



# TSDS ODS 3.x PROJECT UPDATES

FOR VENDORS

August 4, 2022

# SESSION AGENDA

## ■ PROJECT UPDATE

- Purpose & Project Extension

## ■ PROJECT TIMELINE

- Pilot Program & Milestones
- Parallel Submission & Go-Live

## ■ PROJECT ARCHITECTURE

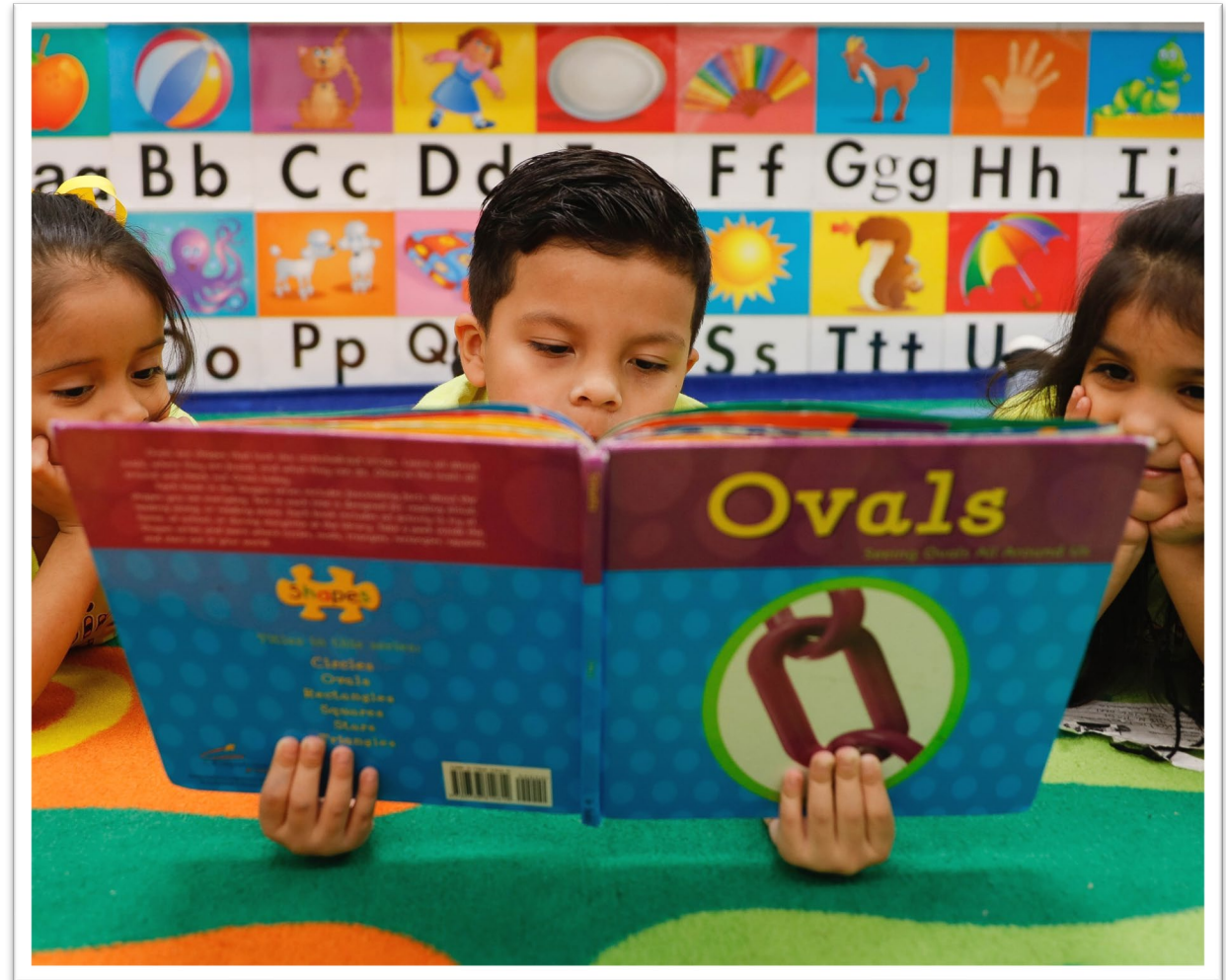
- Diagram & Components
- ODS & Key Changes

## ■ UPCOMING EVENTS

- Software Development Kit (SDK)
- Vendor Communications & Support

## ■ CLOSEOUT

- Key Takeaways & FAQs



Customer Relationship Management & Data Standards Department  
Information Technology



A multi-year initiative to upgrade the Operational Data Store (ODS) and Texas Education Data Standards (TEDS) to a current version of Ed-Fi.



Announced on May 18, 2022

# PROJECT TIMELINE EXTENSION



## RATIONAL & REASONING

### PILOT PROGRAM

Extending provides a more extensive End-to-End testing period for LEAs to validate their vendor product solutions.

