities for TSDS data submissions
- Required for SIS, HR/Finance, and ECDS assessment vendors
- Validated by LEAs during the 2023-2024 Parallel Submission

JULY 2024



TIMING MATTERS!







COHORT 1 VENDORS

Schedule your initial meeting with the Ed-Fi Alliance by **April 3, 2023**.

COHORT 2 VENDORS:

Schedule your initial meeting with the Ed-Fi Alliance by **May 1, 2023**.

ALL OTHER VENDORS:

Schedule your initial meeting with the Ed-Fi Alliance by **June 1, 2023**.



ENSURING PROGRESS & PROVIDING SUPPORT tsds

MONTHLY MEETINGS

Establish monthly meetings with the Ed-Fi Alliance and TEA to effectively meet milestones.

ACHIEVABLE MILESTONES:

- Stage 1: core student/staff domains
- **Stage 2**: core supporting domains
- Stage 3: all remaining core domains

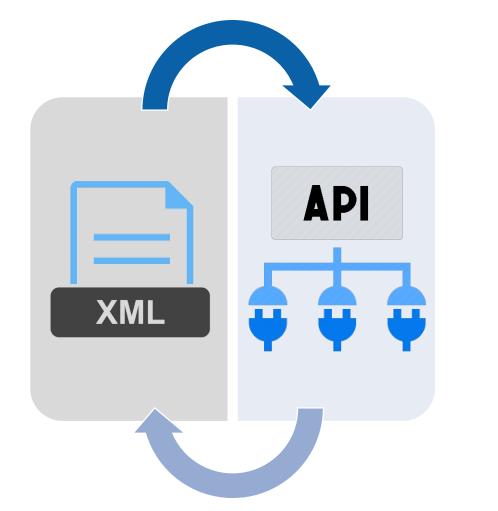
June 2023 August 2023 December 2023





TEA

TSDS COMPATIBLE DESIGNATION



PARALLEL SUBMISSION

- LEAs will validate their vendor(s) product readiness during the 2023-2024 Parallel Submission.
- LEAs will compare all TSDS submissions to ensure required and optional entities are being submitted as expected.
- LEAs will complete any necessary forms issued by TEA to designate a vendor product as compatible.





TEA will publish all vendor products deemed TSDS compatible on the <u>Texas Student Data System website</u>.



NEXT STEPS



HOW TO PREPARE FOR PARALLEL



Vendors should inform their LEA(s) on their product readiness and encourage their participation in the 2023-2024 Parallel Submission.





Vendors should establish meeting cadence with the Ed-Fi Alliance and develop an effective plan of action to obtain Ed-Fi certification and/or badging.



Vendors should develop their solutions for 2023-2024. Participating LEAs are expected to run comparisons prior to submission due dates.



Vendors should implement an effective support framework to respond to feedback and issues reported during the 2023-2024 Parallel Submission.



HOW CAN WE SUPPORT YOU?

Vendor Webinars

Let us know what additional topics and guidance to provide in upcoming webinars by contacting TSDSDeployment@tea.texas.gov.

Vendor Coordinator

Let us know what additional support you need by contacting our vendor coordinator at <u>Donna.Pruitt@tea.texas.gov</u>.

Technical Resources

Let us know any feedback you have on TEDS documents, or any additional technical resources TEA should consider developing.

Ed-Fi Alliance

Join the Ed-Fi community by creating an account <u>here</u>. Setup your initial meeting by contacting jeff.putnam@ed-fi.org.



TEA

KEY TAKE-AWAYS



New resources have been published on the Texas Education Data Standards website.



SDK version 1.0.3.1 will be released on March 23, 2023. The SDK for 2023-2024 will be released in Summer 2023.



Additional LEAs were just added to the Pilot Program. No additional LEAs will be added after April 2023.



Vendors will be responsible for capturing and reporting Level 1 validation (API errors) to their LEA(s).

ED-FI CERTIFICATION

Kickoff Meeting:

Contact the Ed-Fi Alliance and schedule meeting

Determine Plan:

Develop an effective plan to meet the recommended milestone stages

Communicate Early & Often: Inform the Ed-Fi Alliance and TEA of any roadblocks or challenges with obtaining certification



QUESTIONS Ĩ