

Texas Education Agency

TEXAS STUDENT DATA SYSTEM

State-sponsored Student Information System (SSIS) Regional Forums

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1 Executive Overview

1.1 Summary

As a result of earlier studies, the Texas Education Agency (TEA) began a new strategic initiative, called the Texas Student Data System (TSDS), which redefines the relationship between TEA and local education agencies (LEAs). A key strategy of TSDS is to transform the agency's role from one of only enforcing compliance to providing more effective services to LEAs.

As part of this process TEA, in coordination with the Michael & Susan Dell Foundation (MSDF) and their contractor, Double Line Partners, conducted a series of in-person meetings held February 22 through April 22, 2010 at Education Service Centers (ESCs) across Texas. Breakout sessions of these meetings were designed to solicit input into the requirements for a state-sponsored Student Information System (SSIS).

Approximately 2,000 people attended:

- 204 Classroom Teachers
- 268 Campus Administrators and Principals
- 693 LEA Administrators and Superintendents
- 637 PEIMS / IT Coordinators

The goal of the Regional Forums was that by the end of the session participants would:

- Understand the Texas vision for the future of education data
- Identify LEA needs and requirements
- Feel their voices have been heard
- Experience participation in a collaborative process and begin building mutual trust

The sessions were comprised of a 60-minute general plenary session, followed by 120-minute facilitated breakout sessions with stakeholders.

Altogether, 11 three-hour student information system breakout sessions were conducted at the 8 different ESCs.

1.2 The TSDS Initiative

The TSDS initiative results from an investigation begun in 2008. In an effort to make its data collection, analysis, and reporting systems more functional and productive, TEA secured funding from MSDF in 2008 and initiated, through a contract, a study called the Texas Data Collection, Analysis, and Reporting Systems Investigation (TDCARSI). TDCARSI sought to create a roadmap to improve the existing statewide K-12 collection system to keep Texas at the forefront of standards-based accountability.

Study recommendations were developed with extensive input from stakeholders as well as significant research into collection system best practices, including focus groups, interviews, and surveys with a wide variety of stakeholders and five peer states.

The resulting report detailed a statewide data solution designed to increase the availability of transparent, timely, and actionable educational data, while at the same time decreasing the cost and burden of data collection to LEAs and the state. The solution was designed to provide appropriate data access to all stakeholders while ensuring compliance with the Family Educational Rights and Privacy Act (FERPA).

Based on research and interviews with educational stakeholders in the state, the consultants made nine (9) key recommendations. One of those recommendations was the creation of a voluntary SSIS to help LEAs save costs and resources associated with student data management.

More than 80 percent of the LEAs in Texas have fewer than 5,000 students. The vast majority of these LEAs do not have the budget or available staff to support sophisticated information technology departments, yet they must purchase operational systems that support their daily student accounting, staffing, and financial operations needs. Typically, they must pay for expensive (and often delayed or non-compliant) modifications to those systems to support the specific state and federal reporting needs that are beyond their daily operational needs.

A cost-effective alternative to the current situation is for the state to provide and maintain a standard system that any LEA can choose to use. The state would sponsor a third-party solution, making a SSIS available to all LEAs for voluntary use. A standard student system would provide a level of operational and maintenance support that is safe and secure, as well as implement extractions to support state reporting. Moreover, it would provide a more cost-effective way to support changes to data standards. There would be no penalty for LEAs that do not participate, and there would be shared cost savings for all LEAs that do participate. This recommendation does not include support for local financial or human resources systems, as these tend to be more specialized to the local LEA operations. However, the SSIS would support collection of some of teacher data (either through direct support or by data import) to assure linkage between the teacher and classroom information and student information.

The goal of the MSDP-funded SSIS project is to develop software and technical specifications that will be used to develop the SSIS.

1.3 The State-sponsored Student Information System

The Texas Education Agency collects a large amount of data concerning Texas students, teachers, schools, and school finances. This data is used by a variety of TEA program areas to track metrics and assure compliance with State and Federal requirements. The data is also viewed by many stakeholders outside of the agency.

A SIS is the day-to-day operational system used by schools and other LEAs to enter student information, capture attendance and grades, enter discipline infractions and subsequent actions, and generate transcripts, report cards, and other records. These systems can be very sophisticated, and there are many vendors in the marketplace.

