



JIM PIRO, Chair

HERB FRICKE

LISA GRAHAM

DWAYNE JOHNSON

ERIC MESLOW

THOMPSON MORRISON

3 VACANT POSITIONS

Staff:
MARK LEWIS
STEM and CTE Policy Director

LISA J. GIBSON
Council Administrator

STEM Investment Council

May 18, 2016

9:00 a.m. – 12:00 p.m.

Portland State University
Meyer Memorial Trust Board Room (URBN 710)
Urban Center, 506 SW Mill Street, Level 7
Portland, OR 97201

Call-In Information: Dial: (888) 204 5984; Access Code: 992939#

AGENDA

1. **Welcome and Introductions**
2. **Director Update**
Mark Lewis, STEM and CTE Education Director, Chief Education Office (CEdO)
3. **Oregon Workforce System and WIOA (Workforce Innovation and Opportunity Act)**
Karen Humelbaugh, Higher Education Coordinating Commission, Community Colleges and Workforce Development
4. **Investment Updates**
 - A. **Math in Real Life Grants** – Mark Freed and Tom Thompson, Department of Education
 - B. **Oregon Talent Council Grants** – Melissa Leoni, Oregon Employment Department
 - C. **Post-Secondary Equity Support Grants** – Blanca Torres de Hawkins, Higher Education Coordinating Commission
5. **STEM Week Highlights**
Jerian Abel, Portland Metro STEM Partnership
Mark Redmond, STEM Director, Malheur Education Service District
6. **STEM Institute Report**
Beth Unverzagt, Oregon ASK
7. **Central Oregon STEM Hub**
Whitney Swander, High Desert Education Service District
8. **Public Comment**
Members of the public wanting to give public testimony must sign in. There will only be one speaker from each group. Each individual speaker or group spokesperson will have three (3) minutes.

All meetings of the Chief Education Office are open to the public and conform to Oregon public meetings laws. The upcoming meeting schedule and materials from past meetings are posted [on-line](#). A request for an interpreter for the hearing impaired or for accommodations for people with disabilities should be made to Lisa Gibson at 503-373-1283 or by e-mail at Lisa.J.Gibson@state.or.us. Requests for accommodation should be made at least 48 hours in advance.



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Workforce Innovation & Opportunity Connections

STEM Investment Council

May 18, 2016

Karen M. Humelbaugh, Workforce Division Director
Office of Community Colleges and Workforce Development

PURPOSE

2

- Workforce Innovation and Opportunity Act (WIOA)
- State Workforce Board
- Local Workforce Development Boards
- Initiatives
- Connectivity

WORKFORCE INNOVATION & OPPORTUNITY

3

- Federal job-driven public system
 - Links talent pipeline and business needs

- Four Titles
 - Adult, Dislocated Worker, Youth- \$36m
 - Adult Basic Skills- \$5m
 - Wagner-Peyser Labor Exchange- \$8m
 - Vocational Rehabilitation- \$45m



WIOA PRINCIPLES

4

- Integrated

- Industry driven

- Individual skills
 - Training
 - Credentials
 - Certificates
 - Badges

OREGON WORKFORCE INVESTMENT BOARD (OWIB)

