tsds texas student data system

Simple Solution. Brighter Futures.

TSDS Technical Course Module 1: Overview of TSDS and TSDS High Level End User Process Map

Document Number TSDS-Tech-L001-D003

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- Overview of TSDS
- TSDS High Level End User Process Map
- TSDS Roles and Responsibilities
- Wrap Up and Questions
- Knowledge Check

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Key Terms

Term	Definition
EDW (Education Data Warehouse)	This is the single data repository that feeds the PEIMS and the studentGPS™ Dashboards collections
DTU (Data Transfer Utility)	The DTU is an FTP client that transfers files stored at the LEA to the eData Manager (eDM)
eDM (eData Manager)	The portal through which LEAs can manually submit data and monitor data submissions
ETL	ETL means Extract, Transform, Load. This refers to the process of moving data from one system to another (like SIS to ODS) and transforming the data to meet the requirements of the destination environment
ODS (Operational Data Store)	This is the actual data warehouse in the TSDS system
PDM (PEIMS Data Mart)	The PDM is the data mart that pulls data from the ODS and directly feeds the PEIMS application
DDM (Dashboard Data Mart)	The DDM is the data mart that pulls data from the ODS and directly updates the studentGPS™ Dashboards
XML Interchange File	TEA uses XML Interchange Files as the vehicle to transfer data

Course Acronyms

- TSDS – Texas Student Data System
- PEIMS – Public Education Information Management System
- TEA – Texas Education Agency
- ESC – Education Service Center
- LEA – Local Education Agency
- SIS – Student Information System
- SSIS – State-sponsored Student Information System
- TCC – Texas Computer Cooperative
- EDW – Education Data Warehouse
- TPEIR – Texas Public Education Information Resource

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Overview of TSDS

Introducing the Texas Student Data System

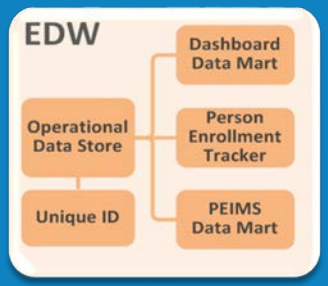
A data collection and reporting system that will:

- Modernize the PEIMS data collection process **to reduce technology risk and system downtime,** allowing for more system availability and ease of use, and;
- Put **real-time student performance data** in the hands of educators to improve student achievement, and;
- Become the ***one*** **common data collection platform** for TEA to reduce the data collection burden on districts and charter schools.

What are the TSDS Components?

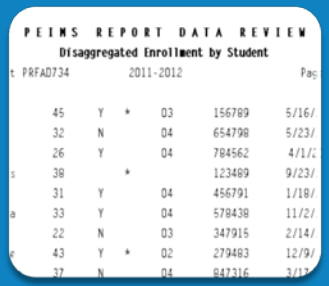
State-sponsored SIS

- **Optional**
- Skyward or TCC TxEIS
- Reduced price
- Improved functionality
- Hosted system



Education Data Warehouse

- Data submission platform
- Supported by TEA
- Data available only to educators
- Powers StudentGPS™ Dashboards



TSDS PEIMS

- Education reporting system
- Efficient
- Stable
- Expandable

studentGPS™ Dashboards

- **Optional**
- Student performance reports
- Easy-to-understand
- Early warning indicators
- Performance trends

Early Childhood Data System

- Pre-K and Kinder
- Assessment and Demographic student data
- Submitted via template

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Overview of Data Loading Process

LEA Source Systems

- Interchange extracts are created from source systems in XML format
- Must align with TEDS

Client Side Validation Tool

- Downloaded from TSDS Portal
- Used by LEAs & ESCs to validate XML interchanges prior to loading
- Errors in interchanges must be corrected in source systems & revalidated

Data Transfer Utility (DTU)

- A secure FTP file transfer client utility
- Downloaded from TSDS Portal & installed at LEA/ESC
- Facilitates On Demand & Scheduled file transfers
- Sends XML files to eDM
- Uses Service Account credentials for login & password
- User selects files to be transferred
- File name is validated
- User can view transfer status

eDM (Manage Data Loads)

- Automatically picks up files that have been transferred by the DTU
- Runs files though data validations & updates the ODS
- Users can also manually upload files
- Error files are generated at initial file validation & again during ETL process
- Errors in interchanges must be corrected in source systems & revalidated
- User can verify that the ODS has been updated by viewing status in the eDM

PEIMS Application

- User schedules and can monitor the promotion of data from the ODS to the PDM
- User specifies collection and submission (e.g. Fall, First)
- User selects Category (e.g. Staff) and Sub Category(ies) to be loaded (e.g. Employment Payroll Summary)
- User can monitor the status

Dashboards Data Mart

- Data is loaded from ODS to a staging DDM
- If load successful, then it is moved to the production DDM for studentGPS™ display
- Metric calculations occur during the load of data from the ODS to the DDM
- Data is automatically refreshed nightly, no user interaction needed
- System will prevent incomplete data from being loaded

ECDS Application

- Early Childhood Data submission for kinder and pre-k
- Charter and Public Schools
- Data Collected include; demographic and, Assessment,
- Data is converted for ODS loading

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State-sponsored Student Information Systems

- The State-sponsored Student Information System (SSIS) is a software as a service (SaaS) master contract negotiated by TEA with *TCC TxEIS* and *Skyward* to reduce price and improve functionality for participating districts and charter schools.
- The voluntary, state negotiated SSIS contracts offer a competitive, not-to-exceed price per student that benefits all sizes of districts and charter schools across the state. Additionally, since TEA negotiated the contract, districts and charter schools do not need to go through the time-consuming process of issuing their own RFP.

