



# The Oregon Examiner

PUBLISHED BY THE OREGON STATE BOARD OF EXAMINERS FOR ENGINEERING AND LAND SURVEYING

The mission of the Oregon State Board of Examiners for Engineering and Land Surveying (OSBEELS) is to regulate the practice of engineering, land surveying, photogrammetric mapping, and water right certification in the state as they relate to the welfare of the public in safeguarding life, health and property.

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## New Board member

**J**ason J. Kent, PE, was appointed by Governor John A. Kitzhaber to the Oregon State Board of Examiners for Engineering and Land Surveying (OSBEELS) as of November 2013.

Kent completed his undergraduate degree in Biological Sciences with an emphasis on Environmental Biology at Ohio University. He completed his graduate work in Civil Engineering, with an emphasis on Water Resources Planning and Management, at Colorado State University. He obtained his registration to practice civil engineering in Oregon by Comity in 2008. Kent is also licensed in Washington, Idaho and Alaska.

Kent's primary field of practice is water resources and he has been involved with projects utilizing engineering, land surveying, photogrammetry and water right examination. "My multidisciplinary background will provide the Board with some different perspectives," Kent explained.

He believes his familiarity with these key areas of practice will also help

him work towards fulfilling the core function of the OSBEELS mission – safeguarding the life, health and property of the people of Oregon. "I believe deeply that the welfare of the public is, and should always be, the primary concern for projects conducted in engineering and land surveying," Kent said. "This belief is what drives me to service in this position."

In the Pacific Northwest, Kent has worked with HDR, Inc.; Tetra Tech, Inc. and Three Parameters Plus, Inc. His current position is as a water resources engineer at Smith-Root, Inc. Kent has engineered and managed a number of projects focusing on hydraulics, fish passage, and stream restoration.

As a member of the American Fisheries Society, Kent has served as the Hydrology/Water Quality Committee Chairman for the Idaho Chapter from 2006 to 2008, the Educational/Outreach Committee Chairman for the Oregon Chapter from 2008 to 2010 and the Internal Director for the Oregon

