



---

Office of Superintendent of Public Instruction

---

# **Washington State Student Success Framework**

## **Request for Vendor Information**

### **Questionnaire & Demonstration Guidelines**

October 26, 2011

## Table of Contents

Introduction .....	3
Commonly Used Terms and Acronyms Appearing in this Document.....	4
Background .....	5
WS3F Continuous Quality Improvement Process Model.....	5
Response to Intervention (RTI) .....	5
Dropout Early Warning Intervention System (DEWIS).....	6
Overview of the New System .....	7
Current Operating Environments .....	8
District information collection system .....	8
State Data Collection.....	8
Conceptual WS3F Model.....	8
WS3F Requirements.....	10
High-level Framework Capability Map.....	10
Implied High-Level System Functionality .....	10
Specific System Requirements .....	11
Key System Attributes .....	14
Request for Information.....	15
Estimated Schedule of Activities .....	15
RFI Coordinator .....	15
General Questions .....	17
Appendix A – Demonstration Guidelines .....	23
Appendix B – WS3F High-level Capability Map.....	25

## **Introduction**

Your responses to this Request for Information (RFI) will help the Washington State Office of the Superintendent of Public Instruction (OSPI) understand the capabilities of current Response to Intervention/Dropout Early Warning Information systems available in the market. It will also help OSPI make key decisions about whether to make or buy a system in support of its Washington State Student Success Framework (WS3F) initiative.

OSPI is currently in the feasibility study phase for the WS3F project. Included are high-level system requirements for that framework, as we understand them. To support an anticipated Agile approach to development of that framework, those requirements are provided in the form of a Capability Map, with “stories” describing critical framework needs and values. OSPI is conducting this RFI to complete a build-or-buy decision for the systems associated with the WS3F

This document contains questions OSPI needs to have answered in response to our Request for Information. These questions are intended to help focus your efforts on the areas we feel are most important based on currently identified needs.

## Commonly Used Terms and Acronyms Appearing in this Document

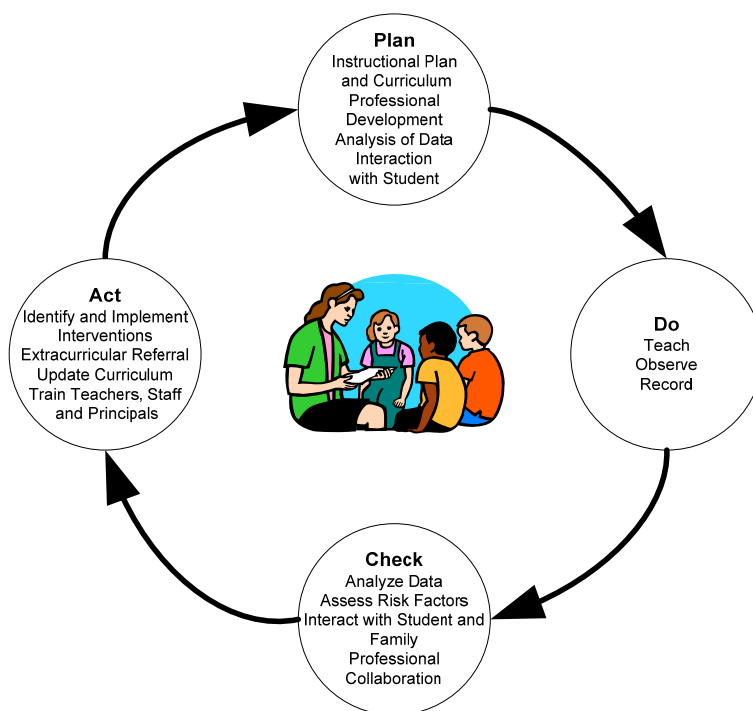
Term or Acronym	Definition
CEDARS	Comprehensive Education Data and Research System
COTS	Customized/Configurable, Off-the-Shelf
DEL	Washington State Department of Early Learning
DEWIS	Dropout Early Warning Intervention System
DOC	Washington State Department of Corrections
DPIR	Dropout Prevention, Intervention and Reengagement
DSHS	Washington State Department of Social and Health Services
EBP	Experience Based Practices
ERDC	Washington State Education Research & Data Center
ESD	Education Service District
FRL	Free and Reduced Lunch
GPA	Grade Point Average
IHE	Institution of Higher Education
LEA	Local Education Agency
MOU	Memorandum of Understanding
NCRTI	National Center on Response to Intervention
OSPI	Office of Superintendent of Public Instruction
RFI	Request for Information
RTI	Response to Intervention
SD	School District
SEA	State Education Agency
SIS	Student Information System
SES	Supplemental Educational Services
SEAC	Special Education Advisory Council
SPDG	State Personnel Development Grant
WS3F	Washington State Student Success Framework
WSIPC	Washington School Information Processing Cooperative

## Background

The Washington State Student Success Framework (WS3F) was conceived as an approach for leveraging the benefits of Response to Intervention and Dropout Early Warning Information System goals and objectives, to enhance the state's education process from kindergarten through high school graduation. The two programs are seen as part of a continuum that enables the state to continuously improve the education process. In this framework, improvement is achieved by providing critical student achievement and behavioral data to parents, teachers, counselors, principals and collaborative working groups within the schools, so that appropriate interventions may be implemented to increase the student's ability to achieve their individual goals.

The goal of this RFI is to obtain information about how the state might best go about buying or building an automated system to support the WS3F Continuous Quality Improvement Process Model shown below.

### ***WS3F Continuous Quality Improvement Process Model***



### ***Response to Intervention (RTI)***

As of December 2010, over 170 districts in Washington State reported implementing RTI in at least one content area. Many of those school districts are working independently to create a means of managing student assessment and achievement data, along with other available data elements.

OSPI is participating in a project to provide a comprehensive student assessment and achievement data management system for the pilot site school districts which are implementing RTI in Washington State. The project is supported by the State Personnel Development Grant (SPDG). This grant consists of federal funds used for the development of a statewide system to

support RTI. This RFI supports a feasibility study that addresses the potential for extending the RTI effort beyond the current pilot projects, on a state-wide basis.