Improved Functionality Includes:

TxEIS	SKYWARD
• Grad Plans • Test Score Reporting • Rubrics • Standards Based Grading • Discipline Referrals • Parent Portal • ...and more	• Career Technology • Special Program Reporting • Scheduling • Registration • Data Security • Parent Portal • ...and more

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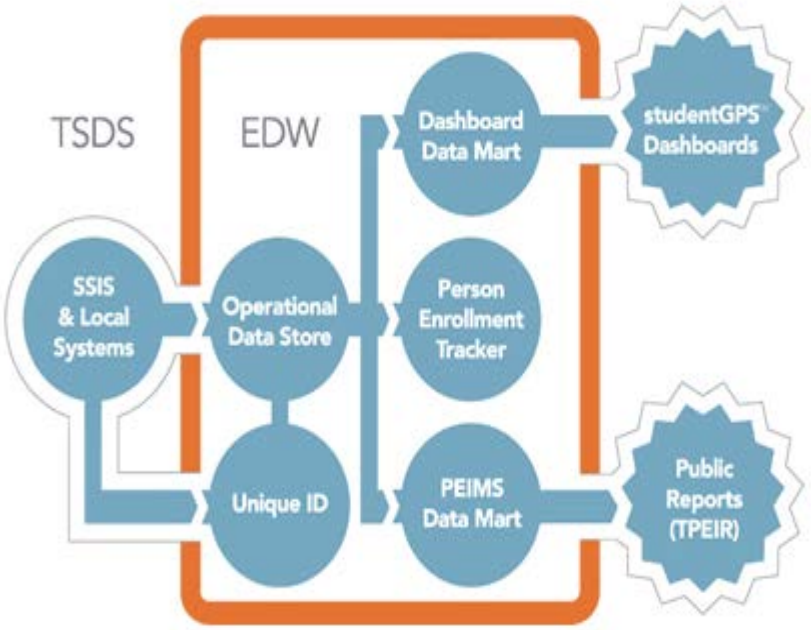
Education Data Warehouse

- The Education Data Warehouse provides a **single data repository** that feeds TSDS PEIMS collections and the studentGPS™ Dashboards



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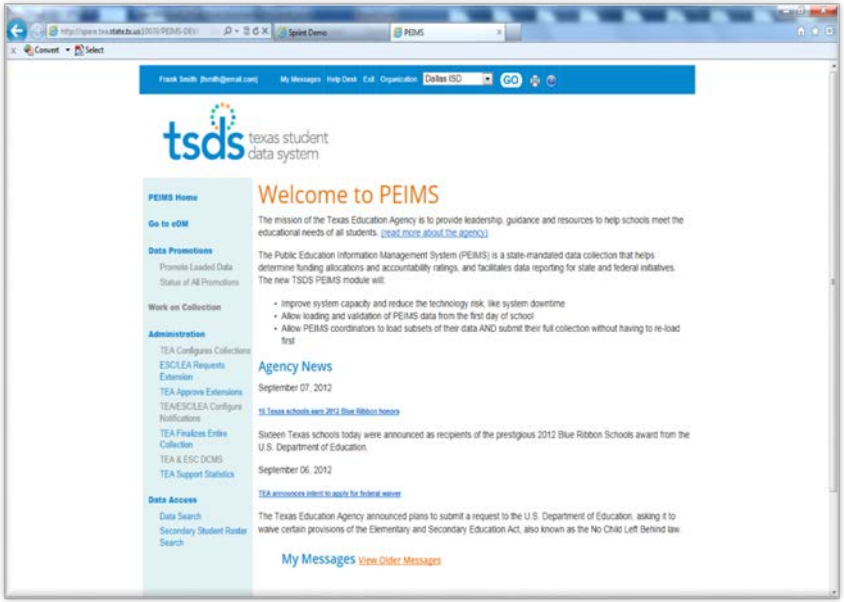
TSDS PEIMS

- TSDS PEIMS leverages the benefits of the new TSDS platform through a redesign of the state-mandated PEIMS process. TSDS PEIMS collects public school data to help determine funding allocations, accountability ratings, and facilitate data reporting for state and federal initiatives.
- TSDS PEIMS is designed to improve our system capacity which will reduce technology risk (including system downtime) that was present with EDIT+.



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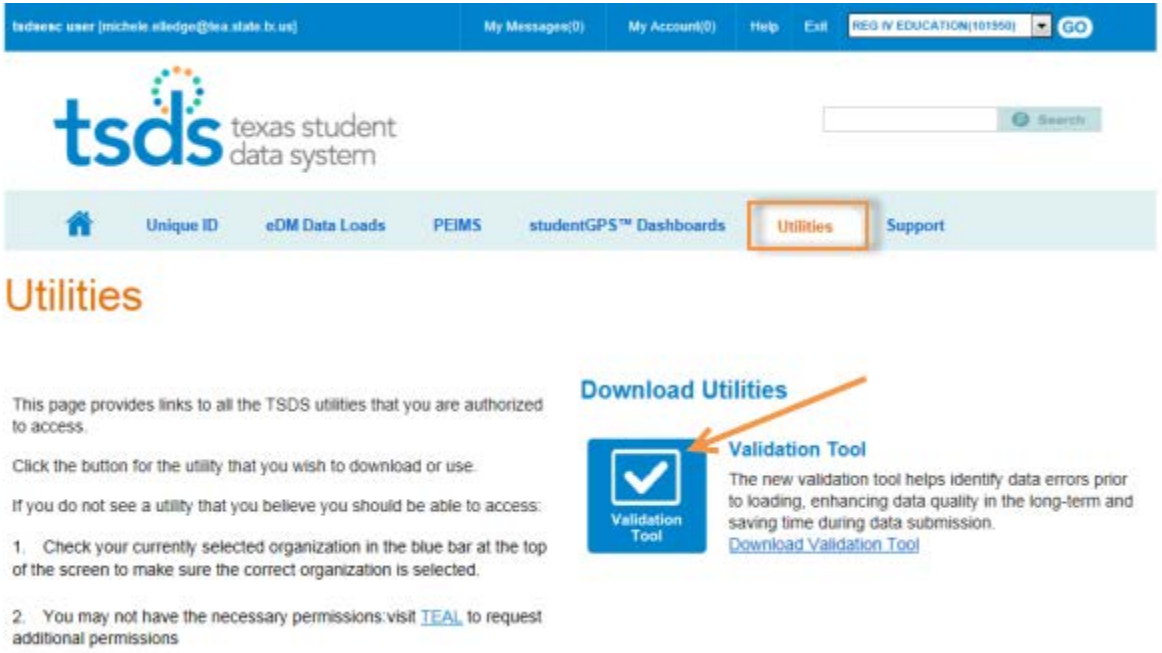
TSDS Client-Side Validation Tool