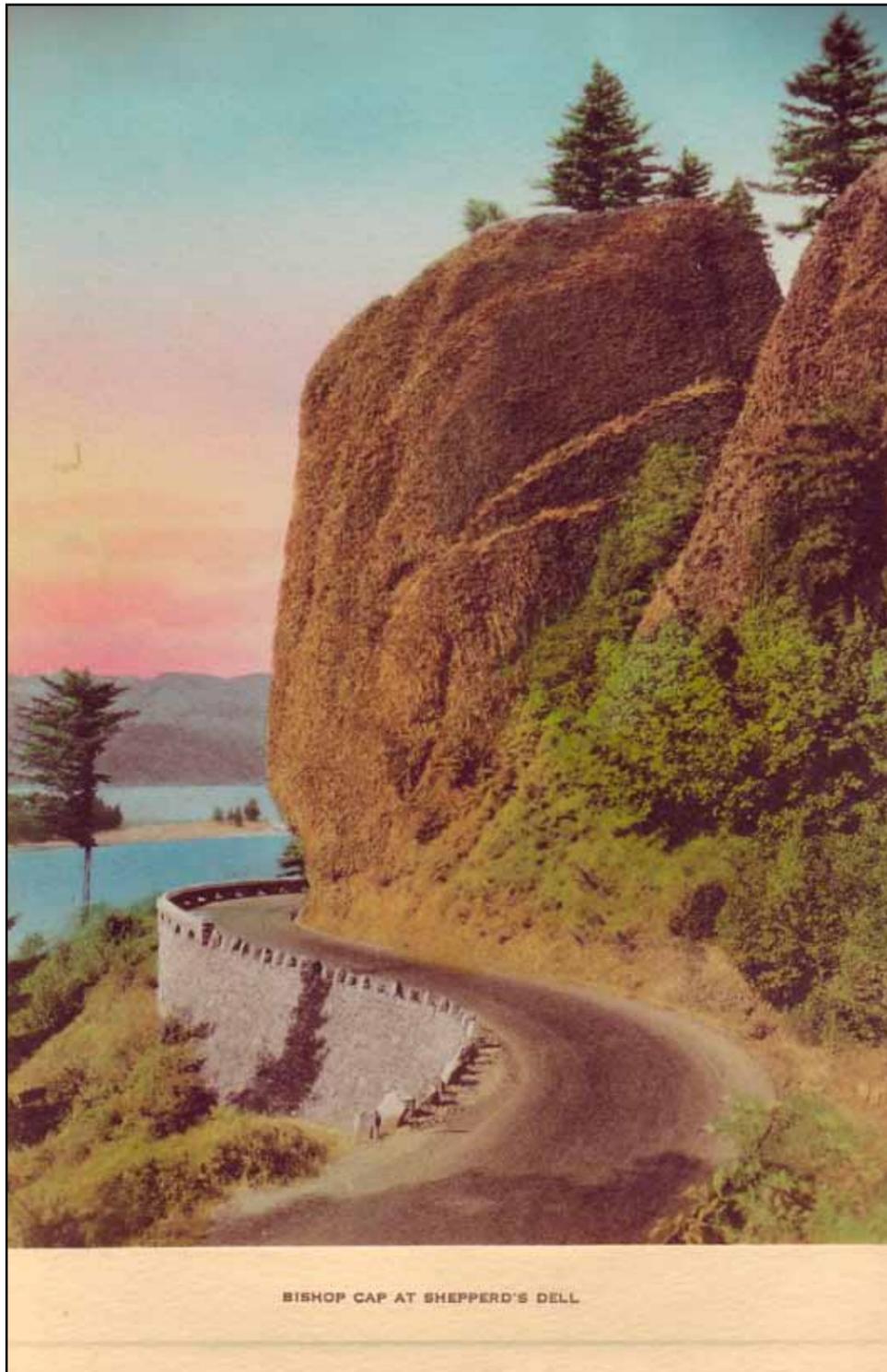
See **BOARD MEMBERS**, Page 11

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# HISTORIC COLUMBIA RIVER HIGHWAY SHOWCASES REVOLUTIONARY ENGINEERING



This digital scan of a hand-painted glass slide depicts Bishop's Cap at Shepperd's Dell. This is one of a vast collection of slides showing the early days of the Columbia River Highway. The slide collection is held by the Oregon Department of Transportation (ODOT).

“ON STARTING THE SURVEYS, OUR FIRST BUSINESS WAS TO FIND THE BEAUTY SPOTS, OR THOSE POINTS WHERE THE MOST BEAUTIFUL THINGS ALONG THE LINE MIGHT BE SEEN IN THE BEST ADVANTAGE AND, IF POSSIBLE, TO LOCATE THE ROAD IN SUCH A WAY AS TO REACH THEM.”

When interviewed in 1915, Samuel Lancaster, professional engineer (Certificate No. 1100\*) and designer of the Columbia River Highway, detailed the inspiration behind America's first scenic highway. The Columbia River Highway was built to connect The Dalles and Portland while highlighting the incredible natural features of the Columbia River Gorge. “A careful study of the great gorge of the Columbia revealed its wonderful beauty and the great possibilities for a scenic and commercial highway,” Lancaster wrote. According to the Historic American Engineering Record (HAER), the highway was “an early 20<sup>th</sup> Century technical and civic achievement; successfully mixing sensitivity to a magnificent natural landscape with ambitious engineering.”

The original highway spanned

Multnomah, Hood River and Wasco Counties and, at the time, was the most expensive (\$11 million) and complex roadway construction ever attempted. The project started in 1913 and was completed in 1922, using only men, horses and steam power, as modern construction equipment didn't exist. It was one of the earliest applications of cliff-face road building to highway construction; this technique was previously only used by railroads.

Since they would be building into cliffs and on substantial slopes, Lancaster set extremely high standards for his roadway.

## Grades

- No grades should exceed five percent.
- During roadway testing and experimentation, Lancaster determined that this percentage allowed for safer descents and easier inclines than the traditional 10 to 20 percent grade used on wagon trails.

## Curves

- Curves should have a minimum 200-foot turning radius to avoid hairpin turns.
- Some locations didn't allow for the first two criteria to be met.

In these situations, Lancaster designed loops where a reduction in one percent of grade for every 50 feet of turning radius was used to compensate for the 100-foot difference in available turning radius.

- Curves were widened from two feet to six feet at the midpoint of the curve to allow for better car handling.
- Continuous curves would be used, whenever feasible, to best follow the natural curvature of the Gorge. Continuous curves meant less environmental impact because of reduced cut and fill. These curves also reduced crowning, which can lead to draining issues and accelerated road deterioration.

## Road surface

- The road would be at least 18-24 feet wide and two-rail wooden guardrails would line the roadway.
- New pavement was developed specifically for the highway. An asphaltic concrete over a broken stone base was used. A final asphalt coat provided a smoother finish.
- To protect the new pavement,

the highway used French drains, gutters, curbs, pipe culverts, box culverts and drop inlets were used to keep water from pooling on or under the roadway.

## Arches

- Numerous arches were also used to facilitate drainage in this rainy region. The arch allowed for water to run off the roadway, instead of pooling as it would behind a flat wall.
- Semi-elliptical arches were used because they were less labor and material intensive.

According to Friends of the Historic Columbia River Highway, some of these criteria would later become national standards for roadway construction.

The Columbia River Highway featured 17 bridges, each of which was individually designed to take a number of factors, such as scenic inspiration, grading, drainage and alignment, into consideration. For example, the focus of the Latourell Creek Bridge was safety and cost-effectiveness. The bridge needed to be light because of poor foundation materials. This was achieved using a technique involving reinforcing steel

See **HCRH**, Page 4

\*OSBEELS was established through an act of the 30th Legislative Assembly and met for the first time on July 11, 1919. Lancaster's registration date was January 1, 1920. He retained his registration until 1939 and died in 1941.

HCRH, from Page 3

and concrete. According to HAER, “from the use of arch ribs instead of a barrel arch, to spandrel columns and diagonals instead of a solid wall, to columns and bracing instead of solid concrete piers...is important to its lightness, its lack of mass.” When it was built, the Latourell Creek Bridge was one of the lightest concrete structures of its size in America. The highway also boasted seven viaducts, three tunnels, and numerous half-tunnels, dry masonry retaining walls, rustic rubble parapets and pedestrian overlooks.

