

# Inventory and Assess the Condition of Washington's Schools

## Initial Report to the Washington State Legislature

December 1, 2015



*Satsop School*



*Midway Elementary Highline School District*

**Prepared by:  
Washington State University Energy Program**

The Washington State University Energy Program Plant Operations Support Consortium Team would like to thank staff with the Office of the Superintendent of Public Instruction and the Washington State Legislature for their guidance and support as we launched this important project.

## Purpose

The goal of this project is to provide elected officials with current information about the condition of Washington's public school buildings to help them make informed decisions about facilities that are essential to support basic education throughout the state.



To achieve this goal, the Legislature provided funds to the Washington State University (WSU) Energy Program's Plant Operations Support Consortium team, as a third-party ombudsman, to inventory and assess the condition of a sample of the state's public school buildings. This information will be entered into the *Inventory and Condition of Schools* (ICOS) database developed by the Office of the Superintendent of Public Instruction (OSPI).

### ***This inventory is the foundation for building long-term solutions for Washington's schools.***

The Legislature and OSPI recognize the need for current information about K-12 public school facilities and their condition so they can:

- Connect with the people of Washington about the school facilities needed across the state,
- Understand the classroom capacity that school districts need to serve new class size mandates, and
- Make informed decisions about how to provide equivalent school facilities for children across Washington.

### ***Terms used in this report***

- **Information and Condition of Schools (ICOS):** The database where information about school facilities (size, date of construction, usage, and condition) is stored. The WSU team is helping school districts enter new information into ICOS, and is also verifying information that school districts have already entered into ICOS.
- **Study & Survey (S&S):** A required process that school districts undergo to communicate district information to OSPI when applying for state construction or renovation funding. (See Attachment A for the table of contents of the S&S.)
- **Building Condition Assessment (BCA):** This systematic rating of common building components is based on uniform coding and categories, including substructure, shell, interiors, services, and finishes. The BCA is a component of the S&S and required for permanent inventory buildings.
- **Permanent inventory buildings:** Term used by OSPI to identify buildings that require a BCA in ICOS and represent buildings that are on a permanent foundation and contain instructional spaces.

*WSU applauds and greatly appreciates the hard work that school districts and OSPI have already done to develop information in ICOS.*

## Summary of WSU Deliverables

The deliverables required by the legislation (ESSB 6080 and 2EHB 1115.SL) are detailed in Table 1. To create these deliverables, the WSU team is:

- Completing BCAs for permanent inventory buildings that are not currently in ICOS.
- Verifying existing ICOS BCA data that has been entered since May 2012, when OSPI began requiring BCA data as a part of the S&S process.
- Measuring interior square footage of entire school facilities and counting classrooms in a sampling of districts statewide to investigate classroom space to support space ratios across different districts.
- Collecting or verifying S&S Chapter 1 data for districts completing an S&S by December 2016.
- Verifying K-3 classroom counts submitted by districts applying for a K-3 class size reduction grant.
- Collecting and inputting data required for S&S Chapter 1 for districts that have never completed an S&S (see Attachment B for an S&S Chapter 1 checklist).

**Table 1. Legislation and corresponding project deliverables**

Legislation	WSU Deliverables
Sect. 5054 (4): Input into ICOS all current S&S on file with OSPI as of July 1, 2015.	Complete BCAs for permanent inventory buildings not currently assessed in ICOS.
Sect. 5054(5): Conduct on-site verification of data for school districts with S&S that will expire June 30, 2017.	Verify existing inventory and condition data in ICOS for S&S grants received since May 2012.
Sect. 5054(6): Conduct on-site data collection of a sampling of school districts to calculate square footage and number of classrooms.	In a sample of school districts: <ul style="list-style-type: none"> <li>• Verify classroom counts submitted in the 2015 Annual Collection of Building Data, and</li> <li>• Measure total square footage of buildings across a variety of building types and districts.</li> </ul>
Sect. 5013(2): School districts must use data collected or validated by the WSU Energy Program for the inventory and condition of existing facilities.	Support completion of the S&S Chapter 1 portion of new FY 15/17 grants being completed by 11/30/2016.
SB 6080 Sec. 201: Verify count of necessary added classrooms in districts applying for a class size reduction construction grant.	Verify elementary classroom counts for districts that apply for K-3 class size reduction grants.
Sect. 5054(3): Conduct on-site visits to assess the inventory and condition of facilities in school districts that have no current S&S on file.	Complete S&S Chapter 1 for districts that have never had one.