- TSDS offers the new TSDS Client-Side Validation Tool, available in the beginning of the data loading process, which will help identify data errors earlier, prior to uploading PEIMS and dashboard data to the Education Data Warehouse (EDW), ultimately enhancing data quality in the long-term.



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studentGPS™ Dashboards Overview

- The studentGPS™ Dashboards gives educators a view into the whole student, providing an easy-to-understand picture of how a student is performing by combining multiple student data, such as grades, attendance, discipline, standardized test scores, program areas, and demographics, all in one place. Educators can easily see the trends and make more timely and informed decisions.

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ECDS

- The Early Childhood Data System generates reports that show the status of the current ECDS data submission for Early Childhood Programs.
- ECDS will inform LEAs, communities, and early childhood programs about the quality of programs in the community and their ability to prepare children for success in kindergarten and beyond.
- For both private and public schools, ECDS will indicate which Pre-Kindergarten classrooms are succeeding and which require additional support.

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TEAL

- TEAL – Texas Education Agency Login
- A single sign-on that provides users access to many TEA applications
- Secure authentication ensures only authorized users can access the applications
- Users must first create a TEAL identity and then request account access to the specific applications needed

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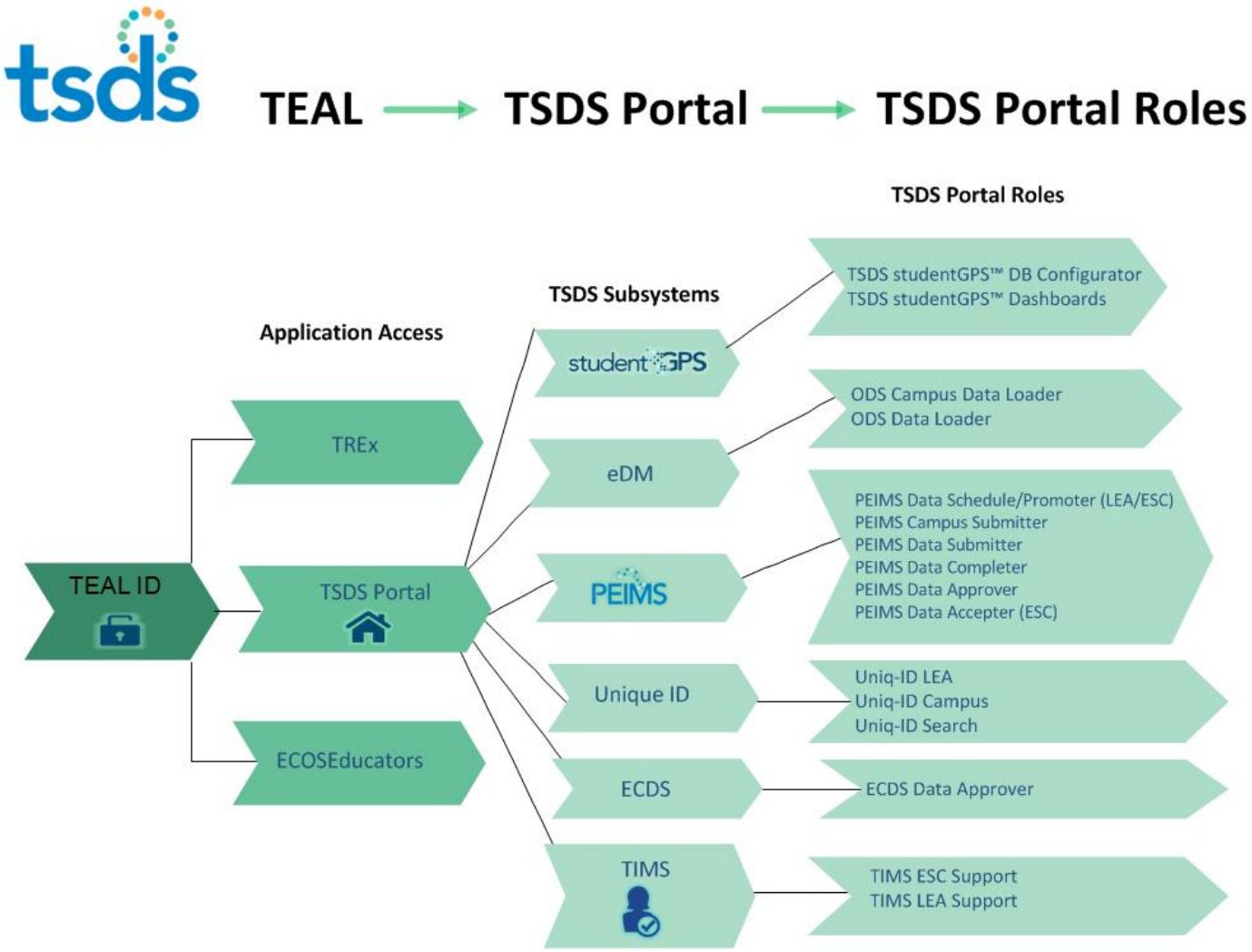
TEAL → TSDS Portal → TSDS Portal Roles