Washington State has a Memorandum of Understanding (MOU) with the National Center on Response to Intervention (NCRTI) to receive technical assistance for the building of a state RTI structure. Five major goals are included in the MOU:

1. Develop a common language across the State Education Agencies (SEA) that is aligned and consistent with language and recommendations from the NCRTI.
2. Align efforts across the SEA, Institutions of Higher Learning (IHE) and Education Service Districts (ESD).
3. Build capacity at the SEA, IHEs, ESDs and districts to support implementation of evidence-based practices (EBPs).
4. Build a data system for RTI demonstration districts that could be expandable across the state.
5. Create an information dissemination system to expand RTI efforts across universities, districts and professional organizations.

### ***Dropout Early Warning Intervention System (DEWIS)***

In 2010, the Washington State legislature adopted a definition of a K–12 dropout prevention, intervention and reengagement (DPIR) system, based on lessons learned in the Building Bridges Grant Program and the recommendations of the Building Bridges Workgroup. The same 2010 legislation asked the workgroup to recommend:

1. A state goal for high school graduation and for reengaged youth.
2. Funding for the planning and implementation of K–12 DPIR systems in local school districts, including portions of the system that should be funded under the basic education program.
3. Expansion of the current school improvement planning program to include state-funded, dropout-focused technical assistance for school districts with a need to improve high school graduation rates.
4. A state-level and regional infrastructure for coordinating services for vulnerable youth to support the building of local K–12 DPIR systems.

In their report to OSPI's management team, the Building Bridges Workgroup envisioned building a school-based "integrated student support system" in local communities throughout the state. The integrated student support system will be based on the statutory definition of a K–12 DPIR system. The following components need to be in place in local school districts and communities to build this system:

- Dropout-focused school district improvement planning.
- A dropout early warning and intervention system (DEWIS).
- Basic education funding for schools to support planning and intervention.
- School/family/community partnerships to support planning and intervention

## Overview of the New System

The WS3F's automated system will combine the intent, functionality, data and reporting capabilities recommended by both the RTI and DEWIS initiatives. It is anticipated that a single online system will provide the tools necessary to:

- Develop a common language across the SEA that is aligned and consistent with language and recommendations from the NCRTI.
- Align efforts across the SEA, IHEs and ESDs.
- Build capacity at the SEA, IHEs, ESDs and districts to support implementation of evidence-based practices.
- Provide a data system for demonstration districts that could be expandable across the state.
- Create an information dissemination system to expand RTI efforts across universities, districts and professional organizations.
- Pull data from many sources, including CEDARS, information systems in the school districts, etc.
- Enable teachers to print out simple to use, one-page summary information by student, by intervention group, class, and other criteria, to identify trends (with strong use of graphics).
- Provide one-step process to access the value of the data.
- Be IT neutral – a non-technical person can use the system with little difficulty.
- Roll up data above the class level for management review and analysis.
- Be easy to connect with district tools.
- Avoid duplicate data entry at the district and teacher level.
- Allow teachers/schools to upload their own assessments into the system.
- Be economically sustainable in a resource-constrained environment.

## **Current Operating Environments**

### ***District information collection system***

Districts have several ways of collecting, storing, and reporting this information. Those with Student Information Systems (SIS) have an online system that collects the data and routines to consolidate and package the data to go to OSPI. Two hundred and sixty-one (261) Washington state school districts are supported by eight SIS vendor packages. Those supported by SIS packages range in size from Index (1 school with 29 students) to Seattle (101 schools and 46,200 students). Thirty-four (34) school districts (like Star School District with 15 students) are without an SIS system and have a variety of mechanisms for collecting this data. These methods range from paper based system to excel spreadsheets on personal computers to home grown SIS systems. These school districts are generally small ranging in size from 8 to 400 students.

Districts sometimes have separate database systems for collecting data for multilingual, Career and Technical Educational (CTE), Special Education, detention centers and alternative learning schools. The district systems collect detailed operational data including enrollment, schedules, teacher assignments, food service accounts, daily classroom grades, class attendance, discipline records, immunizations, medical plans and much more.

205 of the 261 school districts use the SIS product Skyward available through the Washington School Information Processing Cooperative (WSIPC). WSIPC distributes this product through 5 central hubs located at Educational Service Districts. The remaining districts with commercial SIS packages are locally installed (not distributed).