5

■ Strategic Plan- 2020

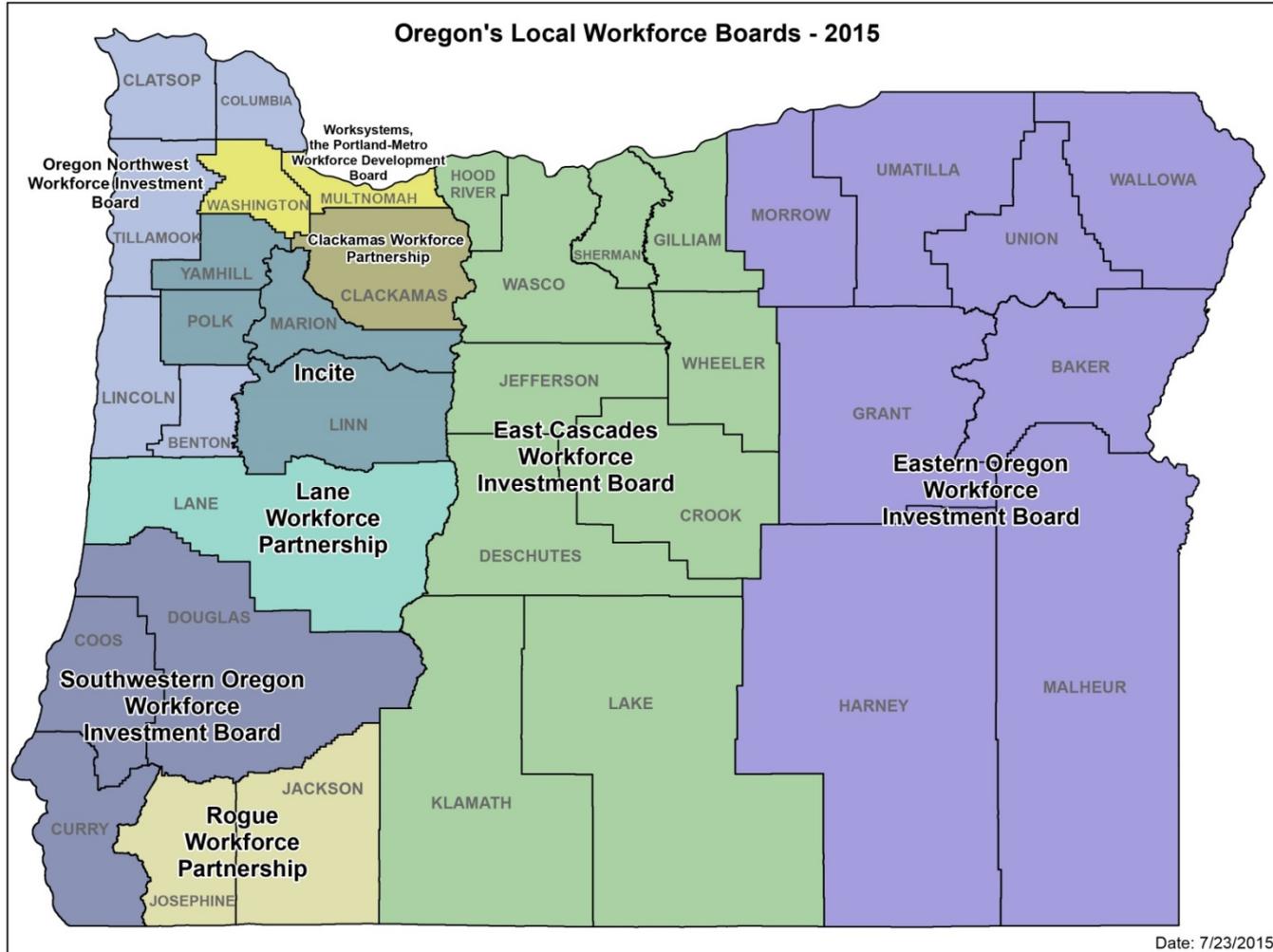
1. System alignment
2. Serve business customers
 - Assure skills are available in pipeline
3. Serve adult customers
 - Skills, training, work
4. Serve youth customers
 - Work experience

LOCAL BOARDS

6

- Locally Driven Strategies
- Neutral Convening Table
- Maximize Resources
- High Value Solutions and Results
- Industry Sector Strategies

OREGON'S NINE LOCAL BOARDS



Date: 7/23/2015

WORKFORCE INITIATIVES

8

- Work based learning
 - Oregon Youth Conservation Corps (OYCC)
 - Work experience
 - Internships
 - On the Job Training
 - Apprenticeship

STEM CONNECTIVITY

9

- Industry Driven
- Out of School Youth
- Career Technical Education
- Apprenticeship
- STEM Hubs-Local Boards

WORKFORCE QUESTIONS

10

- Questions?