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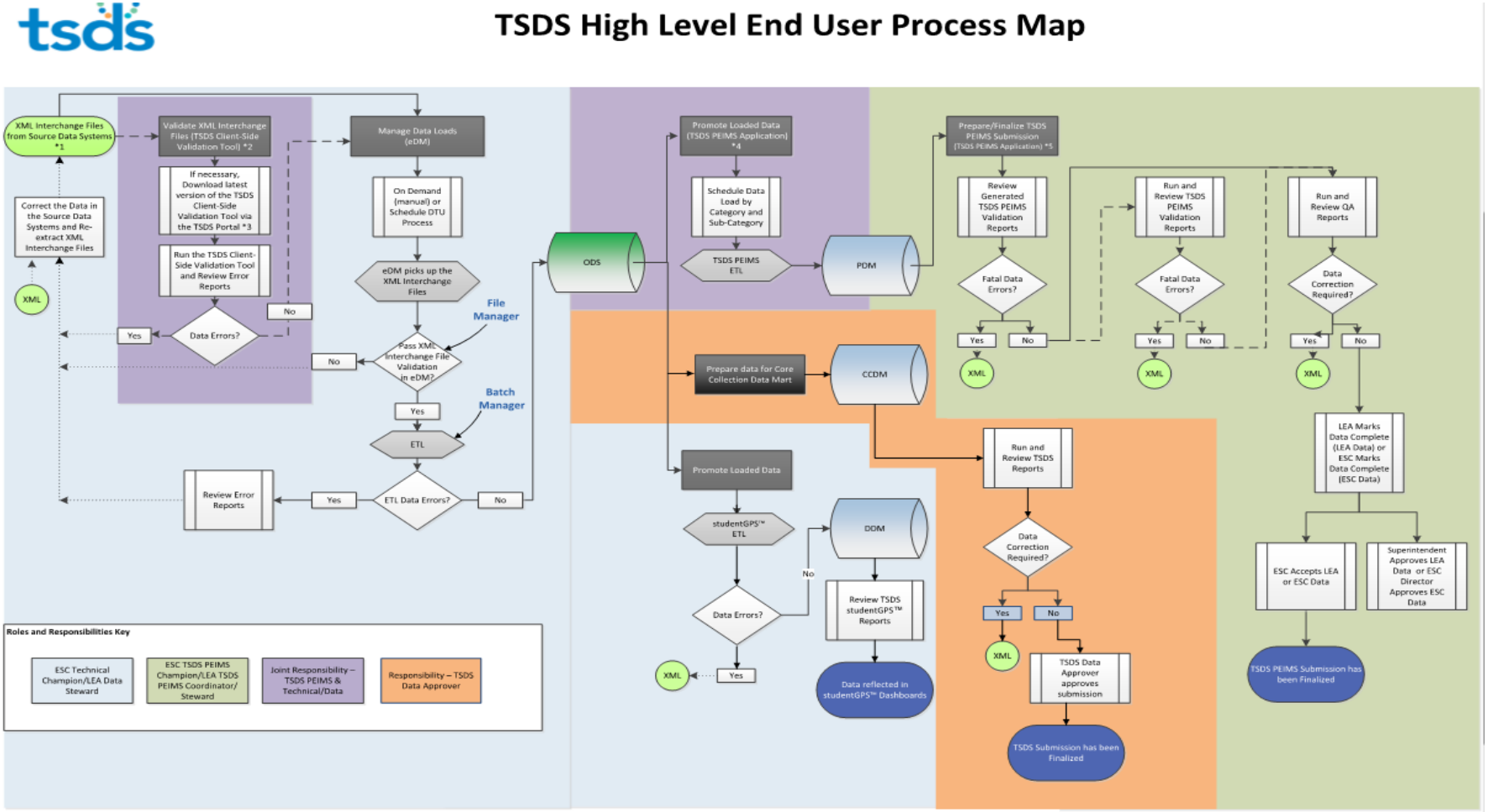
TSDS High Level End User Process Map

Data Loading Process Map



http://www.tea.state.tx.us/Workarea/DownloadAsset.aspx?id=25769810585

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TEDS: About

- The collection of Public Education Information Management System (PEIMS) data is required of all Local Education Agencies (LEAs) by TEC §42.006. Texas Education Data Standards (TEDS) provides instructions regarding the submission of PEIMS data from LEAs to the Texas Education Agency.
- TEDS provides instructions regarding the submission of studentGPS™ Dashboards data from those LEAs to the Texas Education Agency

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TEDS Standards

- Describe the data reporting requirements
- Provide descriptions of data elements and the codes used to report them
- Detail the responsibilities of local education agencies, education service centers, and the Texas Education Agency in connection with the data collection process
- Provide descriptions of the data collection requirements, including collection data element and data edit specifications