Many SIS vendors are regional companies that are quite small and thus may have limited resources to remain current with the latest technologies. LEAs spend a significant amount of time, money, and resources to identify requirements, write RFPs, and select and implement these solutions. After purchase and initial implementation, there are ongoing fees from the vendors to provide help desk support and maintain compliance with constantly evolving state reporting requirements.

The need for compliance with Texas state data requirements make this especially costly, so much so that some vendors simply do not market or sell their applications in Texas. In addition, there are ongoing hardware and networking infrastructure costs. As business and student management systems become more sophisticated, the LEAs are challenged to find and hire local resources with the skills to support the solutions and the technical environments.

1.4 SSIS Strategic Goals

The TDCARSI study revealed the scope of these issues. In response, the agency defined the SSIS project as one of the key projects in the TSDS initiative. The new SSIS will reduce the cost and burden to LEAs and provide a much more robust system by offering them (on a voluntary basis) a single state-of-the-art SIS solution. The SSIS will satisfy local student management needs while seamlessly supporting TEA data extraction without additional effort by the LEAs. This would yield substantial benefits for both the schools and the state. The system will be available to the LEAs at an attractive cost, with guaranteed support for state and local needs and assured vendor (and state) support, since the volume of LEA users will justify implementing shared services.

1.5 SSIS Project Scope

TEA's SSIS project can be implemented in any combination of the following ways:

- Lead an LEA/ESC initiative to identify, select, and procure a SSIS solution via a Request for Proposal (RFP) process.
- Host a SSIS solution at the state level providing access using a SaaS (Software as a Service) model to participating LEAs
- Provide LEAs additional funding to reduce initial migration costs

To begin this process, TEA will define the operational and reporting requirements for a SSIS, based on research conducted with LEA stakeholders.

2 SSIS Stakeholder Meetings Summary

We held this winter's stakeholder meetings to gather wants, needs, and concerns about SIS features that we could develop into a set of requirements for the SSIS. Participation was robust, and we were able to collect a broad range of feedback.

2.1 Regional Forums

In order to develop an understanding of the LEAs' SSIS needs and priorities that was as comprehensive as possible, we met constituents from 338 LEAs at the region plenary sessions. The SSIS breakout sessions were designed to focus on PEIMS coordinators and IT staff. However, we did not limit the breakout session to these groups, as we made it clear that anyone interested in the SIS discussion was welcome to attend.

The forums were held at 8 regional ESCs.

Each SSIS breakout session consisted of the following tasks:

- Texas Student Data System (TSDS) plenary presentation feedback
- SIS features feedback
- Strengths, Problems, Opportunities, and Threats (SPOT) analysis
- Closing questions and comments

Several months prior to the first regional forum, TEA staff developed a list of key SIS features. These features were identified based on research of major SIS vendor offerings via public documentation and vendor web sites.

Our goal was to have each participant in the SSIS breakout sessions review these features as they relate to their currently deployed SIS and rate them as good, needs improvement, or ineffective. We used a color coding of Green for good, Yellow for needs improvement, and Red for ineffective as we rated the features in facilitated exercises.

2.1.1 Where did we go?

The Texas Education Agency TSDS group traveled to eight different regions of the state in an attempt to cover as much of the state as possible. LEA and ESC staff of nearby regions traveled to the designated locations to attend TSDS sessions. We distributed the locations around the state to minimize stakeholder travel and costs.

The TSDS sessions were held at the following regions (in chronological order according to visitation):

- Amarillo - Region 16
- El Paso - Region 19
- San Antonio - Region 20

- Edinburg - Region 1
- Houston - Region 4
- Richardson - Region 10
- Mount Pleasant - Region 8
- Midland - Region 18

2.1.2 How many attended the breakout session that provided feedback? (Attendees who turned in a survey form)

From the feedback received in the form of returned handouts, we calculated that the SIS breakout sessions had a total of 558 attendees.

2.1.3 How many breakout sessions did we conduct to achieve our goal?

In an attempt to get as many attendees to provide an opinion or have themselves heard by the agency, we divided the SIS breakout session into smaller groups (especially at the larger ESCs). As a result, we conducted a total of 26 group sessions at the various venues.