- Karen M. Humelbaugh

karen.m.humelbaugh@oregon.gov

503.551.9322



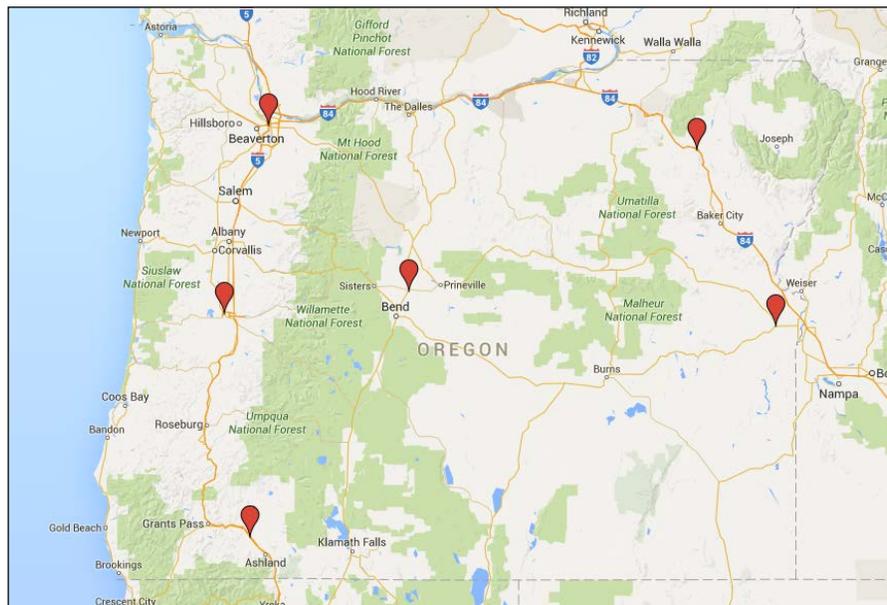
Purpose

The Math in Real Life project supports the expansion of regional networks to create an environment of innovation in math teaching and learning. The focus on applied mathematics supports the natural interconnectedness of math to other disciplines while infusing relevance for students.

During 2015 to 2017, the project will support six networked math learning communities that will focus on developing and testing applied problems in mathematics in grades 7 to 10. The networks will help math teachers refine innovative teaching strategies with the guidance of regional partners and the Oregon Department of Education.

Recipients

Recipient	Related STEM Hub
Eastern Oregon University	Greater Oregon STEM Hub
High Desert ESD	Central Oregon STEM Hub
Lane ESD	Lane County STEM Hub
Malheur ESD	Frontier Oregon STEM Hub
Portland State University	Portland Metro STEM Hub
Southern Oregon ESD	Southern Oregon STEM Hub



Progress

Team Leader Meeting

Team leaders from each project met in Salem on April 19 as a networked community to develop a common understanding of math in real life, math-rich context, and context-rich lesson planning.

Common Measures

Projects met on May 13 to discuss use of common measures of outcomes across projects. Teams agreed to use instruments developed by the Portland Metro STEM Hub.

First Progress Report

The first online progress report was due May 16. The report is one of several approaches we will use to track project progress.

Developing Teams

Each regional project is currently assembling teams of teachers for networked learning communities. Most will have teachers meet starting in the summer at a central location. Malheur ESD is using a TOSA model for implementation to reduce the need for extensive travel by teacher teams.

Networking Website

A password protected website has been developed for teams to share lessons and resources. When lessons are finalized they will be moved to an open resource.

Next Steps

Regional Professional Development

Regional projects have scheduled professional development through the summer. Greater Oregon STEM Hub had one day of professional development in May. Lane ESD is holding a session on June 3 to focus on cultural competency in lesson planning.

Implementing Lessons

Teams will be required to implement designed lessons during the school year and make changes based on what they have learned from the implementation.

Second Team Leader Meeting

A team leader meeting in October will focus on improving lesson quality and assessing student work.

The logo for the Oregon Talent Council features the word "Oregon" in a serif font, "TALENT" in a large, bold, serif font, and "Council" in a smaller serif font. The text is enclosed within a large, dark red circular outline that is partially open at the top and bottom.

Oregon TALENT Council

A hand in a white shirt is holding a white eraser, with a red circle drawn around a blue person icon on a whiteboard. The background is a blurred office setting with many blue person icons scattered across it.

Council Grants & Lifecycle

May 18, 2016

Melissa Leoni | Executive Director

Making Oregonians the first and best choice of Oregon employers

Mission and Goals

Bridge needs of industry to education and workforce so:

- **Oregon employers can quickly find qualified workers** that can hit the ground running
- **Oregon enhances its reputation** as a go-to state for high quality talent



Round 1 Grants



Mount Hood Community College (\$453,129)

Advanced Manufacturing Certification Center (AMC Center).

- MHCC will design and implement the AMC Center to incorporate a career pathway model for industry certifications as well as develop an Associate of Applied Science degree program in Mechatronics.
- Planned and developed with industry leaders and will have the capacity to train 500 new and existing manufacturing workers by 2021.
- Increases the quantity and quality of the talent available to the over 600 manufacturers in the region by providing the best-educated and most skilled workforce possible for the community.