### TECHNOLOGY & ARCHITECTURE

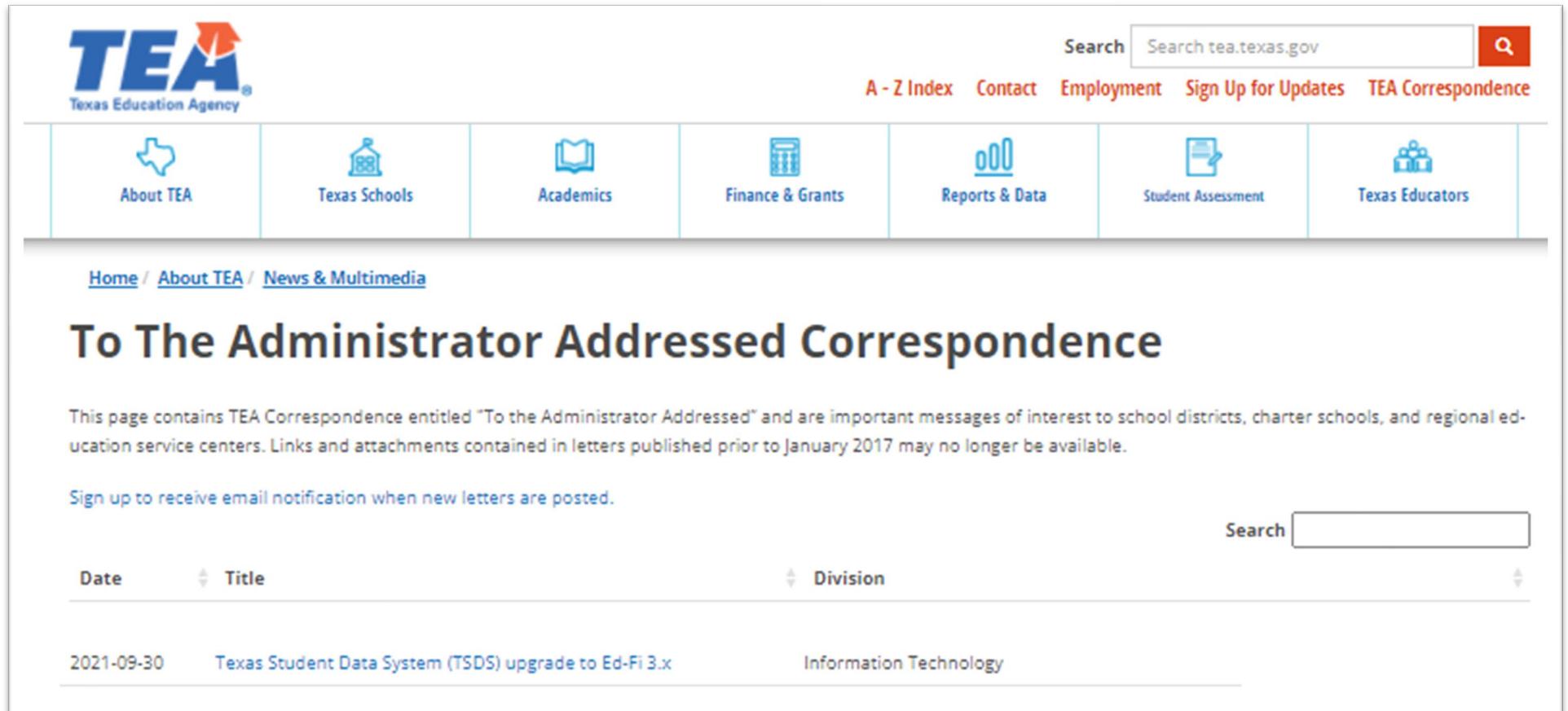
Extending allows TEA to have ownership of the architecture and control in developing application(s) to meet LEA needs.

### VENDOR READINESS

Extending grants vendors more time to develop their solution(s) in ensuring readiness for parallel submission.

Published [To the Administrator Addressed \(TAA\)](#) on **September 30, 2021**

Published [To the Administrator Addressed \(TAA\)](#) on **May 19, 2022**



The screenshot shows the TEA (Texas Education Agency) website. The header includes the TEA logo, a search bar, and navigation links: A - Z Index, Contact, Employment, Sign Up for Updates, and TEA Correspondence. Below the header is a navigation bar with icons and labels for About TEA, Texas Schools, Academics, Finance & Grants, Reports & Data, Student Assessment, and Texas Educators. The main content area has a breadcrumb trail: Home / About TEA / News & Multimedia. The title of the page is "To The Administrator Addressed Correspondence". Below the title is a paragraph explaining that the page contains TEA Correspondence entitled "To the Administrator Addressed" and are important messages of interest to school districts, charter schools, and regional education service centers. Links and attachments contained in letters published prior to January 2017 may no longer be available. There is a sign-up link to receive email notification when new letters are posted. A search bar is located on the right side of the page. Below the search bar is a table with columns: Date, Title, and Division. The table contains one row of data.

| Date       | Title   | Division               |
|------------|---|------------------------|
| 2021-09-30 | Texas Student Data System (TSDS) upgrade to Ed-Fi 3.x | Information Technology |

# PROJECT TIMELINE

## ■ September 2021 – August 2023

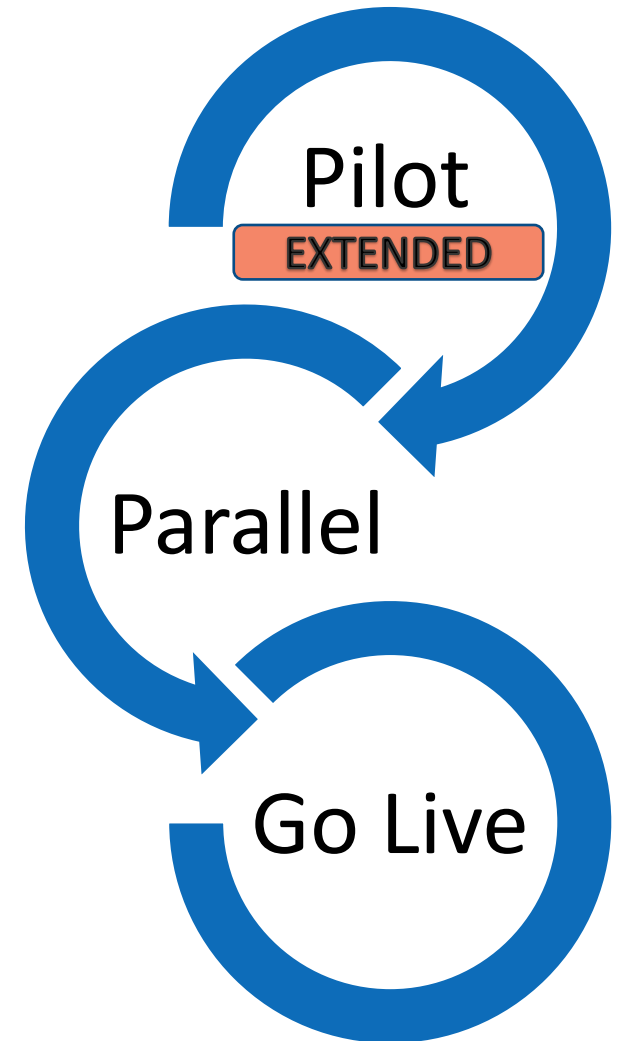
- **Optional:** TSDS vendors can participate in pilot program to develop and test their product solutions.
- **Optional:** LEAs can partner with their vendors to conduct end-to-end testing in preparation to parallel year.