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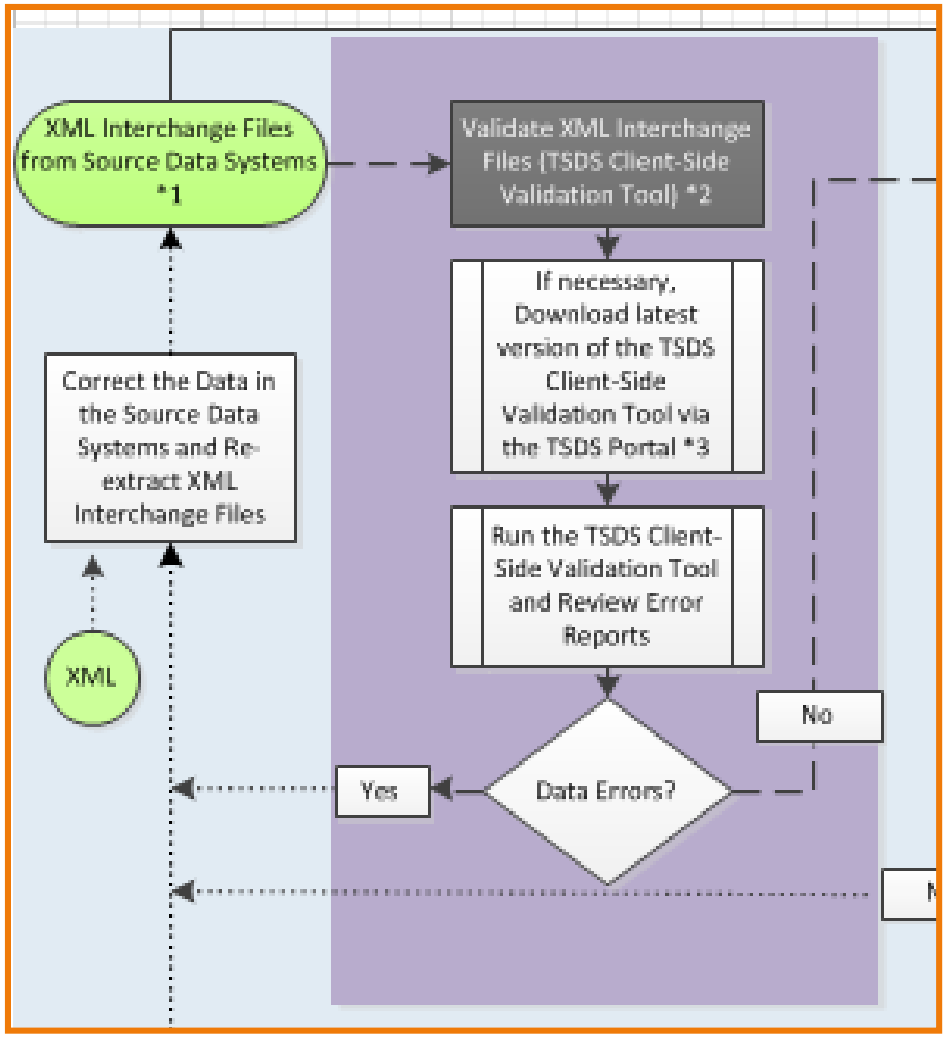
XML Interchange Files from Source Data



- XML Interchange files are extracted from the source data systems
- The extract process will vary by LEA and by Source Data Vendor
- This is outside the scope of responsibilities for either role defined in this map
- The TSDS Client-Side Validation Tool is a critical component

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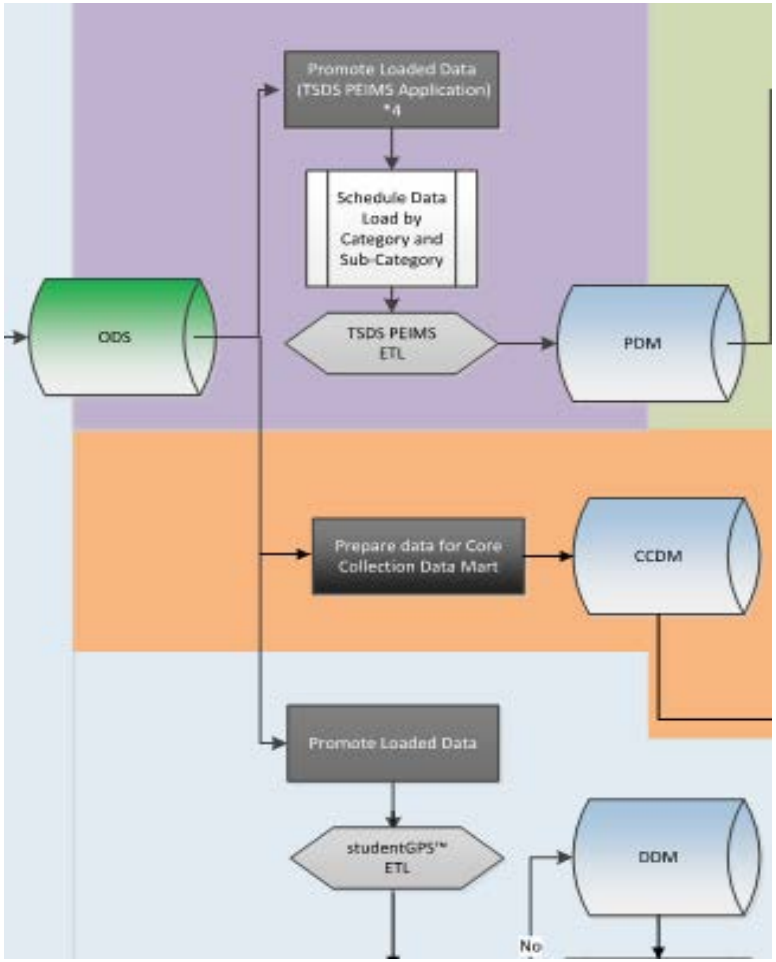
Data Promotion from ODS



- After the data is loaded in the ODS:
  - Data promotion to the PEIMS Data Mart (PDM)
  - Data promotion to the Dashboard Data Mart (DDM)
  - Data promotion to the Core Collections Data Mart (CCDM)