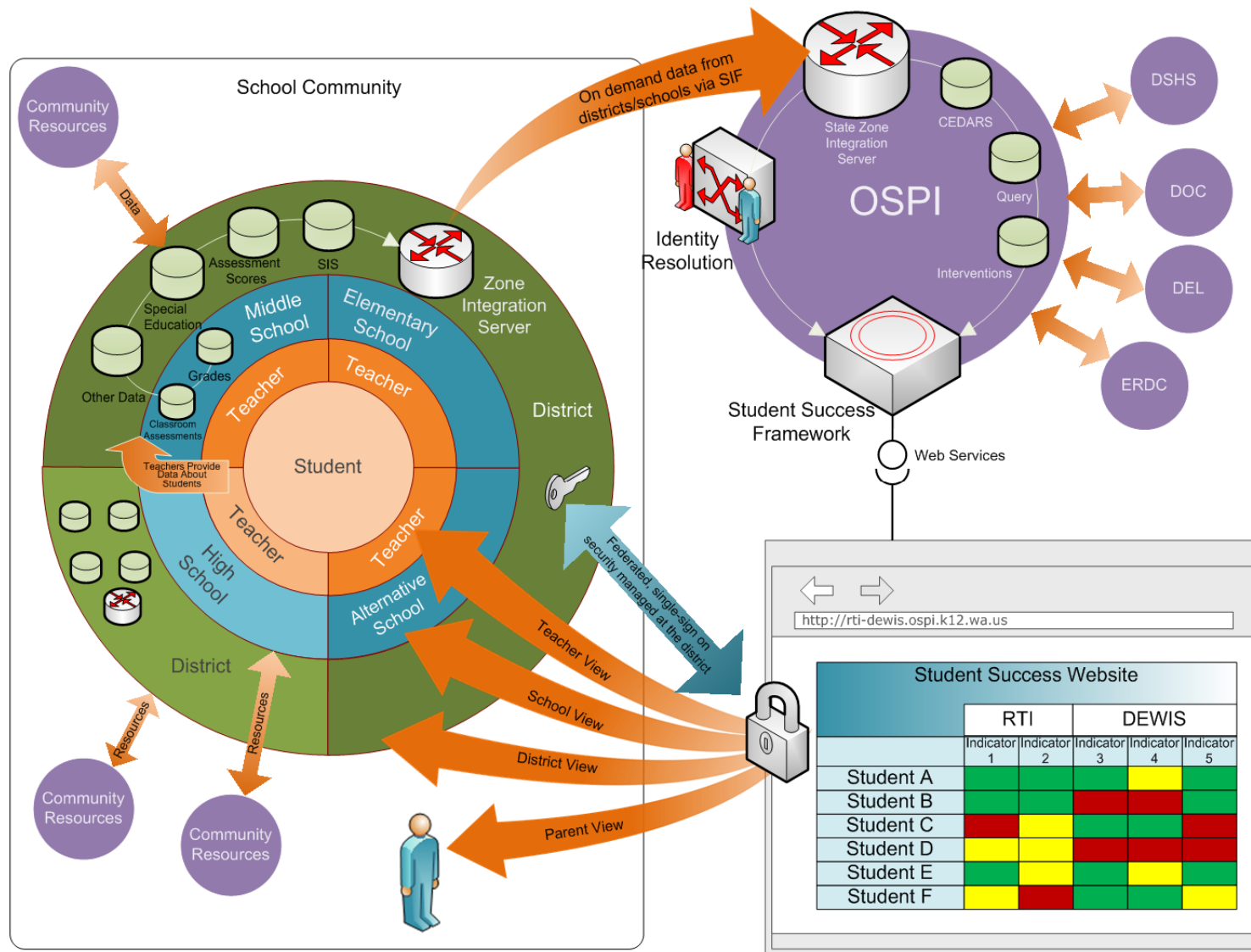
### ***State Data Collection***

Regardless of the SIS package a subset of data is fed to OSPI to the Comprehensive Education Data and Research System (CEDARS) student data collection via monthly and weekly formatted flat files sent via SFTP. Details are posted at <http://www.k12.wa.us/CEDARS/default.aspx>.

CEDARS consolidates these data into a longitudinal operational data store to track a student's progress through the K-12 educational system. The data collection includes student enrollment, student demographic, teaching staff, courses, student and staff schedules, program participation, and grade history. In general the state data collection is a small subset of what is collected in the local SIS system.

### ***Conceptual WS3F Model***

The following diagram illustrates a conceptualization of what the WS3F solution might look like when configured across OSPI, external state agency, school district, and school and community environments. The components of this model are demonstrative, only, and should not limit responding vendors from suggesting alternative proposed approaches and solutions.



## **WS3F Requirements**

### ***High-level Framework Capability Map***

Capability Mapping is an Agile development approach used to define the project's vision and objectives in terms of need and value to the project, from a variety of specific perspectives. Capabilities are expressed as "stories" told from the key perspectives (users) involved in the project.

The goal of this project will be to fulfill the capabilities required by framework users in a manner that is efficient and cost effective. Each "story" included in the Capability Map will be elaborated to an increasing level of granularity during the course of the actual project, as needed to build the necessary functionality.

See Appendix A for the complete high-level Capability Map for this RFI.

### ***Implied High-Level System Functionality***

The automated system supporting the WS3F should have the following high-level functionality:

- Must be able to integrate data from multiple sources, including OSPI and district student information systems (SIS), and provide a user-friendly environment for analysis.
- Enable Local Education Agency (LEA) staff to analyze data trends and support data-based decision-making processes at the classroom, grade level, building, and district levels.
  - As much as possible, the solution should avoid further data collection from districts unless the data requirement is clearly supported to meet the requirements specified in the project's capability map.
  - The solution should be able look to disparate databases or allow central collection of data in a way that does not require additional district programming.
- Utilize multiple data elements – screening measures, attendance, discipline referrals and suspension/expulsion, progress monitoring measures, state assessment scores, intervention fidelity, demographic data, system fidelity, etc., so that teachers and teams can be highly effective in addressing student needs.
- Allow teachers and other school staff to keep track of which students receive which interventions, to enable them to evaluate how well the interventions are working, for whom, and where.
- Enable cross-referencing of available data by student, intervention group, intervention tier/level, classroom, grade, building and district.
- Enable efficient and effective decision-making support for all students, including those considered "at risk" and "off track" for graduation, and those exceeding standard.
- Allow building and district teams to make decisions about effective curricula, training and other supports for teachers, scheduling, funding, staffing, etc. by using objective, reliable data.
- Enable selected State Education Agencies (SEA) staff to see trends across the districts, which could influence training and technical assistance provided by the SEA and ESDs and complete analysis using state standard analysis formulas, with the flexibility to adjust for local use.
- Provide data to the state regarding the RTI and DEWIS implementation process for districts, as well as evidence of what works in Washington State.
- Provide for input of existing information on previous cohorts whose students have already moved through the school system.

- Provide analytics to facilitate examining data on past cohorts to identify good predictors of what will happen to students in future cohorts.
- Provide for the analysis of multiple cohorts to verify the findings generated through analysis of risk factors.
- Provide the ability to set cut scores at the LEA level, to facilitate the identification of students at multiple grades as candidates for intervention.