## ■ 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.

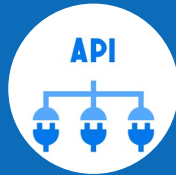


# 2021-2023: PILOT PROGRAM

- **2021-2022:** Cohort of six (6) vendors conducted initial vetting of the integration and data out phases.
  - Software Development Kit (SDK) was provided to all vendors.
- **2022-2023:** Pilot program will continue for any interested vendor.
  - LEAs and ESCs will begin End-to-End testing starting in January 2023.

Extended into 2022-2023

January - August 2023



Integration



Data Output



End-to-End

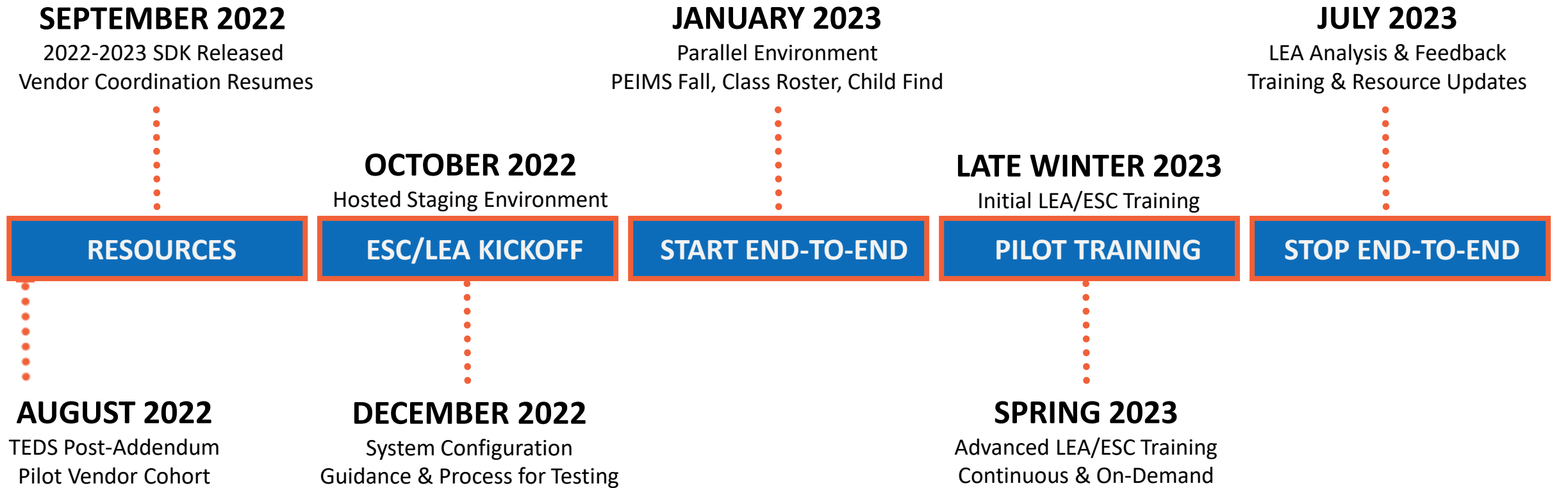
PEIMS Fall

Child Find

Class Roster

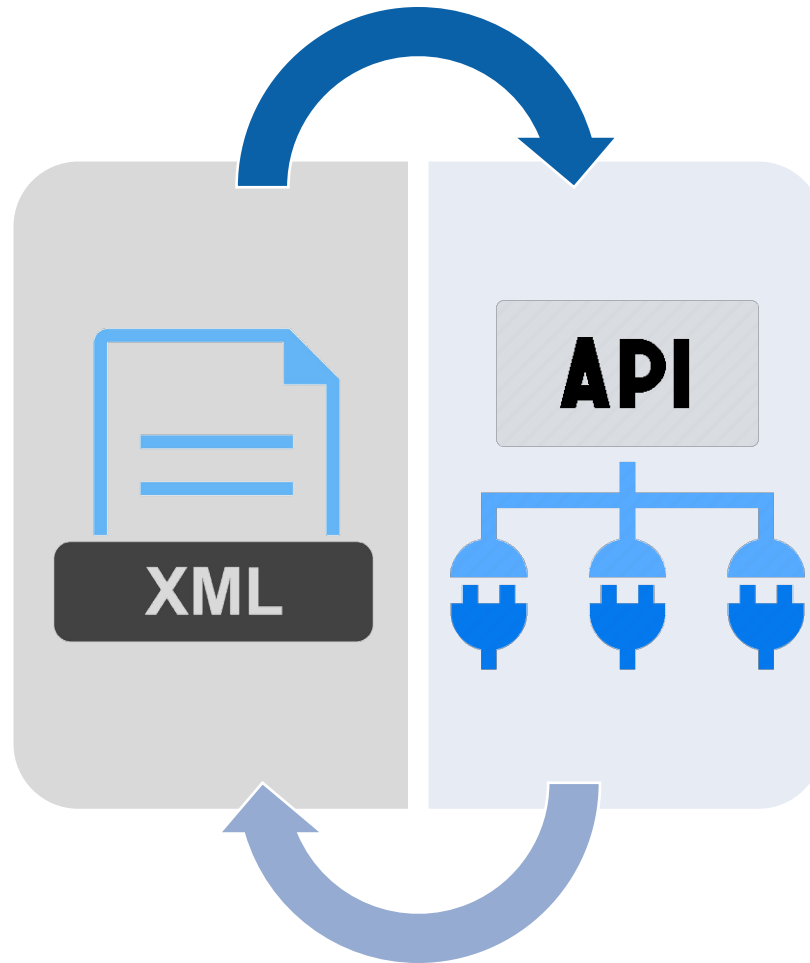
**September 2022:** Online form available for LEAs to submit their interest in the pilot program.