Round 1 Grants



Oregon Health & Science University (\$672,403)

Industry Relevant Training and Research Experiences for Biomedical Engineering and Data Science Students.

- OHSU in partnership with Oregon State University will provide the skilled professionals needed to sustain Oregon's growth in biomedical engineering and will integrate industry-centric training and experiential learning activities within new transdisciplinary undergraduate and graduate programs at OHSU and OSU.
- With Oregon Bioscience Association will establish a program enabling trainees to cross traditional disciplinary boundaries and transition from academia into commercial enterprise through the use of industry-oriented BioPro short courses, including e-campus courses and internships.

Round 1 Grants



Oregon Institute of Technology/Oregon Tech (\$340,783) *Cybersecurity Workforce Development.*

- Undergraduate dual major and a graduate level certificate in cybersecurity starting in the Fall of 2016 at both the Klamath Falls and Wilsonville campuses and online.
- Undergrads will earn a degree with a second major in cybersecurity in four years by completing additional specialized coursework during the summers.
- Cybersecurity courses will be aligned with industry standard certifications, and where possible, use actual certification exams in place of final exams, giving students additional credentials and immediate industry qualifications while they are completing their degree.

Round 1 Grants

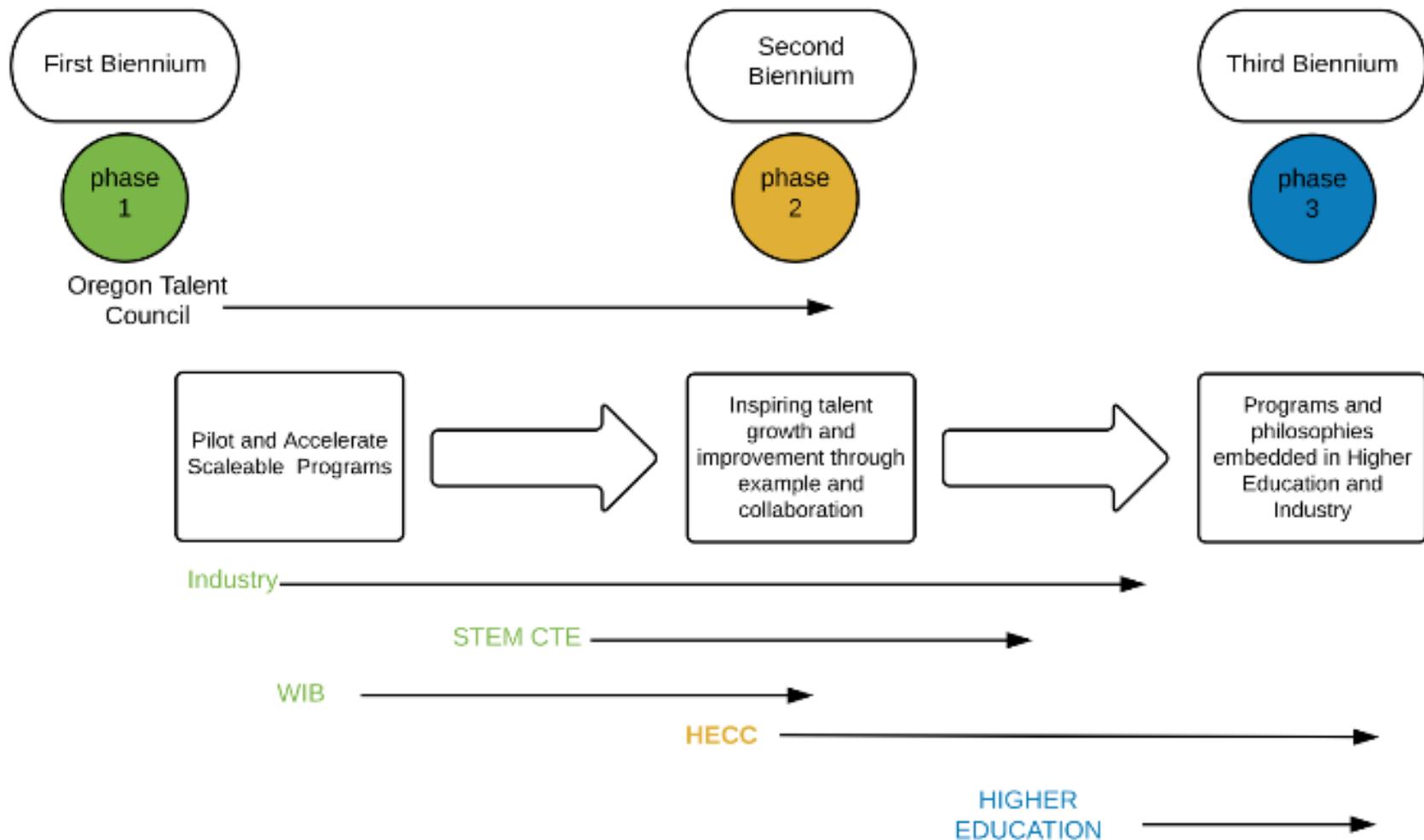


Oregon State University (\$533,686)

Pacific NW Electrical System Resiliency/Disaster Preparedness Training.

- Addresses the urgent talent gap for energy systems engineers.