Upon completion, it was called “the King of Roads” and a “poem in stone” by members of the public. President Theodore Roosevelt said,

“You have in the Columbia Highway the most remarkable engineering in the United States.” The Oregon Department of Transportation (ODOT) has described the highway as the “pinnacle of early 20<sup>th</sup> Century rural highway design.” When the roadway was designated a National Historic Landmark, the citation described an “outstanding example of modern highway development...and is the single most important contribution to the fields of civic engineering and landscape architecture by Samuel C. Lancaster.”

Despite these substantial accolades, the construction of the Bonneville Dam a decade later would increase

water levels so substantially that most of the scenic sites were covered. Additionally, increased shipping demand in the Pacific Northwest made larger, faster roads a necessity. During the construction of Interstate 84, much of the original Columbia River Highway was paved over. Tunnels that were no longer needed were filled with rock and bridges were destroyed.

It wasn't until 1981 that a restoration of the Columbia River Highway was proposed. The goal was to turn the original roadway into a hiking and biking trail. This was an interesting coincidence, as the Columbia River Highway was marketed to wealthy Oregonians and politicians as a

“good road.” At the time, “good roads” were those built to connect rural areas to more metropolitan areas. Much of the focus of these roads was on improving transportation for bicyclists and allowing them to ride safely alongside mechanized and horse-drawn vehicles.

The harsh Columbia River Gorge weather has taken its toll on the remaining portions of the Columbia River Highway. Roadway and masonry alike were crumbling due to the long-term lack of maintenance. However, the Columbia River Gorge National Scenic Area Act brought attention and support to the abandoned highway. To date, 11 miles of the original road have been developed as the Historic Columbia River Highway State Trail. The restoration has been made possible through cooperation between ODOT, Oregon Parks and Recreation Department, the U.S. Department of Agriculture Forest Service, the Western Federal Lands Highway Division of the Federal Highway Administration, the Historic Columbia River Highway Advisory Committee, Friends of the Historic Columbia River Highway and many volunteers and donors.

There are restoration plans in place for 12 more miles of historic roadway.



Another ODOT hand-painted glass slide shows the Rowena Loops near The Dalles. Sweeping loops were used to compensate for reduction in turning radius on steep portions of the highway.

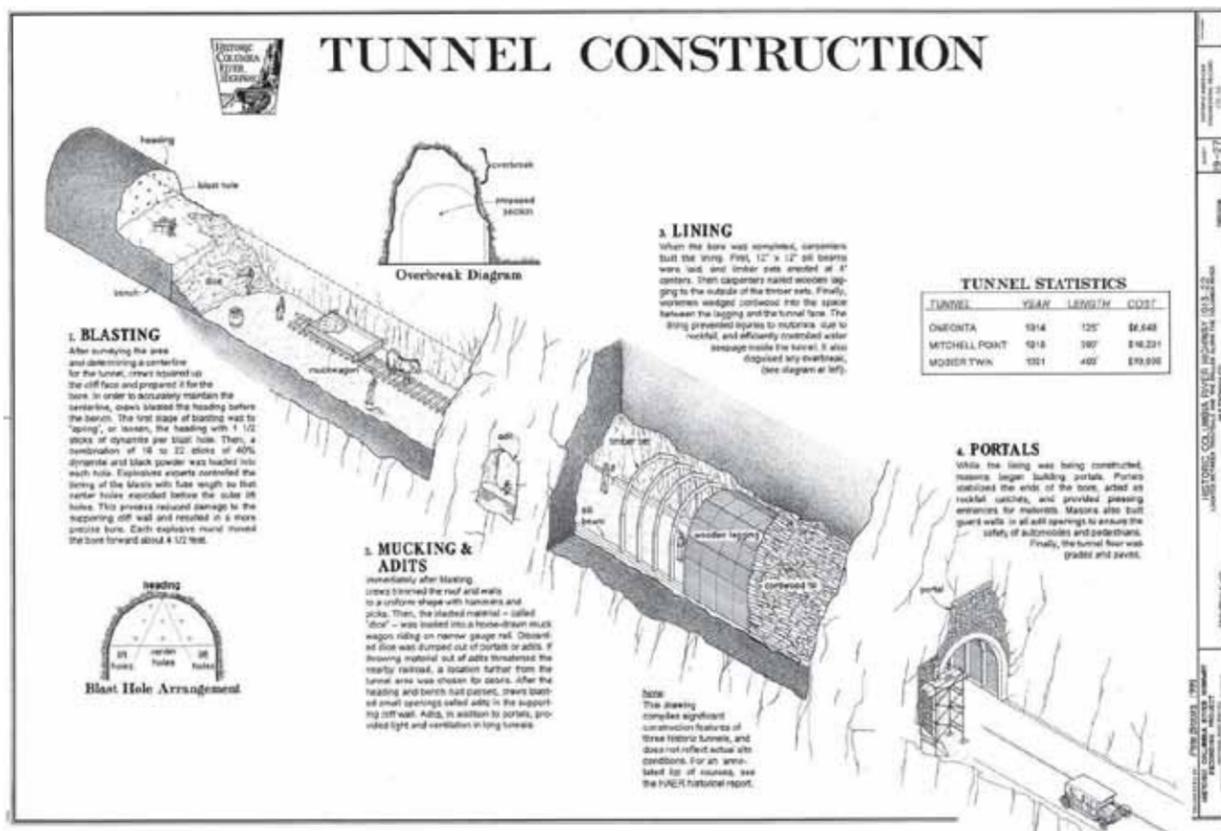
The ultimate goal is for people to be able to bicycle from Troutdale to The Dalles via the Historic Columbia River Highway, the Historic Columbia River Highway State Trail or connecting county roads by 2016 for the 10<sup>th</sup> anniversary of the dedication of the highway. Restoration efforts have cost \$23 million to date; with another \$55 million needed to complete the project by 2016. Funding is obtained through state and federal grants, funding from government agencies, congressional appropriations, the Oregon Lottery, various historic preservation and land conservation funds, through fundraisers and through donations. Anyone interested in donating toward the restoration or volunteering their time at fundraising events, work parties or educational and outreach events, can contact Friends of the Historic Columbia River Highway by