# PILOT PROGRAM: KEY MILESTONES





# 2023-2024: PARALLEL SUBMISSION



**REQUIRED** For All Vendors

**OPTIONAL** For LEAs & ESCs

- LEAs will compare XML data against API transactions through TSDS reports and validations.
- **All TSDS submissions** are expected to be compared by the submission due dates.
- XML data will be used for official TSDS reporting.



LEAs will be nominated, selected, and approved to participate in the parallel submission. Recommending **250+ LEAs**.

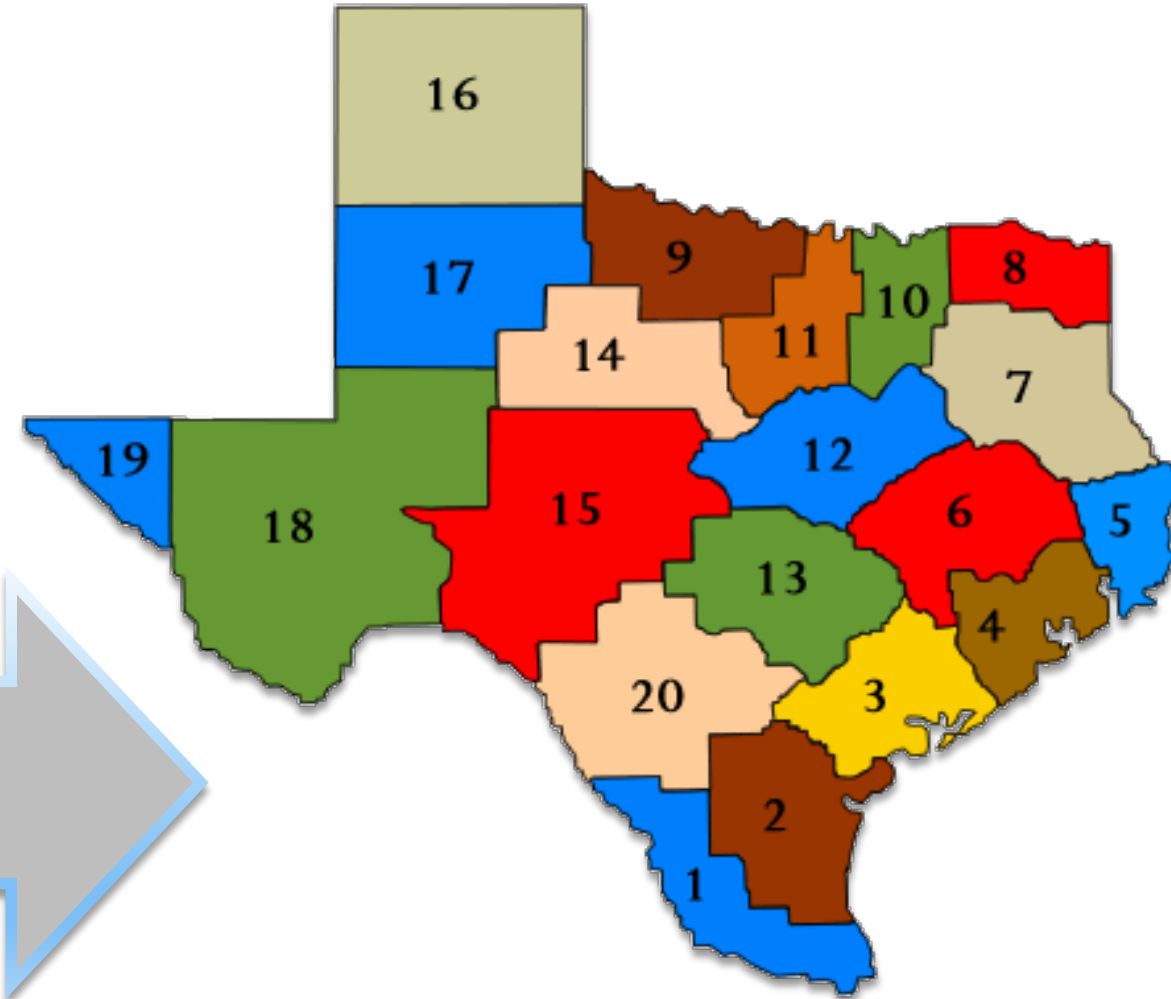
# 2024-2025: GO-LIVE

**REQUIRED For All Vendors**

**REQUIRED For All LEAs & ESCs**

- Only API transactions will be accepted for TSDS
- XML data loads will not be available or permitted
- Training & support based upon API transactions