- OSU will partner with Portland State University and industry partners Central Lincoln Public Utility District, Portland General Electric and Pacific Power to develop graduate level, professional development, and industrial short-courses for incumbent and emerging talent in the electrical power systems area.
- Electrical power systems engineers will be trained for disaster preparedness and electrical system resiliency, with particular attention to a Cascadia Subduction Zone event.

Recurring Investment Lifecycle



HB 3072 STEM GRANT





UNIVERSITIES

2

OHSU \$266,750

- Features hands-on, intensive experience exposing students to STEM careers.
- Strengthen K-12 partnerships & new partnership with Warm Springs.



OIT \$184,960

- Comprehensive strategies to increase recruitment, retention, and completions.
- Projected enrollment of 75 new students.

Oregon TECH



UNIVERSITIES, CONTINUED

3

OSU \$269,594

- Partnership with WOU to create an Oregon Alliance for Minority Minority Participation.
- Intensive academic advising & tracking.



WOU \$226,872

- Build stronger campus community and infrastructure.
- Leverage K-12 partnership and increase college/career readiness.





COMMUNITY COLLEGES

4

Chemeketa \$152,236

- Project 150 students reached.
- U-STEM specific to Latino community (25% population).



Clackamas \$221,761

- Primary focus on transfer students, support retention and completion.





COMMUNITY COLLEGES

5

Klamath \$146,444

- Targeted STEM fields are in alignment with regional economic development.
- Increase course development and equipment, building strong foundation for incoming students.



Rogue \$219,507

- Strengthen connection with local STEM Hub and CTE efforts.
- Leverage early college credits to introduce STEM fields/majors.



PCC \$286,816

- Anticipate reaching 75 new students.
- Enhanced curriculum.





QUESTIONS

6



Contact Information:

Cheryl Myers, Chief of Staff
Higher Education Coordinating Commission
Cheryl.L.Myers@state.or.us