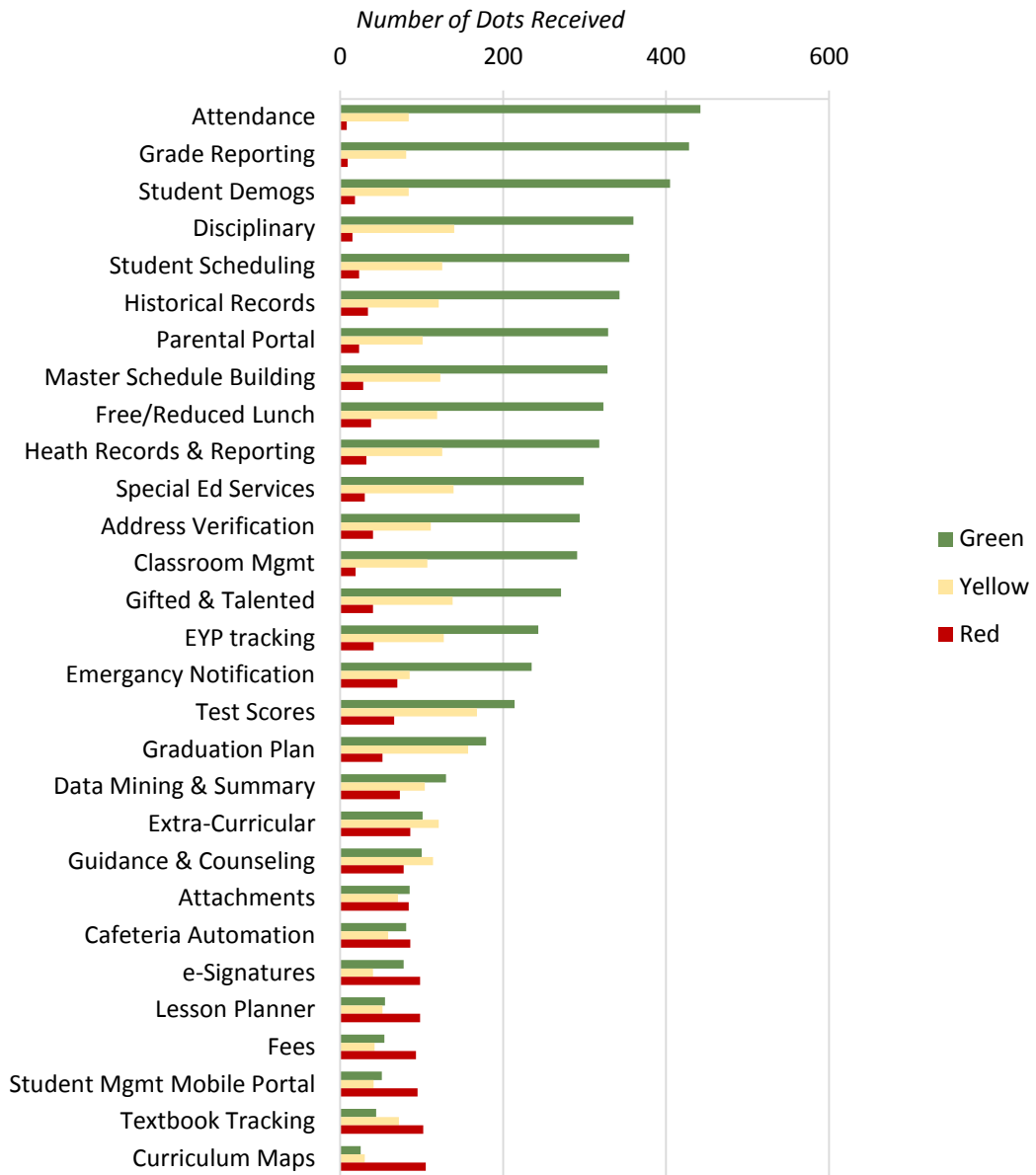
2.2 SIS Features

After breaking the attendees into smaller sub-groups (where needed), participants took part in the SIS features exercise, which collected and quantified their evaluation of their SIS. The SIS exercise was composed of two parts: first, participants rated their SIS features; second, the group shared those ratings on charts posted on the walls. The results indicated the current vendors' effectiveness in delivering those features in their applications.