 LIVE

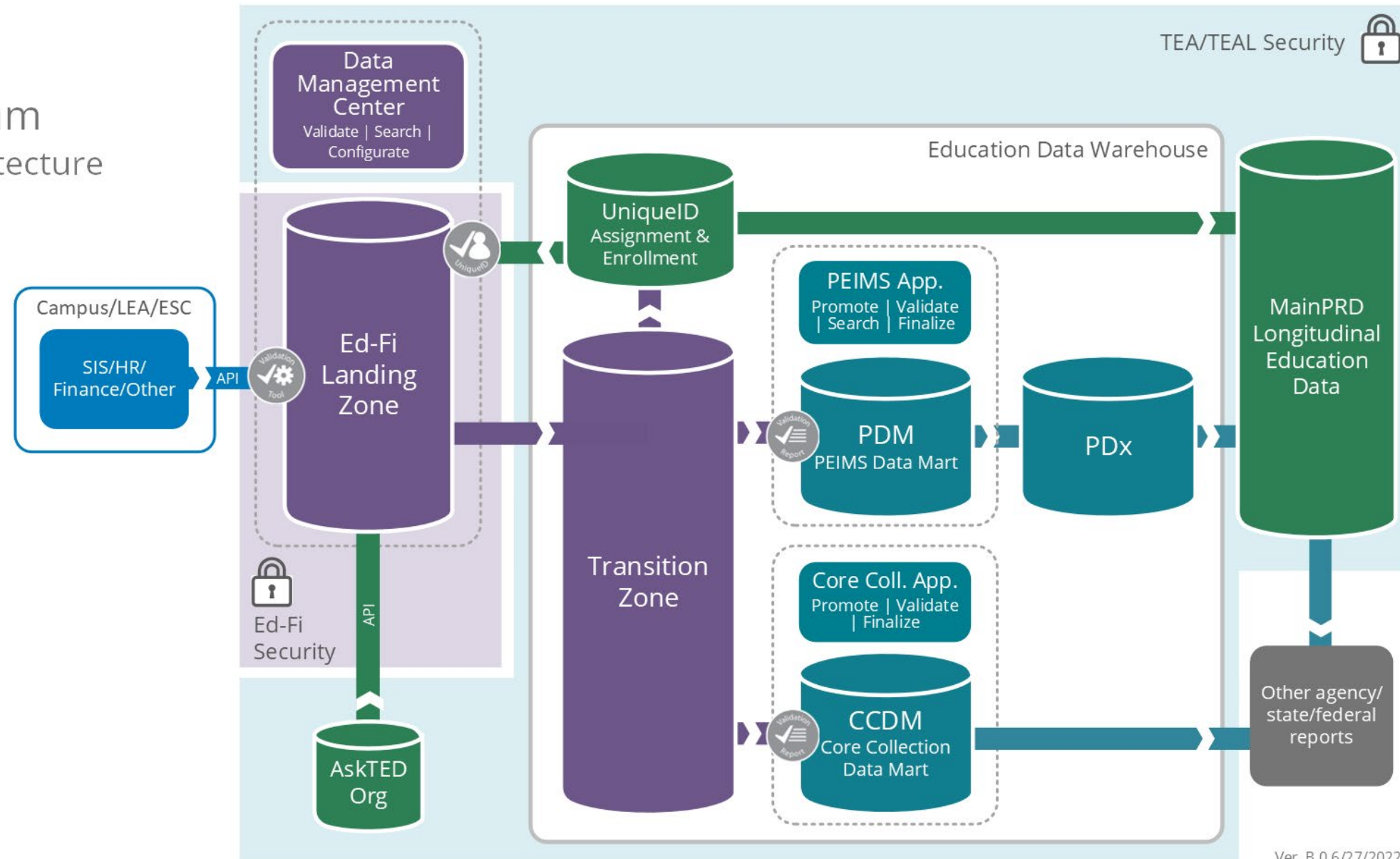


# UPDATED ARCHITECTURE



## Components Diagram Proposed ODS 3.x Architecture

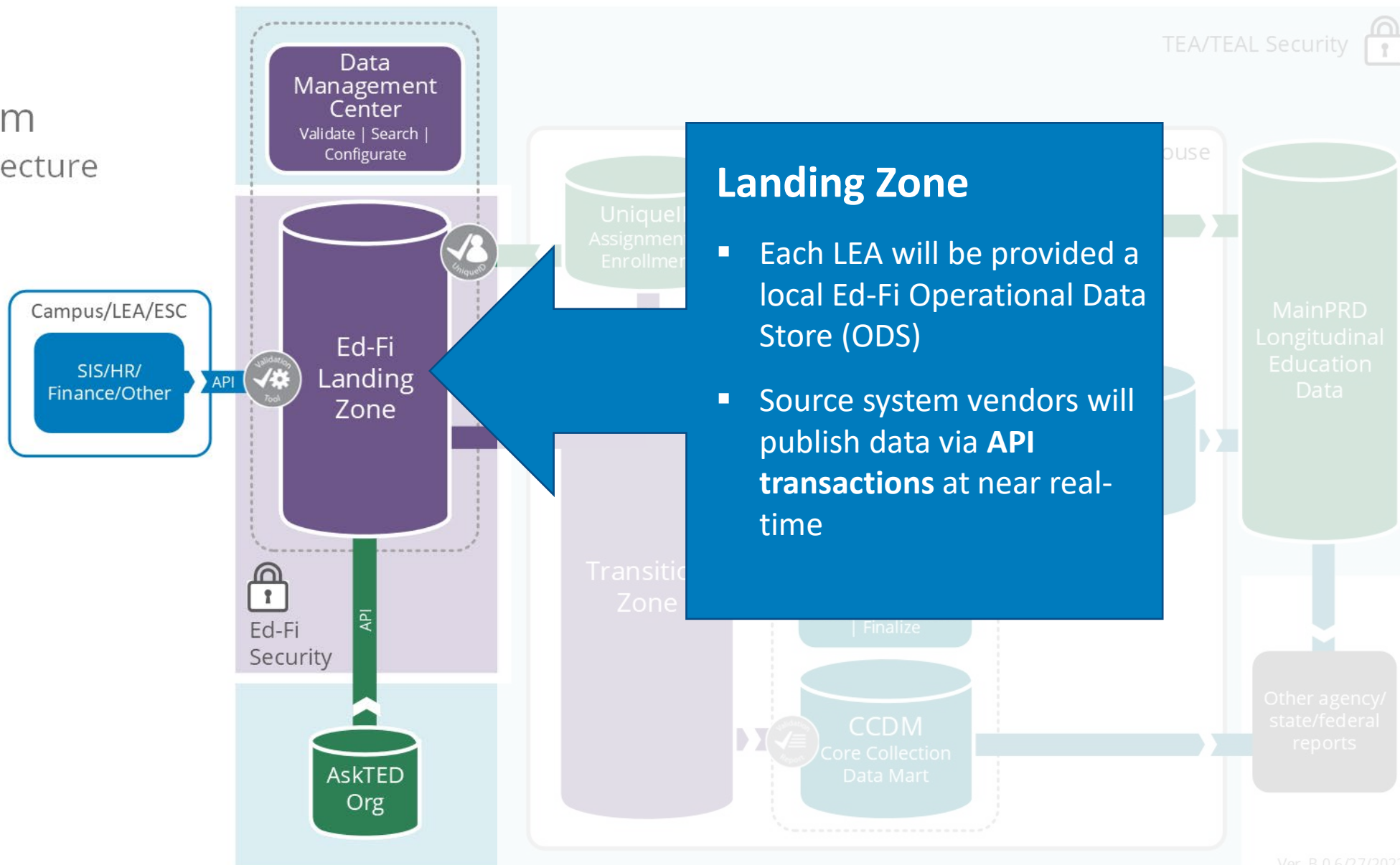
- New ODS 3.x / TPDM Systems
- Campus/LEA/ESC Systems
- TSDS Systems