HCRH honors

The Historic Columbia River Highway has received a number of awards and recognition over the past 98 years, including:

- Named a National Scenic Byway
- Part of the Oregon Scenic Byway Program
- Named a Millennium Legacy Trail
- Named a National Recreation Trail by the U.S. Department of Interior
- Named an All-American Road for showcasing scenic, natural, cultural and recreational significance
- On the National Register of Historic Places
- Named a National Historic Landmark
- Received the Federal Highway Administration's awards for environmental excellence in Historic and Architectural Preservation and Scenic Byways categories
- Received the U.S. Department of Transportation's National Honor Award for Design and Transportation

email at FHRCH@comcast.net or by telephone at 503-227-5638. For more information on the Historic Columbia River Highway, visit www.hcrh.org.

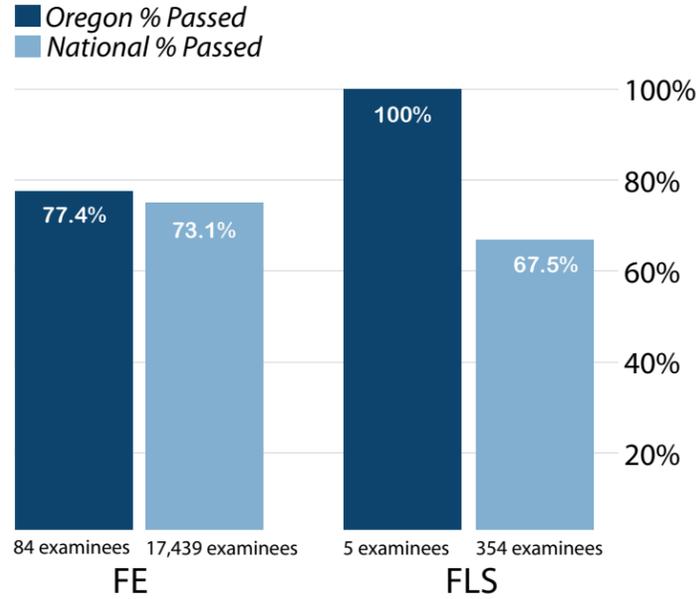


This drawing from 1913 shows the process that went into building all the tunnels along the Columbia River Highway. Engineering drawings such as this are preserved by organizations such as the Historic American Engineering Record of the National Parks Service. This particular drawing was delineated by Pete Brooks.