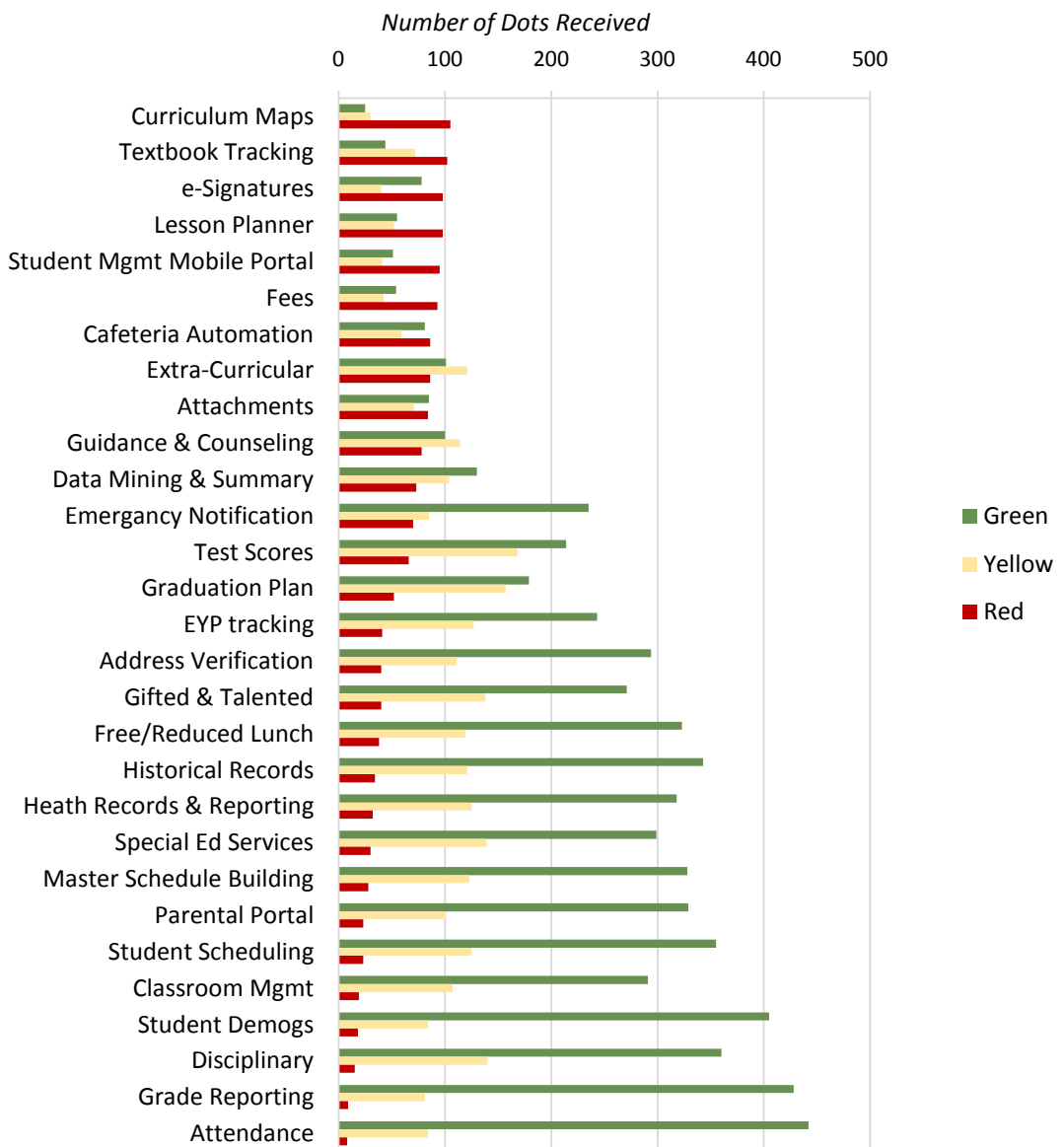
2.3 Features Feedback

We collected participants' ratings, compiled the results, and analyzed the data to identify strong and weak features of the participants' current SIS systems. Those features are listed below.