## Initial Findings

### The ICOS System

- The difference between what the ICOS data system is and what the S&S process is needs more clarification
- Most of the data in ICOS is entered by the school districts or hired vendors, and is subject to the person entering it and their understanding of the system.
- Entering data into ICOS is **voluntary** except when a district is applying for an S&S grant, and the data can quickly get dated. One exception to this is the requirements of the OSPI Asset Preservation Program, which requires regular updating of the data on certain buildings.
- Due to a wide variety of people entering data into ICOS, data quality control and/or screening processes should be added to the system.

### The Study and Survey

- The S&S process uses some of the data from ICOS, and is used exclusively by OSPI to support the distribution of state construction dollars.
- S&Ss are only undertaken when a district is seeking construction support from the state.
- WSU has identified that some districts complete the bare minimum S&S requirements to secure state funding while other districts develop more comprehensive S&Ss and use them as long-range district planning tools as well as meeting the OSPI requirements.

## Data Findings

Information provided in this report would have been impossible to collect and evaluate without the continued efforts of OSPI to develop and refine the ICOS system. While this report may seem to point out possible shortfalls of the ICOS system, it is important to remember that these observations and suggestions would not be possible if the existing system did not already contain a large amount of valuable data.

With that in mind, more comprehensive discussion is needed regarding:

- The use, funding, and support of the database as a tool for state funding and as a tool for district-level management, especially in smaller districts with fewer resources.
- Which buildings should be tracked in the ICOS. Currently, only permanent inventory buildings containing instructional spaces and buildings in the Asset Preservation Program are required to be in ICOS. Some districts have chosen to enter other types of buildings including, but not limited to, portables, administration space, and maintenance space.
- Where state oversight of school building maintenance should start and stop.

The state currently has 295 individual school districts. Exploring the ICOS data indicates that WSU will be required to perform on-site visits in over 230 school districts. As of December 1, 2015, WSU staff members have visited 20 school districts.

- Of the 7,349 buildings identified in ICOS as containing classrooms, 3,971 are portables.
- Of the roughly 4,421 buildings requiring a BCA (permanent and instructional) in ICOS, over 2,971 were completed before WSU began work on this project.

### Completing BCAs

The WSU team has identified 1,397 buildings in 198 school districts that need BCAs. To date, nine districts have been visited in order to complete on-site BCAs.

### **Verifying data already in ICOS**

WSU has identified 51 districts with data input since May 2015. A representative sample of those 51 districts will be determined and assigned for visits in the near future.

### **Measuring entire buildings and verifying classrooms counts submitted in 2015**

WSU has divided the 295 districts into categories to cover requirements of the legislation. Using a 15% sample size as a representative proxy, almost 400 individual schools around the state will be visited, measured, and classrooms counted over the next year.

### **Supporting S&S Chapter 1 for districts receiving grants in 2015-2017**

OSPI has no way of knowing which or how many districts will apply for S&S grants. Historically, OSPI has seen roughly 35 applicants a year.

- 12 districts have been approved for S&S grants since July 2015.
- WSU has identified that it will support only Chapter 1 of the S&S requirements, and that support will vary by district.

### **Verifying K-3 classroom counts submitted by districts applying for K-3 class-size reduction grants**

As of the submittal of this report, the K-3 Classroom Size Reduction grant application window has closed.

- So far, 63 districts have applied, representing over 450 elementary schools requiring verification.
- To date, WSU has visited over 75 elementary schools and finds the classroom counts being submitted by the districts to be very good.
- The major area of difference involves existing classrooms that the districts utilize as learning resource centers or pull-out spaces for specific education processes, and have not counted as classrooms.

### **Completing S&S Chapter 1 for districts that have never submitted an S&S to OSPI**

OSPI identified 22 districts that had never completed an S&S, which indicates that those districts have not received state construction funds in the recent past.

- WSU has been on site at three of these districts. These districts tend to be very small, and often consist of only one, generally older, school building. (Satsop School pictured on the cover is an example.)