# Examination Statistics

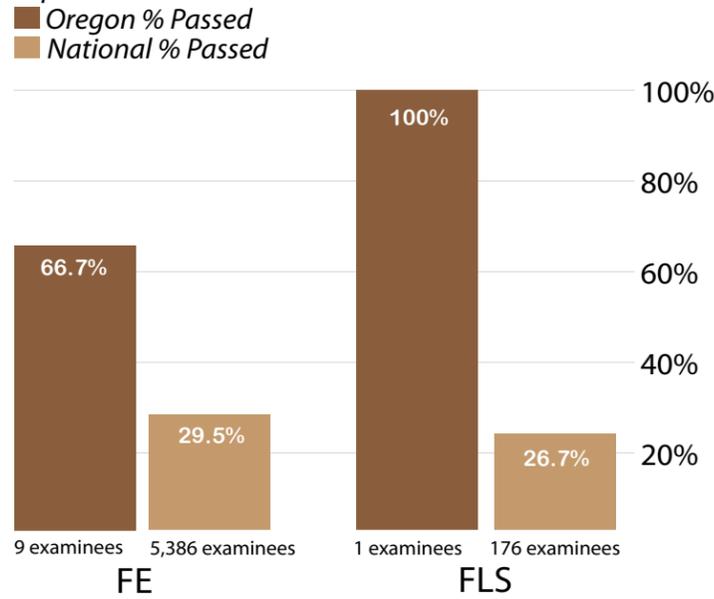
## October 2013 Fundamentals Exam

### First Time Takers



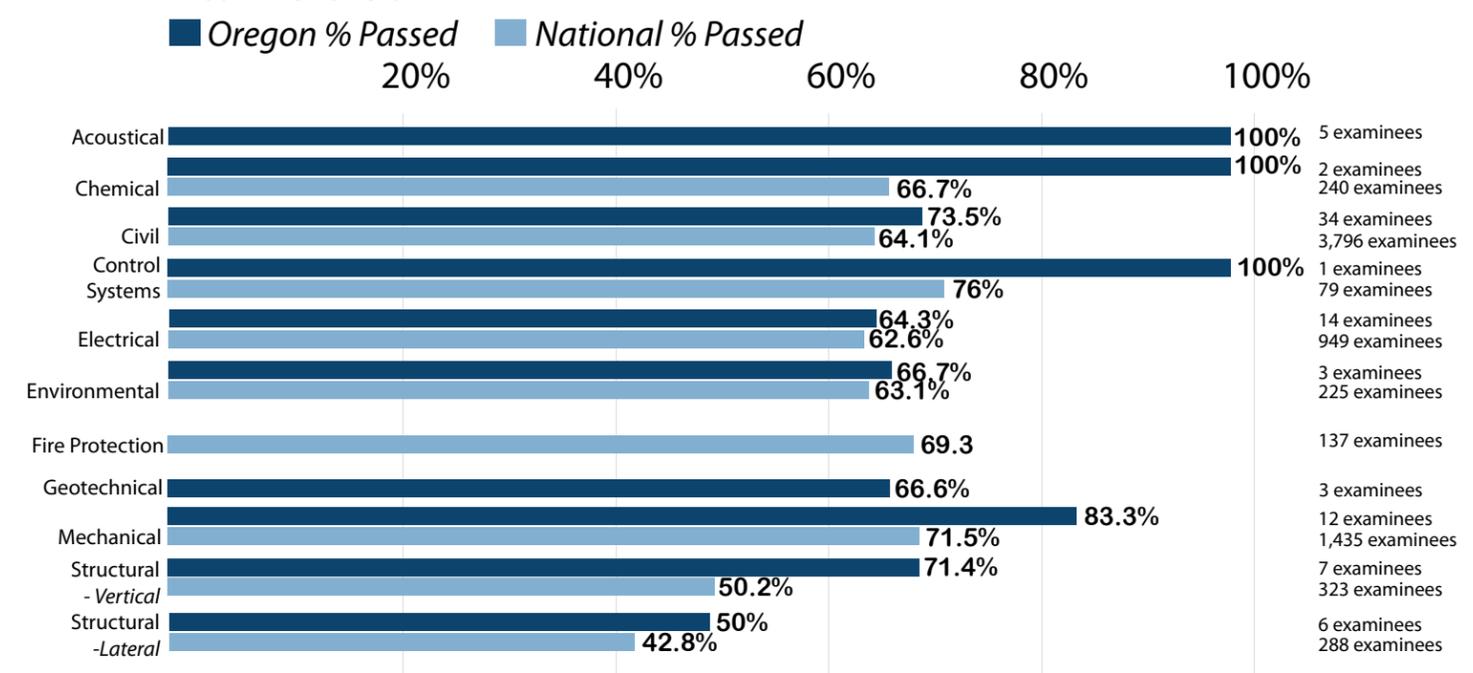
## October 2013 Fundamentals Exam

### Repeat Takers



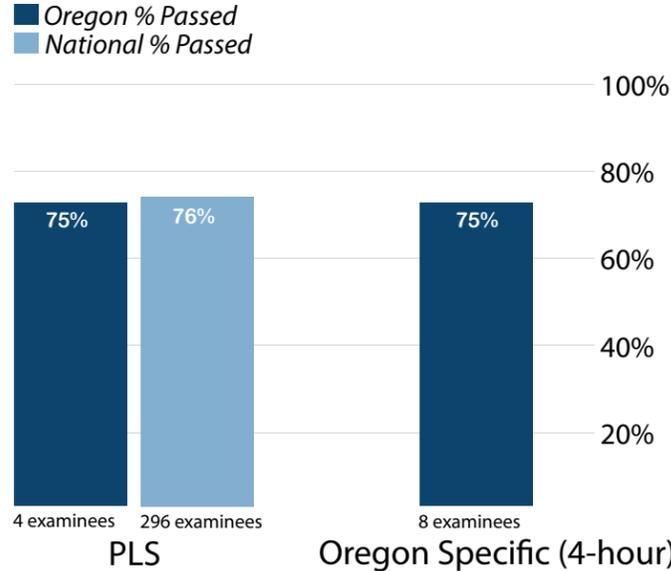
## October 2013 Professional Engineering Examination Statistics

### First Time Takers



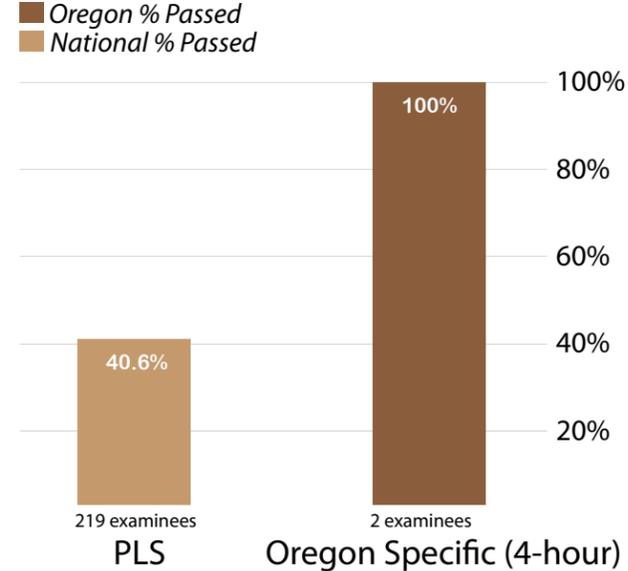
## October 2013 Professional Surveying Exam