SIS Features Sorted by Those that Received the Most Green Dots



SIS Features Sorted by Those That Received the Most Red Dots



Existing Features That Fulfill Needs

- Address Verification
- Attendance
- Classroom Management
- Discipline
- Emergency Notification
- EYP Tracking
- Free and Reduced Lunch
- Gifted and Talented
- Grade Reporting
- Health Records and Reporting
- Historical Records
- Master Schedule Building
- Parental Portal
- Special Education Services
- Student Demographics
- Student Scheduling

Weak Existing Features

- Extracurricular Activities
- Graduation Plan
- Guidance and Counseling
- Test Scores
- Lesson Planner
- Cafeteria Automation
- Curriculum Maps
- Textbook Tracking
- Fees
- Attachments
- Data Mining and Summary
- e-Signatures
- Student Management Mobile Portal

LEAs seemed generally satisfied with most of the core SIS features and often dissatisfied with new feature like the lesson planner or curriculum maps. Between the two extremes is a large group of key functions that could evidently use some improvement for a lot of districts, like test scores, data mining, and free and reduced lunch.

We'll perform further research to clarify what exactly is good about the good features, and bad about the bad features. We will (1) leverage the existing quality features in current systems, (2) perform more research into the important weak features so that we can provide some rigorous requirements (like e-signatures, data mining, and test scores), and (3) leave the less important weak features for the vendor to offer as optional add-ons, if they can. Via the publication of the Request for Offer (RFO) we'll make this research available to our vendor partner(s), so they will be armed with the incentive and knowledge to improve these offerings on their own.

2.4 Other Features

We designed a chart for participants to fill in any other features missing from their SISs. Then we discussed their feedback with the group to gain consensus. Their responses indicated that

there is strong demand from LEAs for an expanded solution, not just the SIS, that would include the business management features as listed below.

High-Level Business Needs

- Accounts Receivable
- Asset Management
- Budget
- Finance
- Human Resources
- Requisition

Stakeholder Identified Needs

- Special Needs & At Risk
- ADA Section 504 & Dyslexia Tracking
- Custom Report Generation
- Test Tracking
- Cohort Tracking
- Transportation / Route Tracking
- Cafeteria Management
- Academic Achievement Tracking
- Nurse's Medical Log
- Court Filing
- Migrant Data
- English as a Second Language (ESL)
- Student Registration
- Fitness Gram
- Locker System

Many of these features will not be incorporated into the system that TEA will support since the current funding is sufficient only to address the need for the SIS. However, they can form the basis for future expansions, add-ons, or optional services.

2.5 Takeaways from the Features Feedback

Initially, we began the forums with two basic assumptions:

- LEAs need a SSIS to manage student data.
- The specifications for the SSIS should be focused on fulfilling the needs of LEAs with enrollments of 5,000 students or less.

What we discovered was:

- There is a set of SIS features that LEAs consider effective that they don't want to lose. We will need to ensure that our process provides specifics about what makes these features successful.
- There is a set of features that are not fully implemented in their SISs that they would like to be incorporated or improved. We will need to perform further research to understand how and why these features are currently not effectively serving the LEAs.
- LEAs need an integrated student and business solution.
- Some LEA needs may exceed the scope of the current project, but may be considered for future projects. It will be necessary to prioritize the modules or clusters of functions initially offered in the SSIS.
- The specifications should not be limited to the needs of LEAs with fewer than 5,000 students, but should include the needs of LEAs with enrollments up to 50,000 students as well.

3 SPOT Analysis Summary

3.1 Overview

We conducted a SPOT analysis of the SSIS proposal based on feedback received in the previous features exercise to determine the key Strengths, Problems, Opportunities, and Threats associated with the strategy.

The idea behind this analysis was to identify the Strengths and Problems of the participants' current SIS applications, and to identify the Opportunities and Threats that would arise from a SSIS.

3.2 SPOT Feedback

After compiling all of the breakout session data from all regions visited, the following had become clear for each of the four analysis indicators:

- Strengths of current SIS
 - Current systems are integrated with PEIMS to include data editing and support PEIMS data submissions
 - Current systems integrate with other applications used by the LEA.
 - Vendors, the ESC regions, and local staff support the current applications.
 - Texas-based vendors provide the best support.
 - Current systems provide canned and custom reports, and charting capabilities.
 - Current systems meet security requirements.
 - Current systems are Web-based applications.
 - Current applications are easy to use and familiar.
 - Current applications provide a high level of data integrity.
- Problems with current SIS
 - PEIMS submissions require significant local data manipulation.
 - Keeping up with mandated changes is burdensome and expensive.
 - Current applications lack error correction functionality.
 - Current applications lack the functionality to validate data for PEIMS submission.
 - The management of changes and updates to the current applications is difficult.
 - Some vendors lack prompt and reliable customer service.
 - Vendors charge for the creation of reports. Cross module data joins are limited so it is not easy to create queries. State-required reports are not supported by vendors.