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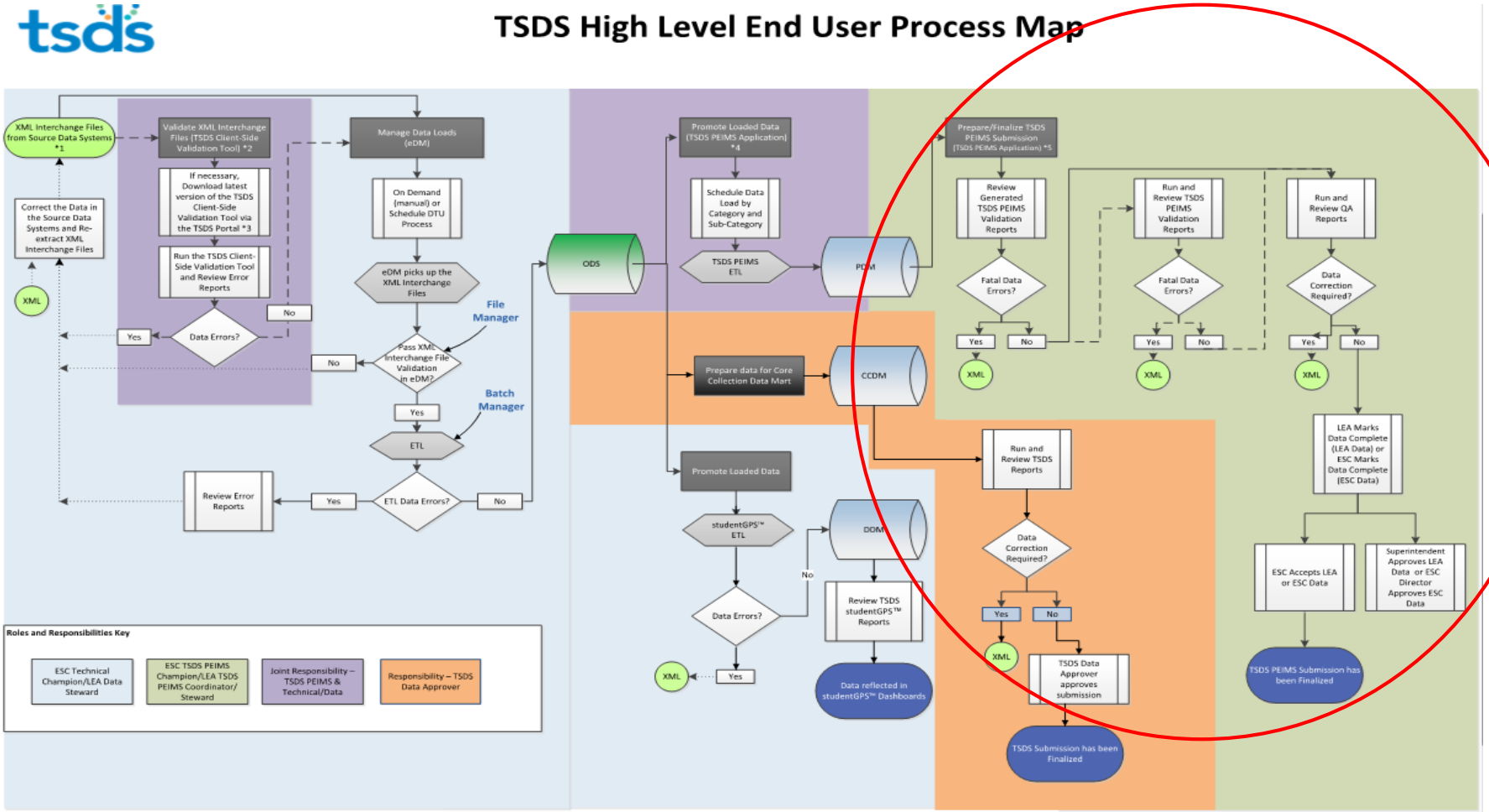
Data Loading Process Map