### First Time Takers



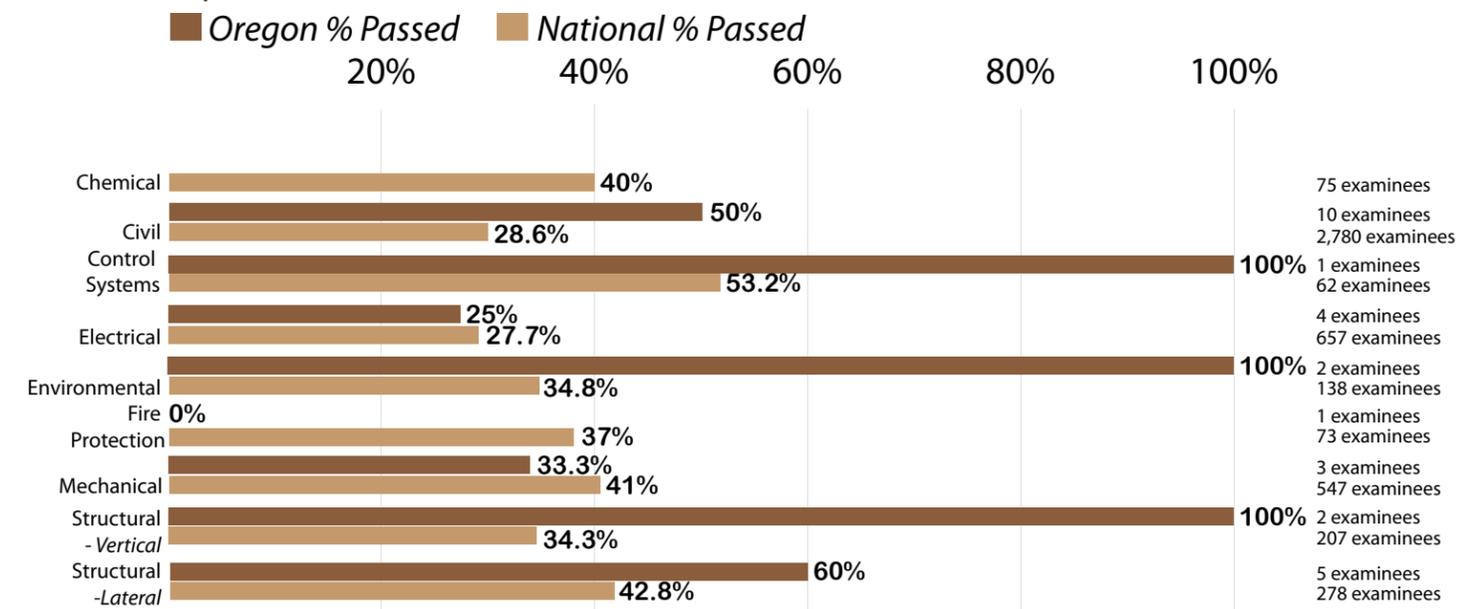
## October 2013 Professional Surveying Exam

### Repeat Takers



## October 2013 Professional Engineering Examination Statistics

### Repeat Takers



**NOTE:** There were no first time takers for the Fire Protection PE examination. There were no repeat takers for the Chemical or Fire Protection PE examinations. The Acoustical and Geotechnical PE are Oregon-specific examinations, therefore, national numbers are not available. Additionally, there were no repeat takers for the PLS.

# Investigation and Enforcement

## Law enforcement cases with sanctions from Nov. 1, 2013 to Jan. 1, 2014

### 2618 - Ruben M. Martinez

The Board issued a Final Order against Ruben M. Martinez for land surveying without a license. Mr. Martinez used the designation "PLS" with Portland contact information when communicating with the Board on eight occasions; even after being informed that he could not use that title without an Oregon license. Mr. Martinez was assessed a \$1,000 civil penalty violations of ORS 672.025 (1) and (2).

### 2734 - Gary D. Wicks

The Board issued a Final Order against Gary D. Wicks, PE, PLS, CWRE, finding that he failed to comply with CPD requirements. Mr. Wicks did not respond to correspondence from auditors. Mr. Wicks entered into a settlement agreement to pay a \$1,000 civil penalty for violations of OAR 820-010-0635(1) and (2) and OAR 820-020-0015(8).

### 2742 - Philip O. Martinson

The Board issued a Final Order against Philip O. Martinson, PE, finding he performed engineering services while his registration was delinquent. Mr. Martinson offered testimony during an OSHA hearing while his license was in delinquent status. He said he was unaware of

the delinquency until informed by the Department of Justice as a result of his testimony. Mr. Martinson entered into a settlement agreement to pay a \$500 civil penalty for violations of ORS 672.045(1)&(2) and ORS 672.020(1).