- Poor integration of system and data.
- Some applications have inadequate training and documentation.
- Current applications make student transfers and data sharing inefficient or impossible.
- Current applications lack data entry validation.
- Support of current applications requires the installation of frequent and untested updates.
- Current applications lack needed data elements for required reporting.
- The per-module costs and support for unfunded mandates strain LEA budgets.
- Opportunities from proposed SIS
 - New areas could be integrated into a new application to include student portfolio, retention information, intervention, and other information.
 - Reports and feedback could offer benchmarking, greater flexibility, customization, and near time updating of data.
 - LEA-to-LEA data sharing could provide access to student transfer data.
 - User groups could be included to share experiences.
 - The proposed application would lead to improved data standards.
 - The proposed application would increase the avenues of support.
 - The proposed application would increase efficiency.
 - The proposed application should result in cost savings for the LEA.
 - The proposed applications would enable the Integration of tools, like third party products and sharing data from other data.
 - The proposed application could be web / portal driven to allow universal access and higher system availability.
 - The proposed solution could provide simplified registration.
 - The proposed application would result in better PEIMS edits and integration.
 - The proposed application would result in better training.
- Threats from proposed SIS
 - The proposed application could cost more than the current solution.
 - The proposed application might require more reporting to the state.
 - Adoption of the proposed solution might cause the loss of the LEA's investment in their current system.

- What happens if the TEA runs out of money before the new application is in production?
- How would pricing be managed over time?
- Migration and/or conversion of data from the current SIS to SSIS are a concern.
- Support capabilities and responsiveness are concerns.
- What if TEA drops support of the vendor or the vendor is bought by another company? How will the service level agreement with the LEA be ensured?

3.3 Takeaways from the SPOT Analysis

Districts particularly prize those features that promote efficiency, and are conversely exasperated by features that introduce redundancy, fail to prevent errors, or are needlessly complex or confusing. This highlights the need for a low-maintenance system rigorously designed for maximum usability. Process analyses to identify and eliminate inefficiencies in the system would help to yield a more useful product.

Although stakeholders expressed some concerns about a SSIS that was initiated and overseen by the state, there was also a hunger for a SIS solution that would free LEAs from the resource drain that is the high-cost, low-benefit current system. The voluntary nature of the new system and its promised reductions in cost were key selling points for the LEAs.

Overall what the LEAs want more than new modules/functionality is *better* existing functionality with improved availability, better integration, better training, and better and more flexible reporting capabilities.

4 Next Steps

1. Create a Request for Information (RFI).
2. Receive and evaluate of responses to the RFI.
3. Review and determine qualifications of vendors / parties to support a voluntary SSIS.
4. Determine the appropriate business model for a voluntary SSIS.
5. Create the contract vehicle (Request for Offer or other) to implement a voluntary SSIS.

Appendix A: Glossary

Term	Definition
ADA Section 508	The section of the Americans with Disabilities Act that requires that federal agencies' electronic communications and technologies be accessible to people with disabilities: http://www.justice.gov/crt/508/508home.php
BMS	Business Management System
ESC	Education Service Center – one of 20 regional service centers established by the Texas State Legislature in 1967 for the purpose of providing services to the school districts within defined geographic regions.
ESL	English as a Second Language
EYP	Extended Year Program
FERPA	Family Educational Rights and Privacy Act – a Federal law that protects the privacy of student education records
ITS	Information Technology Services division at TEA
LEA	Local Education Agency
MSDF	The Michael & Susan Dell Foundation – a charitable foundation that focuses on improving children's health and education in Texas and on transforming the lives of children living in poverty worldwide
PEIMS	Public Education Information Management System – encompasses all data requested and received by TEA about public education, including student demographic and academic performance, personnel, financial, and organizational information.
RFI	Request for Information – a publicly released request for written responses from vendors that allows potential clients to collect data regarding the services and support offered by those vendors
RFO	Request for Offer – a publicly released request for a vendor to formally commit to providing products or services under stated terms and conditions. The response to the request for offer is intended to become a binding contract if/when it is signed.
RFP	Comparable to an RFO
SaaS	Software as a Service – software that is deployed via the Internet instead of residing on the user's local drive; usually offered by subscription