### ***Specific System Requirements***

While not inclusive of all potential requirements, the following specific system requirements have been identified:

- Provide the ability to analyze and identify groups of high-yield risk factors, i.e., ones that do the best job — and a good enough job — of predicting which students will drop out, including:
  - Combinations of factors
  - Changes in factors
- Provide the ability to conduct a school-level analysis to better understand where individual risk factors are most concentrated and which schools put students at an even greater risk for dropping out, including:
  - Concentration of risk factors
  - Contribution of risk factors
  - Impact of outcomes
  - Provide dropout early warning reporting that is focused on “predictive” value, as well as statistical reliability
- Gather high school academic performance data related to:
  - Grades in core academic subjects, by end of quarter, semester and year
  - Number of courses failed and passed in core courses, by end of quarter, semester and year
  - Number of credits attempted by semester, by year and cumulatively
  - Number of credits earned by semester, by year and cumulatively
  - GPA by semester, by year and cumulatively
- Track and report on the four primary high school risk factors:
  - Attendance
  - GPA
  - Credits earned
  - Failing grades
- Provide indicators that signal when 9th graders are falling “off track” to earning a diploma, based on specific risk factors:
  - Track 9th graders at risk, including:
    - Being over-age
    - Having reading and math scores significantly below grade level
    - Low 8th grade attendance
    - Having failed courses in middle school
  - Track academic failure indicators, including:
    - Receiving more than one grade of F in core academic courses or not earning enough credits to be promoted during 9th grade
    - Earning an F in English or mathematics during 6th grade
    - Failing one or more courses during 8th grade
    - Entering 9th grade with math or reading scores below 8th grade level
    - Being retained in 9th grade
    - Significant drop in grade point average from 8th to 9th grade

- Being retained in any grade during K–8 or in high school
  - Track educational engagement indicators, including:
    - Low attendance (80 percent or lower) during 6th grade
    - Receiving a failing classroom behavior mark during 6th grade
    - Low attendance during 8th grade
    - Low attendance during the first 30 days of 9th grade
    - Significant drop in attendance beginning in 6th grade and worsening in subsequent years
  - Provide a 9<sup>th</sup> grade “on-track indicators” equivalent to or adapted from measures developed by the Consortium on Chicago Schools:
    - Earned enough credits to be promoted and received not more than one semester F in core academic subject, with same calculated for subsequent grade levels
    - On-time promotion to 10th grade
    - Scores on standardized assessments, including grade level, end-of-course, benchmark assessments and exit exams
    - Dropped out previously and reenrolled
- Capture high school data
  - Capture high school social background data related to:
    - SES — FRPL
    - Eligibility, family income, etc.
    - Race/ethnicity
    - Gender
    - Mobility — number of schools enrolled
    - Years overage for grade
  - Capture high school educational engagement data related data, including:
    - Attendance — number of days or percentage of days absent
    - Discipline problems — indicators of poor behavior, including, for example:
      - Number of office referrals
      - Number of counseling referrals
      - Number of suspensions
- Capture middle school data, to include:
  - Middle school social background data related to:
    - SES — FRPL eligibility, family income, etc.
    - Race/ethnicity
    - Gender
    - Mobility — number of schools enrolled
    - Years overage for grade
  - Middle school academic performance data related to:
    - Grades in academic subjects including at least English and math by end of quarter, semester and year
    - Failing grades in math and English
    - Scores on standardized assessments in at least reading and math, including grade-level and benchmark assessments
    - Number of times retained in grade during elementary and middle school
  - Track 6th grade risk factors that are powerful predictors of falling off the track to graduation:
    - Low attendance (80 percent or lower)
    - A failing mark for classroom behavior
    - A failing grade in math
    - A failing grade in English

- Capture middle school educational engagement data related data, including:
  - Attendance — number of days or percentage of days absent
  - Discipline problems — indicators of poor behavior, including, for example:
  - Classroom behavior marks
  - Number of office referrals
  - Number of counseling referrals
  - Number of suspensions
  - Grades in non-academic subjects such as art, music and physical education aggregated into one score
- Reporting requirements:
  - The system must be able to report which individual students exhibit risk factors to school or program staff, including:
    - Aggregate risk factors by school
    - Adjusted outcome measures by school
  - Provide middle grades educators with reports showing how their graduates fare in high school:
    - How many students stayed on track as they progressed through high school
    - How many students dropped out
  - Configurable grade reporting capabilities, including:
    - Warning signs in every middle and high school grade level on an annual basis.
    - These should be adjustable for more frequent monitoring and reporting if certain grade levels turn out to be particularly important sticking points on the road to graduation
  - Specific reporting related to:
    - Detailed student level
    - Alphabetical listing of at-risk students by district
    - Identifies data that placed students on the list
    - Complete listing emailed on the 1st and 15th of each month
    - New student listing emailed on other days
    - District summary chart
    - Number and percent of students by category
    - School listing within a district
    - Grades 8-12
    - Grade 9 only
    - State summary chart
    - Read-only Detailed reports emailed to users (Superintendents, Principals, Assistant Principals, Counselors)
    - Electronic summary reports generated by users
    - Available any time, online
    - Sort capability
    - Drill down to student level
    - Detailed student level data at the following levels:
      - School
      - District
    - Summary school level at the following levels:
      - School
      - District
      - State

- Summary district level
  - District
  - State (LDE)

### ***Key System Attributes***

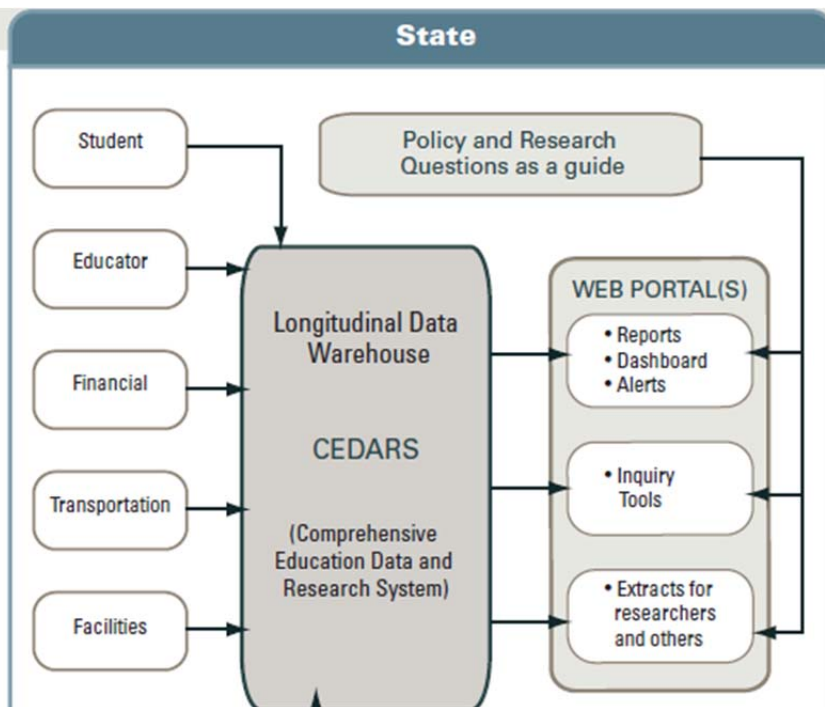
OSPI has a preference for the following system attributes:

1. A fully integrated system – all major parts of the system are seamless to all users of the system.
2. A customizable system that allows OSPI broad latitude to design an intuitive user interface.
3. OSPI has the option to own or out-source the resulting system with the authority to make upgrades as required by new legislation or changes within the education industry.
4. OSPI has the option to purchase maintenance for the system at a reasonable price.
5. OSPI imports data from many distinct, ESC and OSPI sources into the WS3F system, including student test scores, student, class, teacher, school and district identification, interventional activities, and more. Records from these files need to be linked to provide classroom, school, and district and state education system profiles. The system should support upload and relationship administration between many types of data sources.

All aspects of the system should be available to internal and external office staff managing the WS3F program.

A tangential project to this is the K-12 Statewide Longitudinal Data System (K-12 SLDS). This project takes data from 22 transactional systems that collect directory, student, staff, finance, and assessment data and blends them for analysis and reporting into the EdFusion Data Warehouse and Reporting portal purchased from Choice Solutions. The WS3F may provide a data source for the K-12 SLDS. It is intended that the new Response to Intervention/Dropout Early Warning Information System collect additional data to fulfill reporting expectations.

### **K-12 Statewide Longitudinal Data System Diagram**



## Request for Information

Respondents must indicate if they are suggesting transferring a system currently in use in another state. If so, please indicate the location of the system, the duration of its use, and a summary of its technical attributes. Vendors must completely describe the architecture and technical details of the proposed solution, including any third-party software. If the proposed transfer system meets only part of the OSPI requirements, respondents need to specify which are in the system and which are not present or are partially present.

### *Estimated Schedule of Activities*

RFI Activity	Date
Issue Request for Information	Oct. 26, 2011
Question and answer period	Oct 27 – Nov. 4, 2011
Responses due	Nov 12, 2011
Review responses	Nov 13-20, 2011
Conduct product demonstrations	As required

### *RFI Coordinator*

The RFI Coordinator is the sole point of contact in OSPI for this procurement. All communication between the Consultant and OSPI upon receipt of this RFI shall be with the RFI Coordinator, as follows:

Name	Fatima Salahuddin
Physical Address	600 Washington Street South

Mailing Address	PO Box 47200
City, State, Zip Code	Olympia WA 98504-7200
Phone Number	360.725.6369
Fax Number	360.586.7251
E-Mail Address	Fatima.Salahuddin@k12.wa.us

Any other communication will be considered unofficial and non-binding on OSPI. Consultants are to rely on written statements issued by the RFI Coordinator.

## General Questions

The following questions have been developed by our project team and express the range of information we are seeking. We encourage you to tell us about functionality your system may have in addition to the areas identified below.

These are questions about your product. Most questions are about the core system requirements in the use cases. Other questions about your product will give us a more complete understanding of the product's functionality.

<b>Questions 1 through 30 require a detailed response.</b>
<b><u>Architecture</u></b>
1. What is the technical architecture of your system (hosted, distributed, centralized, cloud, etc.)?
2. What technologies were used to develop your system?
3. Does your system include any 3 <sup>rd</sup> party tools? If it does, what are they? Are the 3 <sup>rd</sup> party tools licensed for redistribution and extension?
4. Does the application provide an open, well-documented Application Programming Interface (API)?
5. What is the architecture of the "client" software your system requires?
<b><u>Operations</u></b>
6. What are the recommended Server hardware/software requirements for your system?
7. What are the recommended Client hardware/software requirements for your system?
<b><u>Implementation</u></b>
8. How do you approach the initial system installation? Do you rely on remote installations?
9. How do you approach on-going system maintenance requirements, including technical support, upgrades, patches, version control, and training on new or changed functionality?
<b><u>Performance</u></b>
10. How does your system scale? What if we wanted to double the number of users or the number of records contained in the database? Are there any maximum record volumes we need to be concerned with?
11. How many concurrent users does your system support? What is the peak load and what dependencies are required to support that peak load?
<b><u>Administration</u></b>
12. How do you support the need for user and administrative training?
13. What documentation comes with your system?

<b>Hosting</b>
14. Describe hosting options available for this system and the advantages/disadvantages of each.
15. Does your system allow access from a standard PC or Mac web browser through the Internet? Describe requirements for the client environment including supported browsers, required browser add-ons, and any client third party software requirements.
<b>Reporting</b>
16. What is your system's reporting architecture?
17. Does your system provide standard reports?
18. Does your system provide the ability to create custom reports?
19. Does your system have the ability to interface with the Choice Solutions EdFusion product for reporting, query and analysis, and data integration products?
20. Please provide a complete list and examples of available reports.
<b>Security</b>
21. Describe your system's security features?
22. Does your system provide the ability to administer, modify, and customize security features?
23. Does your system provide the ability to include and enforce user permissions and restrict access to data at the agency, individual, agreement type, and data type levels?
24. Describe your user validation process.
25. Does your system provide the ability to integrate with single sign-on authentication and/or other standard authentication methods?
26. Does your system meet the security standards of the Washington State Information Services Board published at this link: <a href="http://isb.wa.gov/policies/security.aspx">http://isb.wa.gov/policies/security.aspx</a> ?
27. Does your system provide the ability to maintain (read-only) transactional dated history (audit trail) for all key changes to data that includes a time/date stamp, the type of change that was made, and the person responsible for the making the change?
28. Does your system provide data protection features?
a. Is data protected from wrongful access when at rest?
b. Is data protected from wrongful access when it is in motion?
c. Is data protected from wrongful access when transferred between applications?
29. Does your system provide any features that would detect unauthorized access to or disclosure of system-managed data? If yes, please describe.
30. Does your system provide control over "who" can get "what" reports based on the user security system?