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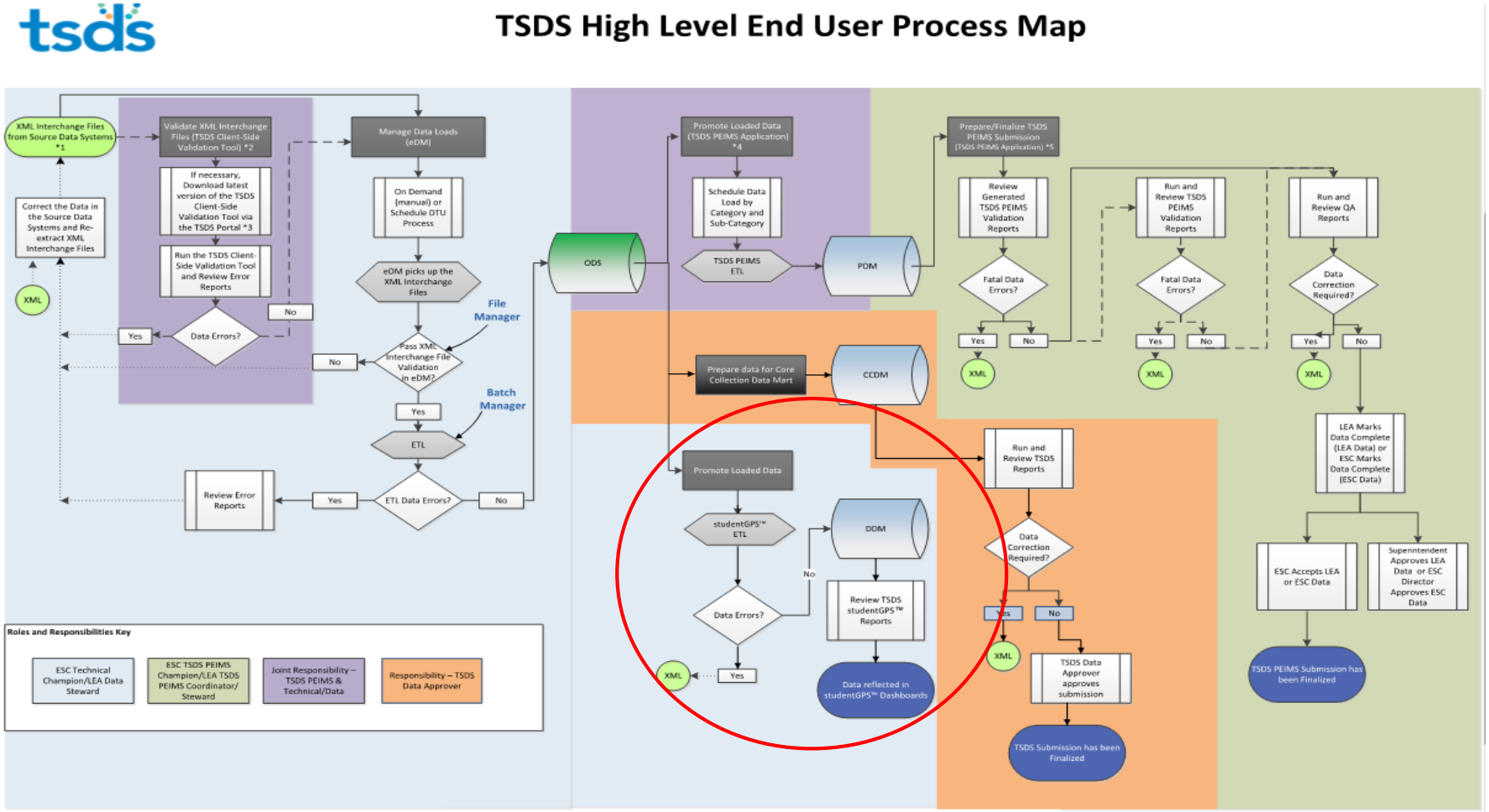

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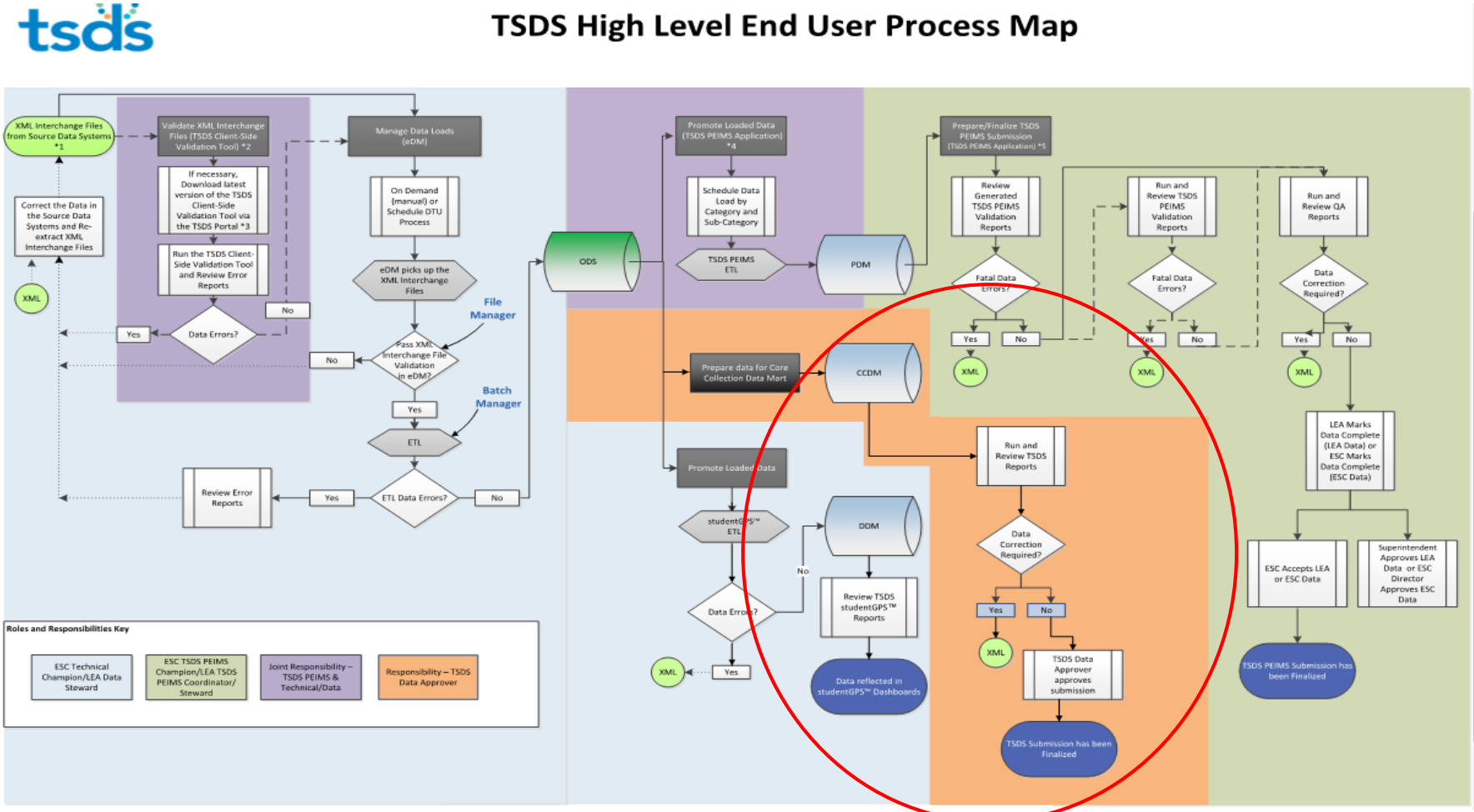
Data Loading Process Map