<i>SIS</i>	<i>Student information system – an application or suite of applications that allow LEAs to enter, manage, and report on the data they collect on their students.</i>
<i>SPOT</i>	<i>Strengths, Problems, Opportunities and Threats – a strategic planning tool used to help people make informed decisions about pursuing a plan or action. The acronym SPOT derives from the words Strengths, Problems, Opportunities, and Threats.</i>
<i>SMS</i>	<i>Student Management System – software that provides classroom-level data collection, storage, and reporting, such as grade books, attendance, calendars, report cards, etc.</i>
<i>SSIS</i>	<i>State-sponsored Student Information System – the proposed SIS that will be contracted by the state of Texas using requirements derived from LEAs. The goal is to reduce the costs and difficulties associated with a SIS and increase the benefits to the districts.</i>
<i>TEA</i>	<i>The Texas Education Agency</i>
<i>TDCARSI</i>	<i>TEA Data Collection, Analysis, and Reporting Systems Investigation – a study detailing the inadequacies of Texas's current system for collecting education data. The SSIS project is an outgrowth of the recommendations made at the conclusion of the TDCARSI study.</i>
<i>TSDS</i>	<i>The state initiative to overhaul Texas's system for collecting education data in response to the TDCARSI study. SSIS is one component of this initiative.</i>

Appendix B: SSIS Features Handout

STUDENT INFORMATION SYSTEM FEATURES

Name: Title:

District: Student Enrollment:

Financial Management System:

Human Resources Management System:

Student Information System:

Please answer the survey to the best of your knowledge. If you don't know if a feature exists in your SIS, please leave those columns blank.

Groups	Feature	Does it work?
Student Records	Attendance Records (accounting of student attendance)	G Y R
	Disciplinary Records (student behavioral infractions and actions taken by school district)	G Y R
	Extended Year Program Tracking (OEYP enrolment, transfers and absences)	G Y R
	Extra-Curricular Activities (set standards, clone student information, and include information on official transcripts)	G Y R
	Federal Free/Reduced Lunch (information related to federal free/reduced lunch program)	G Y R
	Gifted & Talented (track student patterns)	G Y R
	Grade Reporting (grade reporting functions for both elementary and secondary campuses)	G Y R
	Graduation Plan (valid graduation plans and associated courses)	G Y R
	Guidance & Counselling (student contacts and the actions taken)	G Y R
	Health Records and Reporting (up-to-date student health records)	G Y R
	Historical Records (student information from previous school years)	G Y R
	Special Education Services (students receiving special education services)	G Y R
	Student Scheduling (student scheduling in compliance with curriculum specifications and educational program policies)	G Y R

Groups	Feature	Does it work?
	Test Scores (maintenance of student test scores throughout the year)	G Y R
Teacher Records	Lesson Planner (classroom lesson plans)	G Y R
	Master Schedule Building (master schedule creation using scheduling and student requests)	G Y R
Student Demographics	Address Verification (verification of student address and enrolment data)	G Y R
	Emergency Notification (streamlined emergency notification; phone, text message and/or email)	G Y R
	Student Demographics Database (single complete record for each student)	G Y R
Campus Information	Cafeteria Automation (for payment and assistance with medical and nutritional needs)	G Y R
	Classroom Management (posting of student data, including attendance and grades)	G Y R
	Curriculum Maps (custom curriculum maps for teachers)	G Y R
	Textbook Tracking (who has them, their value, late fees, damages, and when new ones will be needed)	G Y R
Fees	Fees (access student/family invoices, fees, and payment plans)	G Y R
Additional Services	Attachments (attaching of documents for reporting)	G Y R
	Data Mining & Summary (analysis and monitoring of data for local, state, and federal reporting)	G Y R
	e-Signatures (electronic reproduction of a users signature)	G Y R
	Parental Portal (Web access for parents and guardians to their students' school-related information)	G Y R
	Student Management Mobile Portal (mobile device application access)	G Y R
Other Features		G Y R
		G Y R
		G Y R
		G Y R
		G Y R