### 2758 - Randall J. LaPlante

The Board issued a Final Order against Randall J. LaPlante, PE, finding that he failed to comply with CPD requirements. Mr. LaPlante eventually produced supporting documentation showing compliance. Mr. LaPlante entered into a settlement agreement to pay a \$300 civil penalty for a violation of OAR 820-020-0615(8).

### 2760 - Thomas W. Pennington

The Board issued a Final Order against Thomas W. Pennington, PE, finding that he failed to comply with CPD requirements. Staff were unable to reach Mr. Pennington to gain his compliance with an audit request, as he had failed to update his address with the Board. Mr. Pennington entered into a settlement agreement to pay a \$100 civil penalty for a violation of OAR 820-010-0605(1).

### 2761 - Edward J. Pfluger

The Board issued a Final Order against Edward J. Pfluger, PE,

finding he failed to comply with CPD requirements. Mr. Pfluger entered into a settlement agreement to pay a \$500 civil penalty for violations of OAR 820-010-0635(1), OAR 820-020-0015(8) and OAR 820-020-0025(1).

### 2763 - Keith L. Short

The Board issued a Final Order against Keith L. Short, PE, finding he failed to comply with CPD requirements. Mr. Short entered into a settlement agreement retire his license without the option of reinstatement in lieu of a civil penalty for violations of OAR 820-010-0635.

### 2765 - Arthur M. Noxon

The Board issued a Final Order against Arthur M. Noxon, PE, finding that he failed to use a compliant stamp. Mr. Noxon used a number of different stamps with varying designs to seal acoustical documents. Prior to entering into a settlement agreement, Mr. Noxon produced a compliant stamp and surrendered all noncompliant stamps to the Board. Mr. Noxon entered into a settlement agreement to pay a \$100 civil penalty for violations of OAR 820-010-0620(1), (2) and (4) and OAR 820-020-0015(9).

See **ENFORCEMENT**, Page 11

# Renewal Form

Registrant Contact Information			
First name (personal name)	Middle name or initial	Last name (family name)	
If you have a Social Security number Oregon law requires that it be used. Only use a Passport number if you don't have a Social Security number.			
<input type="checkbox"/> Social Security #	OR <input type="checkbox"/> Passport #	Country issuing passport	
Birth date (Mo/Day/Yr)	Where do you want correspondence mailed to? <input type="checkbox"/> Home address OR <input type="checkbox"/> Business address	Registration Number	
Home address (include any apartment number)			Home/Personal phone #
City	State	Zip/Postal code	Home email address
Business name		Business phone #	Business fax #
Business address (include any suite number)			
City	State	Zip/Postal code	Business email address
Address for public disclosure (As per Oregon Revised Statute (ORS) Chapter 192)			<input type="checkbox"/> Same as mailing address
City	State	Zip	

**Social Security Guidelines**  
 As part of your application for an initial or renewed occupational, professional or recreational license, certification, or registration issued by OSBEELS, you are required to provide your Social Security Number to OSBEELS. This is mandatory. The authority for this requirement is ORS 25.785, ORS 305.385, 42 USC § 405 (c) (2) (C) (I), and 42 ISB § 666 (a) (13). **Failure to provide your Social Security Number will be a basis to refuse to issue or renew the license, certification, or registration you seek.** This record of your Social Security Number will be used for child support enforcement and tax administration purposes (including identification) only, unless you authorize other uses of the number. Although a number other than your Social Security Number appears on the face of the licenses, certificates, or registrations issued by OSBEELS, your Social Security Number will remain on file with OSBEELS.

If, the United States Social Security Administration has not issued you a social security number, you must follow these guidelines:

- form must be signed by you;
- You are attesting to the fact that no social security number has been issued to you by the United States Social Security Administration; and
- are acknowledging that knowingly supplying false information under this section is a Class A misdemeanor, punishable by imprisonment of up to one year and a fine of up to \$6,250.

**By providing the following signature, you are agreeing to comply with the guidelines listed above.**

Signature	Date (Mo/Day/Yr)
-----------	------------------

If requesting reinstatement from inactive or retired status, please complete the Reinstatement from Inactive or Retirement Status form.

**Please check the applicable boxes and enclose the appropriate amount**

<input type="checkbox"/> Active registration renewal: \$150.00 each profession <input type="checkbox"/> PE <input type="checkbox"/> PLS <input type="checkbox"/> RPP <input type="checkbox"/> I have attached the CPD Organizational Form <input type="checkbox"/> I have attached the Continuing Education Request for a Grace Period form	Please refer to the Oregon Administrative Rule (OAR) 820-010-0505, 820-010-0510, OAR 820-010-0635 and OAR 820-015-0026 for additional details.
<b>I certify that I have completed the required professional development hour (PDH) units in accordance with the applicable OARs.</b>	
Signature	Date (Mo/Day/Yr)
<input type="checkbox"/> Certified Water Right Examiner (CWRE) renewal: \$40.00 <b>Please note:</b> January 2015 will be the first scheduled audit cycle which will require 10 CWRE PDH units. These audits will reflect the 2013-2014 renewal cycles, which means the PDH units will need to be obtained starting in 2013 and supporting documentation will be required.	<input type="checkbox"/> Delinquency fee per registration renewal: \$80.00 each profession Please refer to the OARs 820-010-0505 and 820-010-0520 for further details. <input type="checkbox"/> PE <input type="checkbox"/> PLS <input type="checkbox"/> RPP <input type="checkbox"/> CWRE