- Other TEA Systems
- Other systems
- Client-side validations
- UniquelD validations
- Server-side validations



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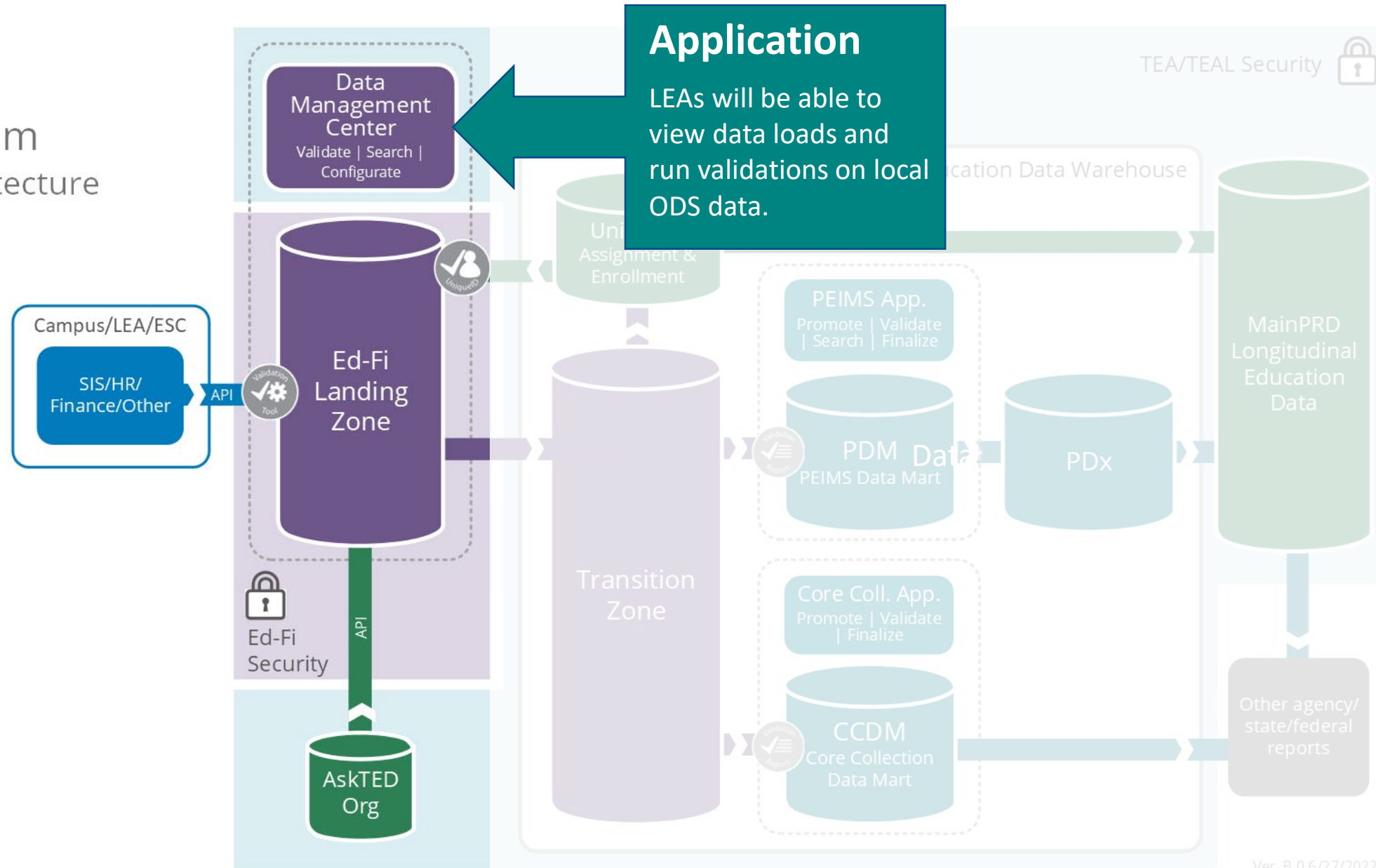
### Landing Zone