Questions 31 through 73 require a yes or no response, except for questions 43, 45, 46, 67a, 71, 72, and 73 which require an additional detailed response.	Yes/No
<b>Database</b>	
31. Does your system provide sufficient technical documentation to allow developers to interface with your database from the variety of sources where educational data is currently stored (schools, districts, ESCs, state level)?	
32. Will you release the database schema for use by schools', districts', ESCs' and OSPI's developers?	
33. If it is a remotely hosted system or cloud-based system, will you release nightly backups to OSPI?	
<b>Operating Environment</b>	
34. Does your system run in a Microsoft environment and use an application deployment model that can be efficiently managed across agency environments (development, test, production)?	
35. Are product updates available to support upgrades to the underlying server and desktop environment (e.g., the operating system)?	
<b>Availability</b>	
36. Does your system have the ability for extended use hours, 99.0% of the time assuming 24x7 public availability and 4am to 8pm for business processing capabilities?	
37. Does your system have the ability to be available for normal on-line transaction processing during batch processing, if applicable?	
<b>Performance</b>	
38. Does your system have the ability to meet the following performance requirements?	
a. Screen displays within three seconds for external users: the time elapsed after a command is entered until results begin to appear must not exceed three seconds for 99% of all transaction or search/retrieval requests.	
b. Next Screen Page Time: The time elapsed from the request of a new screen until the new screen and data appear must not exceed three seconds for 99% of the time.	
c. Screen Edit Time: The time elapsed after the last field is filled on the screen and the enter command executed until all field entries are edited and the screen refreshed with the errors highlighted must not exceed five seconds for 99% of the time.	
d. System must satisfy response time requirements for at least 600 concurrent external users. And 50 concurrent internal users. Screen displays within two seconds for internal users.	
e. Backend processing system should have the ability to meet all performance criteria during normal Washington State working hours of 8:00 A.M to 5:00 P.M. Pacific Time.	
39. Does your system allow a system administrator to monitor response time, system use and capacity, concurrent users, and system errors?	
<b>Data Collection, Management, Structure, and Validation</b>	
40. Does your system provide the ability to archive disposed data and retain data for a minimum of six years and longer for certain agreements?	

41. Does your system provide the ability to automatically expire/retire records based on a record retention schedule and/or other business rules? These may vary depending upon the type of agreement.	
42. Does your system provide the ability to perform flexible workflow management?	
43. Does your system display error messages that are easy for users to understand and respond to?	
44. Does your system provide the ability to customize error messages?	
45. Does your system allow user-defined fields to be included on screens, forms, and reports? If yes then how are the definitions maintained (calculations, rollups, and summary views of user-defined fields, other)?	
46. Does your system provide any mechanism for user-defined data validations that are based on other data elements, either in form or in the database? If yes then how are the validations maintained?	
47. Does your system account for role based data presentation? For example, suppression of student identities, or suppression of address for those enrolled in an address confidentiality program?	
<b>Administration</b>	
48. Does your system provide user/system administration features?	
49. Does your system require any operational maintenance or housekeeping activities that OSPI must perform? If the answer to this question is "yes", please outline what those activities are, the level of skill required to perform them, and the frequency that they will need to be performed.	
<b>Interfaces</b>	
50. Does your system provide the ability to make data available to the agency or other systems using industry standard XML formats? If not, what other formats are provided for interface?	
51. We will need to interface your system to various OSPI internal and State external systems, as well as systems at the Education Service Area, School District and building levels. Please explain how system-to-system interfaces will be developed. Can OSPI development staff build these?	
<b>Document Management</b>	
52. Does your system include an integrated document management system?	
53. If your system includes an integrated document management system, does this system include the ability to associate electronic documents with a certification application or other database entities?	
54. If your system includes an integrated document management system, does this system include the ability to image paper documents into a format that can be managed by this system and associated with a client record or other database entities?	
55. Does your system have the capability for back-file conversion, the ability to scan and index historical documents, storing them in a digital format, and group them by historical transaction and by applicant?	
56. If your system includes an integrated document management system, does this system include the ability to maintain previous versions of documents?	

<b>Implementation</b>	
57. Does your system provide an incremental, disciplined approach to the upgrade or replacement of the system?	
58. Does your system include support for implementation?	
<b>Accessibility</b>	
59. Does your system adhere to the Web Content Accessibility Guidelines (WCAG) 1.0 – Priority 1 checkpoints as published at this link: <a href="http://www.w3.org/TR/WCAG10/">http://www.w3.org/TR/WCAG10/</a> ?	
<b>Statewide Enterprise Architecture</b>	
60. Does your system provide the ability to meet the requirements of the Washington State’s Enterprise Architecture Program? The Integration Domain of the State’s Technology Architecture is a key consideration.	
<b>In-Bound Integration</b>	
61. Does your system have the ability to provide access to the application through Application Programmable Interfaces (API) independent of the user interface?	
62. Is your system’s application user interface separate from the rest of the application, especially the business rules and the API’s?	
63. Does your system provide well-documented and unrestricted (both technically and by license) APIs?	
<b>Out-Bound Integration</b>	
64. Does your system provide the ability to isolate other applications, as much as possible, from changes in your system?	
65. Does your system provide an interface between the business logic and the enterprise financial functions?	
66. Does your system separate functional dependencies (e.g., business rules for messaging) from non-functional dependencies (e.g., types of messaging)?	
67. Does your system minimize the impact of system changes to its integration partners?	
68. Does your system provide isolation and loose coupling between systems?	
<b>Open Standards Conformance</b>	
69. Does your system provide the ability to use open (vendor-neutral) industry standards-based technologies?	
a. If not, does your system have a strong business case justifying a proprietary alternative?	
70. If a proprietary alternative is used, does your system ensure one or more “adapter strategies” is available to render the proprietary alternative “open” to other statewide applications?	
<b>Other Capabilities and Features</b>	
71. Does your system provide features that may be of value to our operation that we have not asked about and that you would like to address?	