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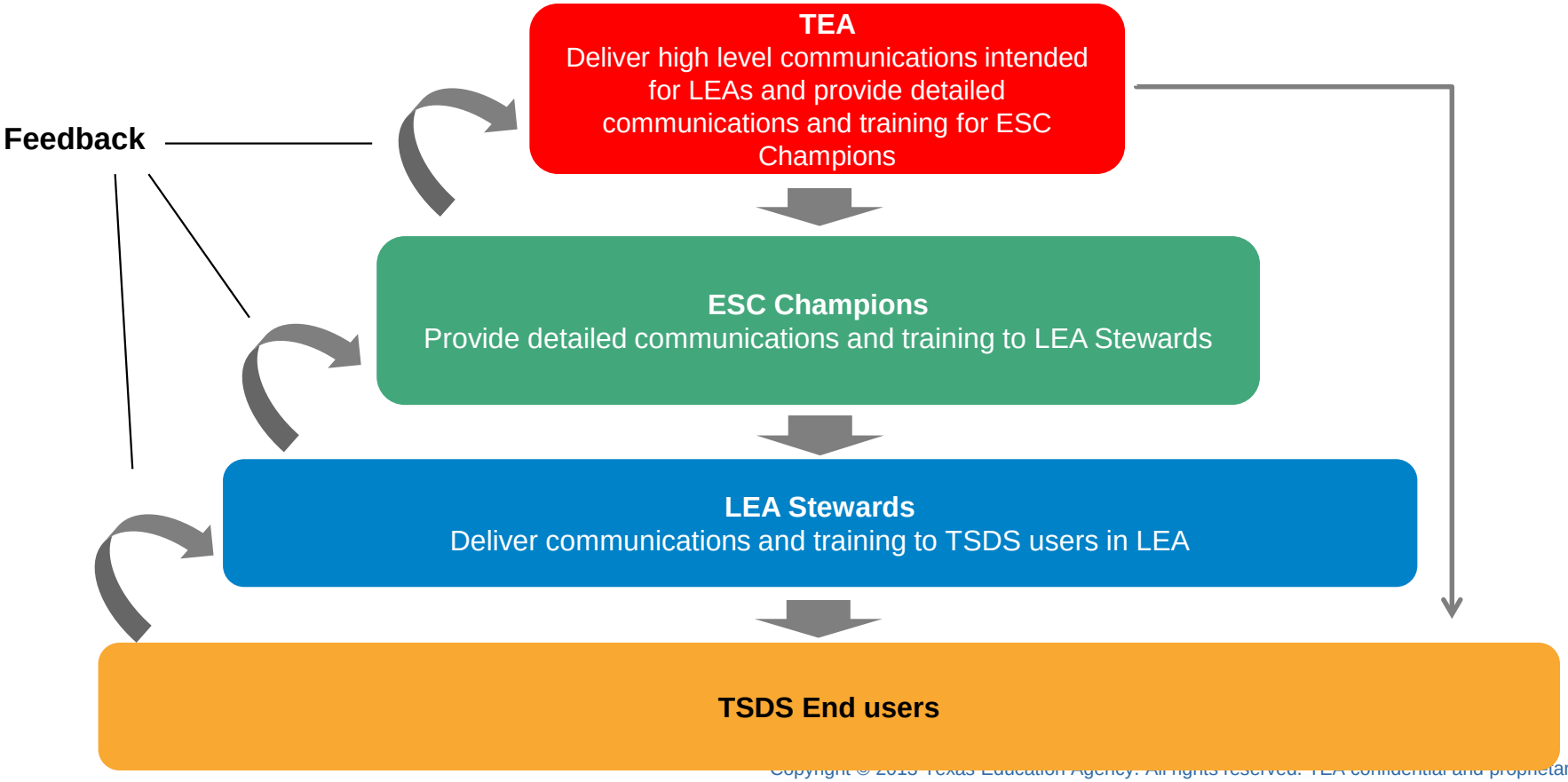
TSDS Roles and Responsibilities

TSDS Field Coordination Network

The Field Coordination Network is a two-way feedback mechanism that effectively uses a tiered communications path. It enables TSDS to deliver consistent and timely communications to users in ESCs and LEAs.



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TSDS Roles and Responsibilities

ESC Technical Champions/LEA Data Stewards	ESC TSDS PEIMS Champions/LEA TSDS PEIMS Stewards/Coordinators	Joint Responsibility
Manage File Transfer in DTU	Run TSDS PEIMS Validation Reports	Run the TSDS Client-Side Validation Tool
Manage Data Load in eDM	Run TSDS PEIMS QA Reports	Download the latest version of the TSDS Client-Side Validation Tool if necessary
Manage Data Promotion to PDM	Mark TSDS PEIMS Data as Ready	
Manage Data Promotion to DDM	Manage ESC Acceptance and Superintendent Approval of Data	
Run studentGPS™ Dashboards Validation Reports		

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Wrap Up, Knowledge Check, and Questions

Wrap Up

Today we talked about:

- Overview of TSDS
- TSDS Components
- TSDS High Level End User Process Map
- TSDS Roles and Responsibilities

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Knowledge Check

- We will administer a quick 5 question quiz through the online session. The score Does Not count. It is designed to test your retention knowledge of this module.

Click the link to take the quiz

Knowledge Check

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Questions?

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