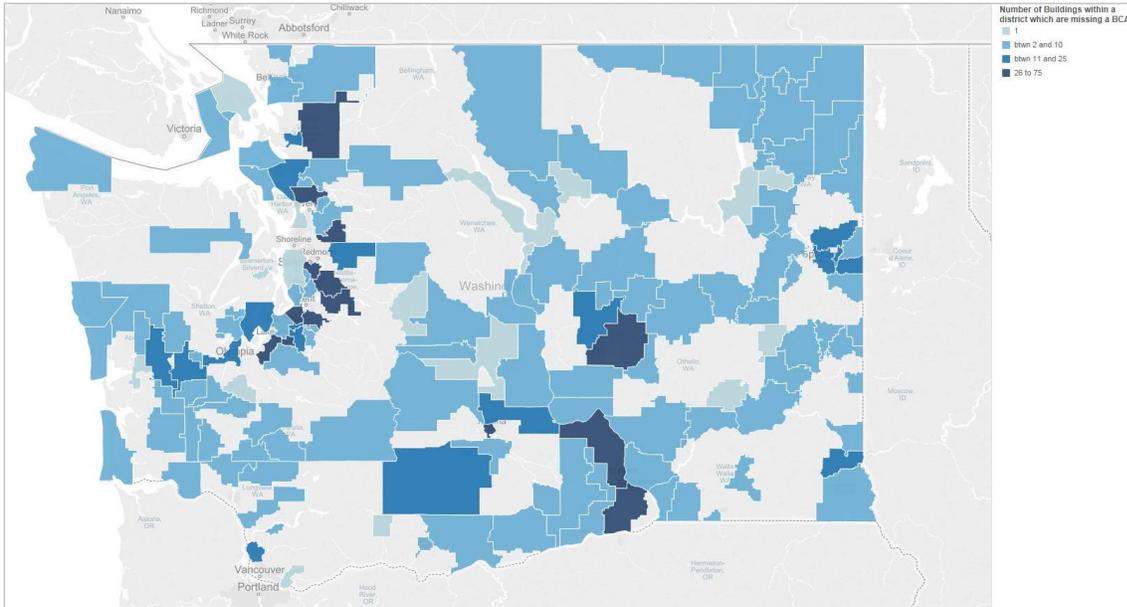
### **Maps**

The maps on the following pages illustrate the breadth of the effort to be undertaken by WSU to meet the requirements of the legislation.