<b>Cost</b>	
The cost information being requested below will be used to help us make a "Build" or "Buy" decision. If we decide to "Buy" a system, you will have an opportunity to refine these figures based on our Request for Proposals.	
72. Given the information you have about our requirements, are you able to provide an estimated range for a 5-year total cost of ownership of your system? If so, please provide the following information for each major component: OSPI user module; Education Service District module; School District module; building/school module; Teacher/Counselor module; Parent module, other.	
a. Initial cost?	
b. Initial installation and support cost?	
c. Initial training cost?	
d. On-going maintenance cost?	
e. Other anticipated cost?	
73. Are there any typical cost items your current customers face which are required to make your system effective that are not in your cost estimate?	

## **Appendix A – Demonstration Guidelines**

Demonstrations, if requested, are intended for vendors to provide the Office of Superintendent of Public Instruction with information on how your system works to support the WS3F Capability Map defined in Appendix B, while meeting the specific technical requirements identified earlier in this document.

### **General**

1. Demonstrate how your system provides the ability to enter, view, and modify data using a customizable web form.
2. Demonstrate how your system provides the ability to view an on-line summary screen that provides overall information at the state and local levels regarding a specific school district, school, class, student, and other items.
3. Demonstrate how your system provides a way to track historical transactions.
4. Demonstrate the minimum data elements required by your system.
5. Demonstrate how your system provides a user-friendly interface for adding new data elements to the database and application forms and any limitations to adding new data elements.

### **User Access to System Functionality**

6. Demonstrate your client-centered dynamic process where access to system tools is based on a user role, i.e., the user login allows user to see only what is needed by that user.
7. Demonstrate how your system provides the ability to create or develop multiple mobile technology data collection formats for use in the classroom or other school or district locations, or views specific to client needs.

### **Data Query, Reporting and Analysis**

8. Demonstrate how your system provides a user-friendly interface for selecting data for analysis or reporting from any database field. This includes all data recorded in the system.
9. Demonstrate how your system provides an ability to perform extensive search/query of data managed by the system using a variety of criteria, and the ability to sort and group returned data using a variety of filters or criteria.
10. Demonstrate how your system provides the ability for clients and non-technical staff to create and generate custom ad-hoc reports that can be saved, in an organized way, for future use.
11. Demonstrate how your system provides a simple-to-use but robust ad-hoc data analysis and reporting capability that can support decision-making and strategic planning.

12. Demonstrate how your ad hoc reporting tool will report trend data over time.
13. Demonstrate how your system provides the ability to query transaction history data, such as interventions implemented and tracked for a specific student, classroom or school.

### **Data Collection, Management, Structure, and Validation**

14. Demonstrate how your system provides the ability to automate trigger mechanism(s) used for sending notifications, alerts, and/or initiating functions that are internal or external to the system.
15. Demonstrate how your system provides the ability to validate data entry against user maintained lookup tables and business rules.
16. Demonstrate how your system provides the ability to attach files in a variety of formats such as Microsoft Office documents (Word, Excel, Outlook Mail Items), PDF, text, CSV, JPEG, MPEG, HTML, etc.

### **Security**

17. Demonstrate the security features of your system and how are they administered.
18. Demonstrate how your system provides product suites instead of individual systems with the goal of one model for service delivery to all customers.
19. Demonstrate how related systems can take advantage of a single sign on.

### **Administration**

20. Demonstrate the “administrative” role capabilities of your system.

## Appendix B – WS3F High-level Capability Map

Capability Mapping is used to define the project’s vision and objectives in terms of need and value to the project, from a variety of specific perspectives. Capabilities are expressed as “stories”. An example of a high-level capability, stated in story format:

Perspective: *Teacher*

Need: *I need to see student achievement data in a simple format that is easy to view, understand and act on in an IT-neutral format,*

Value: *So that I can successfully implement an intervention “in the moment” and positively impact student success.*

The following High-level Capability Map has been developed for the WS3F project:

Priority H/M/L	Story #	Perspective	Story
H	T 1	Teacher / Counselor / PLC	<u>Need:</u> I need to see and print out my students’ achievement, behavioral and evidence-based risk data in a simple, easy-to-view format that identifies trends at the summary level for classes and students, with data drilldown capability using IT-neutral navigation, <u>Value:</u> So that I can successfully identify performance trends at the classroom, student and intervention group levels, for potential intervention and collaboration with peers.
H	T 2	Teacher / Counselor / PLC	<u>Need:</u> I need access to a library of evidence-based/district adopted interventions that are specific to the common warning indicators associated with student achievement and successful graduation, and are supported with evidence of success, <u>Value:</u> So that I can quickly and efficiently identify the intervention to improve that student’s performance, in the moment.
H	T 3	Teacher / Counselor / PLC	<u>Need:</u> I need multi-year, initial and sustaining Professional Development training that addresses the “what”, “how” and “why” of the Student Success Framework (RTI & DEWIS), <u>Value:</u> So that I can commit myself to the process and understand my function and role, in order to improve student achievement.

Priority H/M/L	Story #	Perspective	Story
H	T 4	Teacher / Counselor / PLC	<u>Need:</u> I need meaningful communications with cross-disciplinary/grade level teams and interventionists for collaboration and leadership in validating good practices and developing exceptional interventions not addressed by standard protocols, <u>Value:</u> So that “whole student” needs can be met with an effective non-standard intervention when standard guidance is not sufficient.
M	T 5	Teacher / Counselor / PLC	<u>Need:</u> I need to minimize data entry (essential data) during my day through the use of integrated systems and a single data entry toolset, <u>Value:</u> So that I can spend more time working directly with my students.
H	T 6	Teacher / PLC	<u>Need:</u> I need access to current curriculum that supports the unique needs of my students and is validated against a solid body of evidence, <u>Value:</u> So that I can improve student performance when curriculum currently in place no longer supports desired student outcomes.
H	T 7	Teacher / PLC	<u>Need:</u> We need professional development and ongoing technical assistance regarding change management and implementation of the framework, <u>Value:</u> So that we can effectively implement the system and build a sustainable structure.
H	P 1	Principal / Counselor / RTI-DEWIS Coordinator / Coach	<u>Need:</u> I need access to all information provided to the teachers in my building/school, as well as summary view and reports of my school/building’s student achievement, behavior, and graduation risk data, <u>Value:</u> So that I can regularly review the progress of students, classrooms, grades and the school/building against core standards and other key performance indicators.
H	P 2	Principal / Counselor / RTI-DEWIS Coordinator / Coach	<u>Need:</u> I need access to state-wide school data for schools in similar and dissimilar situations, <u>Value:</u> So that I can conduct comparative analysis of my school/building’s performance.