- Each LEA will be provided a local Ed-Fi Operational Data Store (ODS)
- Source system vendors will publish data via **API transactions** at near real-time

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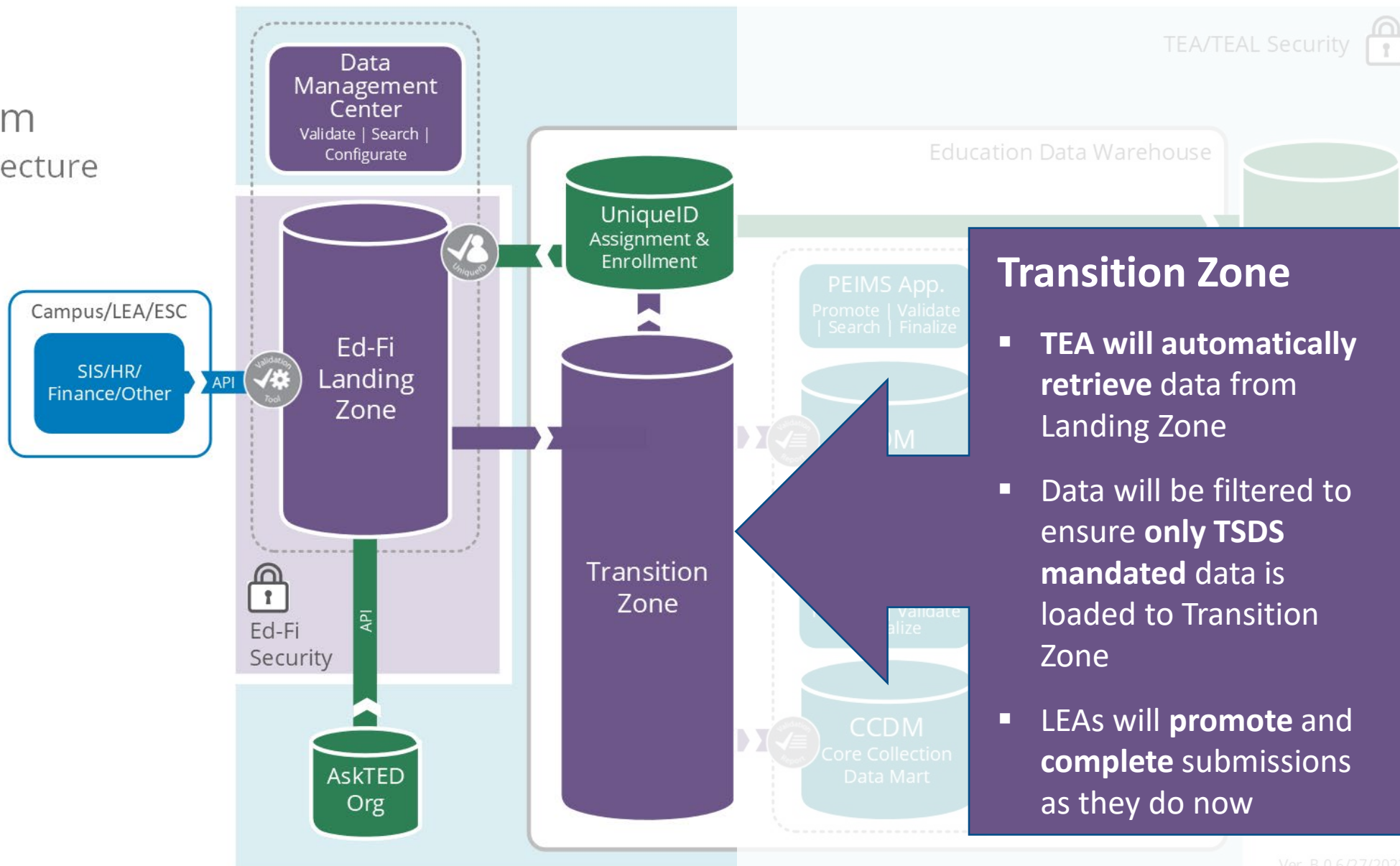




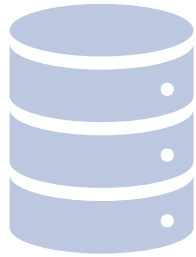
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# OPERATIONAL DATA STORE (ODS)

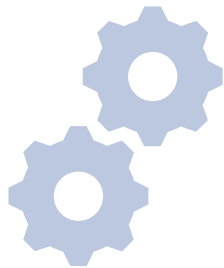


Each LEA will be provided an Ed-Fi Operational Data Store (ODS) to utilize for **state reporting and local use**. LEAs will need to provide security credentials to vendors through the Data Management Center for API transactions.



Source system vendors will publish **transactional data** to an LEA's Ed-Fi ODS irrespective of specific TSDS data submissions along with appropriate effective dating.

Additional data can be published beyond the reporting requirements of TSDS for an LEA's local use.



LEAs will be able to verify and validate API transactional data in the Data Management Center.

Logic will be implemented in the **LEA's Landing Zone** to ensure **only the TSDS state mandated data is reported to TEA's Transition Zone (ODS)** and utilized for TSDS data submissions.