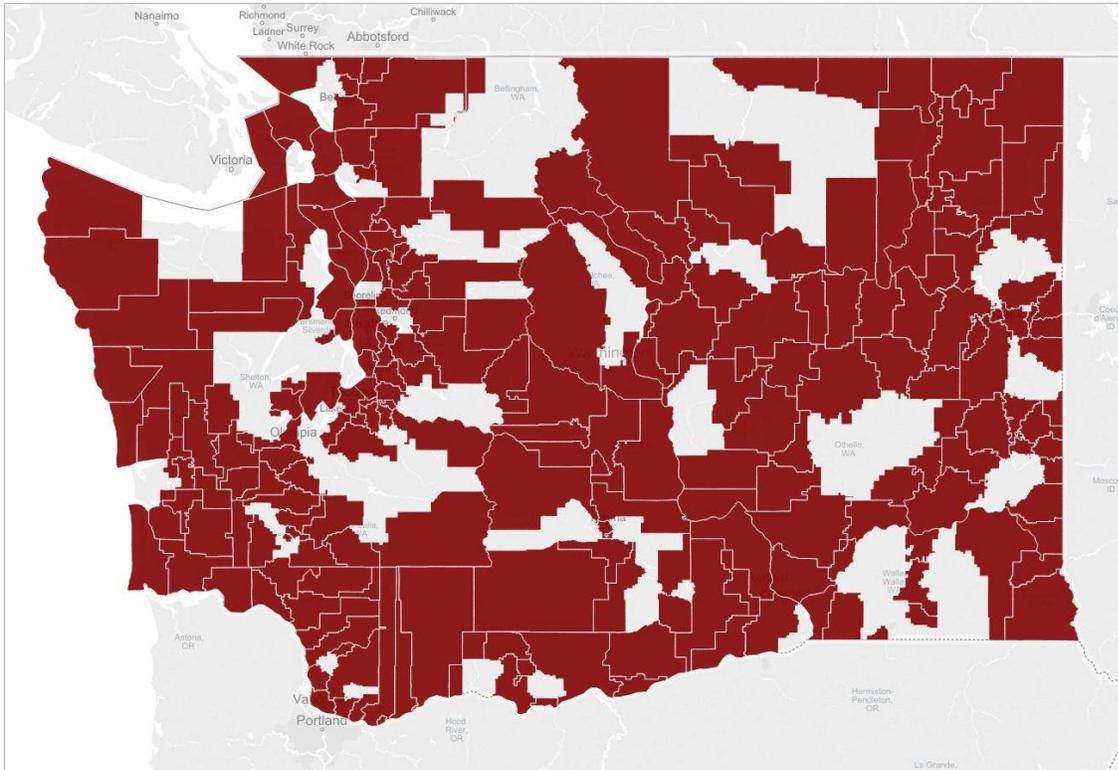
### **For More Information**

The WSU team will provide a final report on this project in December 2016. If you have any questions about the process or progress of this project, please contact the WSU Energy Program's Plant Operations Support Consortium at [plantops@energy.wsu.edu](mailto:plantops@energy.wsu.edu) or 360-956-2230.

**Figure 1. School districts with missing BCAs (light blue = one missing BCA; darker shades of blue = greater number of missing BCAs), illustrating the scope of the BCA work to be completed by WSU.**



**Figure 2. School districts requiring some level of visitation and support by the WSU team (in red). Additional districts may be visited to complete the facility measurement task.**





## **Attachment A: Table of Contents for a Study and Survey Report**

Chapter I	Inventory and Area Analysis of Existing School Facilities
Chapter II	Long-range Educational and Facilities Plan
Chapter III	Demographic Data
Chapter IV	District's Capital Funds
Chapter V	Existence of a Housing Emergency
Chapter VI	Racial Balance or Imbalance
Chapter VII	School Facilities Required and Urgency of Need
Chapter VIII	Modernization
Chapter IX	Deferred Maintenance
Chapter X	District's Timeline
Chapter XI	Accessible Unused or Underutilized School Facilities in Neighboring Districts
Chapter XII	Adjustments of School Attendance

**Attachment B: Study and Survey Chapter 1 Checklist**

**OSPI School Facilities  
Inventory and Building Condition Assessment Checklist**

This checklist corresponds to information required to complete **Chapter 1 of a Study & Survey**. All information must be provided in accordance with OSPI School Facilities Manual and ICOS User Manual & Glossary.

School district consultants should work with the applicable OSPI School Facilities Regional Coordinator as needed.

<b>School Facility and Site General Information</b>		
For each school facility campus in a district, provide the following information:		
<b>1</b>	School Facility Name	<input type="checkbox"/>
<b>2</b>	School Facility Physical Coordinates Use the ICOS map function to enter a street address or to pin a location.	<input type="checkbox"/>
<b>3</b>	Total Site Acreage If there is more than one facility on a site, approximate a separate acreage for each facility.	<input type="checkbox"/>
<b>4</b>	School Code(s)	<input type="checkbox"/>
<b>5</b>	Grades Served	<input type="checkbox"/>
<b>6</b>	Site Plan Upload Site map or plan should be to scale and identify all buildings on the campus. Aerial photographs are acceptable.	<input type="checkbox"/>
<b>7</b>	Site Condition Assessment	<input type="checkbox"/>

<b>Building Information</b>		
For each permanently construction building at a school facility, provide the following information:		
<b>1</b>	Building District Assigned Name	<input type="checkbox"/>
<b>2</b>	Building Floor Plan Upload Floor plan should be to scale and label primary spaces.	<input type="checkbox"/>
<b>3</b>	Building Area Analysis Upload May be in table format or a graphic combined with or separate from the floor plan. Indicate any individual areas.	<input type="checkbox"/>
<b>4</b>	Number of Floors Include any occupied basements.	<input type="checkbox"/>
<b>5</b>	Characteristics Indicate whether building is occupied, vacant, leased, has classrooms, etc.	<input type="checkbox"/>
<b>6</b>	Types and Quantities of Classrooms	<input type="checkbox"/>
<b>7</b>	Year Originally Built	<input type="checkbox"/>
<b>8</b>	District Assigned Area Name	<input type="checkbox"/>
<b>9</b>	District Assigned Area Use Select one or more uses from the list provided.	<input type="checkbox"/>
<b>10</b>	Building Inventory: Gross Building Square Feet and Gross Instructional Square Feet	<input type="checkbox"/>
<b>11</b>	Building Condition Assessment	<input type="checkbox"/>