Priority H/M/L	Story #	Perspective	Story
H	P 3	Principal / Counselor / RTI-DEWIS Coordinator / Coach	<u>Need:</u> I need access to automated tools that interface with existing systems at all levels of the education continuum (classroom, school, school district, ESD and OSPI), <u>Value:</u> So that I can avoid duplicate data entry, minimize the time invested in maintaining systems, reduce data entry requirements to focus more resources and direct student outcomes.
H	P 4	Principal / Counselor / RTI-DEWIS Coordinator / Coach	<u>Need:</u> I need professional development and ongoing technical assistance for preparing for implementation of the framework, data analysis and organizational change, <u>Value:</u> So that the framework that is implemented can be successful.
H	P 5	Principal / Counselor / RTI-DEWIS Coordinator / Coach	<u>Need:</u> We need to be able to analyze building trend data regarding: <ul style="list-style-type: none"> <li>➤ outcomes with specific curricula/interventions (including outcomes with specific populations),</li> <li>➤ cost (actual materials/license, as well as training/support to implement), and</li> <li>➤ ability to achieve fidelity,</li> </ul> <u>Value:</u> So that we can determine the most effective use of resources.
H	P 6	Principal / Counselor / RTI-DEWIS Coordinator / Coach	<u>Need:</u> We need professional development and ongoing technical assistance regarding for using the technical solution, <u>Value:</u> So that we can effectively implement the system and build a sustainable structure.
H	SD 1	School District Superintendent / District Team	<u>Need:</u> We need all of the capabilities identified for the Principals/Building Managers, plus summary data and trending for the district as a whole, <u>Value:</u> So that we can monitor student progress and identify opportunities for improvement.
H	SD 2	School District Superintendent / District Team	<u>Need:</u> We need ongoing resources committed over 5-6 years, including funding and personnel, to administer the framework from an administrative, professional development and interventionist perspective, <u>Value:</u> So that the framework can be adequately supported upon deployment and sustained over time.

Priority H/M/L	Story #	Perspective	Story
H	SD 3	School District Superintendent / District Team	<u>Need:</u> I need evidence-based implementation models, <u>Value:</u> So that I can effectively integrate RTI/DEWIS with ongoing district initiatives to ensure student success.
H	SD 4	School District Superintendent / District Team	<u>Need:</u> We need to be able to analyze and compare building and district level trend data regarding: <ul style="list-style-type: none"> <li>➤ outcomes with specific curricula/interventions (including outcomes with specific populations),</li> <li>➤ cost (actual materials/license, as well as training/support to implement), and</li> <li>➤ ability to achieve fidelity,</li> </ul> <u>Value:</u> So that we can determine the most effective use of resources.
H	SD 5	School District Superintendent / District Team	<u>Need:</u> We need professional development and ongoing technical assistance regarding change management and implementation of the framework, <u>Value:</u> So that we can effectively implement the system and build a sustainable structure.
H	ESD 1	Educational Service District	<u>Need:</u> I need all of the data, trending and resource capabilities provided to the School Districts, consistent with school district authorizations for access to data, <u>Value:</u> So that I can consult, advise and support their unique needs within the framework.
H	ESD 2	Educational Service District	<u>Need:</u> We need professional development and ongoing technical assistance regarding change management and implementation of the framework, <u>Value:</u> So that we can effectively implement the system and build a sustainable structure.
H	SPI 1	OSPI Staff	<u>Need:</u> I need access to summary information from the schools and school districts across the state to support analysis of programs, student performance, district compliance with state and federal standards, and for needs identification, <u>Value:</u> So that I can influence policies, procedures and funding to support student success, answer legislative inquiries, and capture and make available data regarding the successful use of interventional tools.

Priority H/M/L	Story #	Perspective	Story
H	SPI 2	OSPI Staff	<p><u>Need:</u> I need data management tools to interface with existing systems, such as the K-12 Student Longitudinal Data System,</p> <p><u>Value:</u> To minimize redundancy and honor the data governance principle of collect once/use many times.</p>
H	SPI 3	OSPI Staff	<p><u>Need:</u> I need ongoing resourcing, in terms of program funding and staff, to support the framework,</p> <p><u>Value:</u> To sustain the program’s impact on student achievement and not have to end a program that has had positive results.</p>
H	SPI 4	OSPI Staff	<p><u>Need:</u> I need to be part of an integrated, organization-wide effort that consolidates interventional, professional development and program management resources,</p> <p><u>Value:</u> So that I can provide an efficient, consistent approach to supporting an efficacious student success framework.</p>
H	SPI 5	OSPI Staff	<p><u>Need:</u> We need to be able to analyze statewide trend data regarding:</p> <ul style="list-style-type: none"> <li>➤ outcomes with specific interventions (including outcomes with specific populations),</li> <li>➤ cost (actual materials/license, as well as training/support to implement), and</li> <li>➤ ability to achieve fidelity,</li> </ul> <p><u>Value:</u> So that we can make data available to assist districts in the selection and use of the most effective resources, and so that we can make data available to assist ESDs in the selection and preparation of professional development and coaching resources.</p>
H	SPI 6	OSPI Staff	<p><u>Need:</u> We need professional development and ongoing technical assistance regarding change management and implementation of the framework,</p> <p><u>Value:</u> So that we can effectively implement the system and build a sustainable structure.</p>