# KEY CHANGES TO DATA COLLECTION

## Attendance

TEA plans to collect **attendance** data **two ways** in the 2024-2025 (Go-Live) school year:

1. Granular negative attendance by student **which will eliminate the requirement for SIS vendors to calculate attendance by six-weeks.**
2. **Cumulative attendance** by six-weeks by student (no change from the way attendance is currently collected).

Note: TEA will discontinue collecting cumulative attendance after confirming attendance calculations in future year(s) beyond 2024-2025.

## Enrollment

**Enrollment** and **withdrawal** data will be collected at the **student level** through source system vendor API transactions to the LEA's ODS.

This data will be automatically loaded to the Unique ID Enrollment Tracking application. LEAs will **no longer need to load this data in the Unique ID system directly.**

# WHAT IS REMAINING THE SAME?

- All processes that occur from the **Transition Zone (ODS) to the data mart** will remain as-is.
- **Reports** and **business rule validations** will remain in downstream TSDS applications.
- **TEAL** will continue to be utilized for authentication.
- **Unique ID application** will continue to be utilized for assignment for staff and students.
- TSDS Web-Enabled Data Standards (**TWEDS**) will continue to be utilized to provide specifications and guidance.



# SOFTWARE DEVELOPMENT KIT (SDK)



## PURPOSE

The SDK will provide vendors with a fully functional set of EdFi ODS, WebApi, Swagger, and Admin App that can be easily installed in their local systems for development purposes.

The ODS and WebApi will contain all the TEA defined extensions, as well as will come with pre-populated TEA Descriptors, Education Organizations (ESCs, LEAs, and Campuses), and Courses.

## TECHNICAL APPROACH

TEA will create a “Docker Compose File” that will create all the required containers for all the components in a local system running a Docker engine. All container images referenced in the Docker Compose File will be owned and managed by TEA.





# SDK: KEY CHANGES & DIFFERENCES



## What will be different?

- MS SQL Server Express instead of PostgreSQL
- API mode is “DistrictSpecific” instead of ShareInstance
- Admin App will be included
  - Create more ODSs for different districts
  - Configure claim-sets

## What remains the same?

- Dependency on Docker
- Texas extensions and pre-populated data
- ODS and API versions

# SDK: DEMONSTRATION



## Software Development Kit

- Run Docker Compose File
- Show containers in Docker Desktop
- Open API and Swagger in the browser
- Login to Swagger
- Query Pre-loaded data

DEMO



TIME



## Ed-Fi Admin App

- Create ODS Instances
- Manage Claim Sets
- Create Key/Secrets
- List Descriptors
- District user

## Statewide Vendor Webinars

- TEA will resume the statewide webinars for all vendors starting in **September 2022**.
- Meeting invitations for our next webinar will be sent to our vendor distribution list in **August 2022**.
- Please contact the following mailbox to be added to the distribution list:

[TSDSDeployment@tea.Texas.gov](mailto:TSDSDeployment@tea.Texas.gov)

## Vendor Coordination

- TEA is still in the process of hiring a dedicated TSDS ODS 3.x vendor coordinator.
- Support guidance and process will be provided during the statewide vendor webinar in September 2022.
- Pilot vendors can continue to utilize the Microsoft TEAMS channels previously established.

# KEY TAKEAWAYS



2021-2023 Pilot Program (**extended**)  
2023-2024 Parallel Year  
2024-2025 Go-Live



Any interested vendor can join the optional pilot program being extended into the 2022-2023 school year.



The Software Development Kit (SDK) for 2022-2023 will be provided in **September 2022**.



Partner LEAs will be able to test in TEA's parallel environment in starting in **January 2023**.

## PILOT END-TO-END TESTING

- Vendors will need to partner with LEAs to complete end-to-end testing.
- TEA will coordinate with vendors to ensure product readiness and support capacity.
- Vendors will need to provide any necessary training on their product solutions.
- TEA will provide training and support to LEAs and ESCs on the TEA environments and applications.

# FREQUENTLY ASKED QUESTIONS

**Can vendors join pilot program in 2022-2023 if they were not a pilot vendor in 2021-2022?**

Yes. The pilot program is open to any interested vendor, regardless if they were a pilot vendor last year. TEA strongly encourages vendors to participate in this optional opportunity.

Vendors do not need to meet any criteria requirements to be accepted. Please contact [TSDSDeployment@tea.texas.gov](mailto:TSDSDeployment@tea.texas.gov) for any questions or to be added to the pilot program for 2022-2023.



# FREQUENTLY ASKED QUESTIONS

## What TEDS publication will the upcoming SDK be built upon?

The Software Development Kit (SDK) scheduled to be released in September 2022 will be built upon the ODS 3.x TEDS post addendum published on August 1, 2022.

TEA will continue to release additional SDK updates, as necessary, based upon any TEDS changes or vendor feedback.

# FREQUENTLY ASKED QUESTIONS

## What support and assistance is available to vendors now?

While TEA is still in the process of hiring a dedicated TSDS ODS 3.x Vendor Coordinator, vendors can still reach out to [TSDSDeployment@tea.texas.gov](mailto:TSDSDeployment@tea.texas.gov) for assistance.

Pilot vendors with previously established Microsoft TEAMS channels can also utilize that platform to reach out with any questions.

TEA will be establishing a new support process for all vendors in the coming months. Information and guidance will be shared during the upcoming vendor webinar expected in September 2022.

# FREQUENTLY ASKED QUESTIONS

## How do pilot vendors prepare for End-to-End testing by LEAs?

TEA will be providing additional guidance and support regarding End-to-End testing in the coming months through the scheduled statewide vendor webinars.

Pilot vendors will need to plan for any necessary documentation and/or training that an LEA partner will need in order to integrate and utilize their product solution(s).

TEA will assist pilot vendors and partner LEAs with the applicable security credentials needed to publish data needed for End-to-End testing.



**QUESTIONS**