**Select payment method (choose one)**

<input type="checkbox"/> Check or Money Order (payable to OSBEELS)	<input type="checkbox"/> Cash	Amount enclosed:	
<input type="checkbox"/> Debit or Credit Card (Visa, Mastercard, Discover, or AmEx)		Total charge to card:	
Card number	Exp. date	Security code*	Billing Zip/Postal code
<b>Payment Signature (serves as payment authorization if paying by debit or credit card)</b>			
Signature		Date (Mo/Day/Yr)	

**The Oregon Examiner Newsletter**

Please indicate how you would like to receive the OSBEELS newsletter, *The Oregon Examiner*.

Primary Address  
  Primary Email  
  Business Address  
  Business Email  
  No Newsletter

**\* Debit or Credit Card Security Codes**  
 If submitting a payment to the OSBEELS for fees by debit or credit card, please provide the security code. These codes are a security feature that appears on the back of most Visa, MasterCard, and Discover cards, and on the front of American Express cards.

American Express Card Users: Look for the 4-digit code printed on the front of the card just above and to the right of the main card number. This 4-digit code is the card security code.

Visa, MasterCard, and Discover Card Users: Flip the card over and look at the signature box. A special 3-digit code will be located in the signature box. This 3-digit code is the card security code.

## Friendly Reminders

### Registration renewal

Not sure if your registration(s) is current? Visit the OSBEELS website at [www.oregon.gov/osbeels](http://www.oregon.gov/osbeels) and click on the "Find a Licensee" link to confirm your registration(s) status. If you would like to renew your registration(s), mail the form on page 9 to the OSBEELS office at 670 Hawthorne Avenue SE, Suite 220, Salem, OR 97301

### Employer Checks

If your employer sends a check for your renewal, please ensure that it

includes your registration number(s) and your Continuing Professional Development Organizational Form is attached. If these items are not included, it will delay the renewal process.

### Social Security Number

To comply with child support enforcement and tax administration law, OSBEELS requires that all applicants and licensees provide their Social Security numbers. The Oregon Revised Statute (ORS) 25.785, specifically requires that the

Social Security number be recorded on an application for, or form for renewal of, a license, certificate or registration. If you have not been issued a Social Security number, OSBEELS will accept a written certification to fulfill this requirement.

### Deceased Registrants

If you are aware of a registrant who has passed on, please call (503) 362-2666. OSBEELS would like to avoid sending renewal notices and other communications to the families.

### ENFORCEMENT, from Page 8

#### 2778 - Douglas G. Knight

The Board issued a Final Order against Douglas G. Knight, PE, finding he failed to comply with CPD requirements and was untruthful with the Board. Mr. Knight submitted a CPD Organizational Form and claimed credit for courses he had not completed. Additionally, Mr. Knight signed his name attesting to

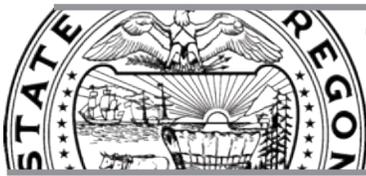
the truthfulness of his statements on his renewal and CPD Organizational Form. Mr. Knight denied the allegations, but entered into a settlement agreement to pay a \$2,000 civil penalty and receive a 90-day license suspension for violations of OAR 820-010-0635(1), OAR 820-020-0015(7) and OAR 820-020-0025(1).

### BOARD MEMBER, from Front Page

Chapter from 2010 to 2012. He is a member of the American Society of Civil Engineers, active both in the local chapter and the Environmental & Water Resources Institute. Personally, Kent has participated

with Habitat for Humanity Global Village projects in El Salvador and Guatemala and volunteered as a mentor in the David Douglas Mentoring Program through the Immigrant and Refugee Community

Organization. Kent has been active with Toastmasters International since 2004 and is currently the club coach for inmates at the Columbia River Correctional Institution in Portland.



# Oregon

BOARD OF EXAMINERS  
FOR ENGINEERING &  
LAND SURVEYING

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Please list an email address below to receive the newsletter electronically. However, if you do not have an email address and would prefer to receive the newsletter by mail, please provide a mailing address. You may return the information by email to [osbeels@osbeels.org](mailto:osbeels@osbeels.org), by fax to (503) 362-5454, or by mail to the address listed above. Please note, by submitting this form, the contact information in which Board correspondence is sent will not be changed. Please utilize the Registrant Information Update form to comply with Oregon Administrative Rule (OAR) 820-010-0605.

Registrant Information

First name (personal name)	Middle name or initial	Last name (family name)
.....	.....	.....
Email Address	Registration or certificate number, if applicable	
.....	.....	

To receive the print edition of The Oregon Examiner, please complete the information below.

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Mailing address (include any apartment/suite number)

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City	State or Province	Zip/Postal code	Country
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