STEM WEEK OREGON

May 1 - 8, 2016

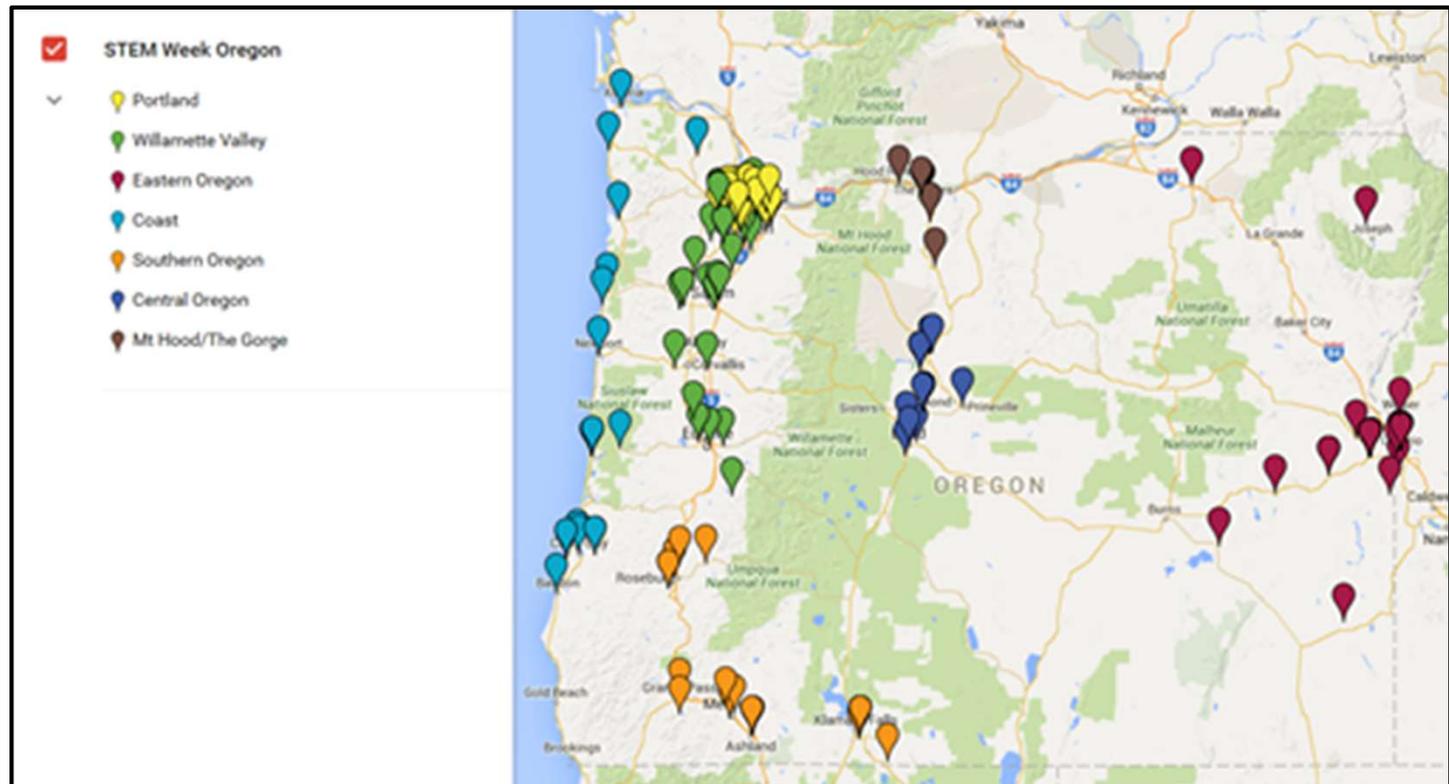
Inspire the Future

STEM Week Sponsors

Thank you STEM Week Oregon Sponsors!



The Map



The Numbers

- Estimated number of participants = 19,118
 - 17,310 Students
 - 1,808 Adults
 - 181 events
 - \$6000 in prizes awarded
-

STEMOregon Social Media Engagement



You Retweeted

Stand Together @PTStandTogether · May 9

Great job to all of the students that participated in #STEMWeekOregon, you inspire us! Thank you @stemoregon for letting us be involved 🙌



You Retweeted



Portland WaterBureau @portlandwater · May 6

Science, technology, engineering & a bit of math all featured during Bull Run Watershed field trips #StemWeekOregon tinyurl.com/hnzjtxj

You Retweeted



LaCreole MS @lacreolems · May 5

Our kids are showing off their quad potter build at Stemapalooza tonight. It's STEM week in... instagram.com/p/BFDDsDHoFDh/



STEM Oregon

Published by Buffer [?] · May 7 at 10:22am · 🌐

#DidYouKnow this week is STEM Week in Oregon? STEM is an education movement to support students learning about science, technology, engineering, and math.

Young Oregonians celebrating STEM this week could be the next generation of energy experts and engineers! Portland General Electric was pleased to supply Alberta Rider PSO Elementary School in Tigard with "Saving Energy and Water" activity books for its K-5 students.

#ThankATeacher #STEMWeekOregon #OregonLearns



77 people reached

Boost Post

Central Oregon STEM Hub

Culver STEMFest! Kicking off STEM Week the Culver School District hosted an all-day STEM celebration of student learning and achievement:



Martian Simulation @ Tumalo Community School: Beau Variel, engaged his 6-8th grade students in a programming project during Oregon STEM Week based on the book/movie, The Martian. Students worked in teams to bring their astronaut (Matt Damon!) home using Sphero Robots. The activity made the local news too! Check it out! <http://zolomedia.com/problem-solving-using-robots/>

Columbia Gorge STEM Hub



The 2016 Wind Challenge on April 30, hosted by the Gorge Tech Alliance, Google, and Columbia Gorge Community College. Middle and high school students competed to build the most powerful wind turbine at this one-day competition in The Dalles.

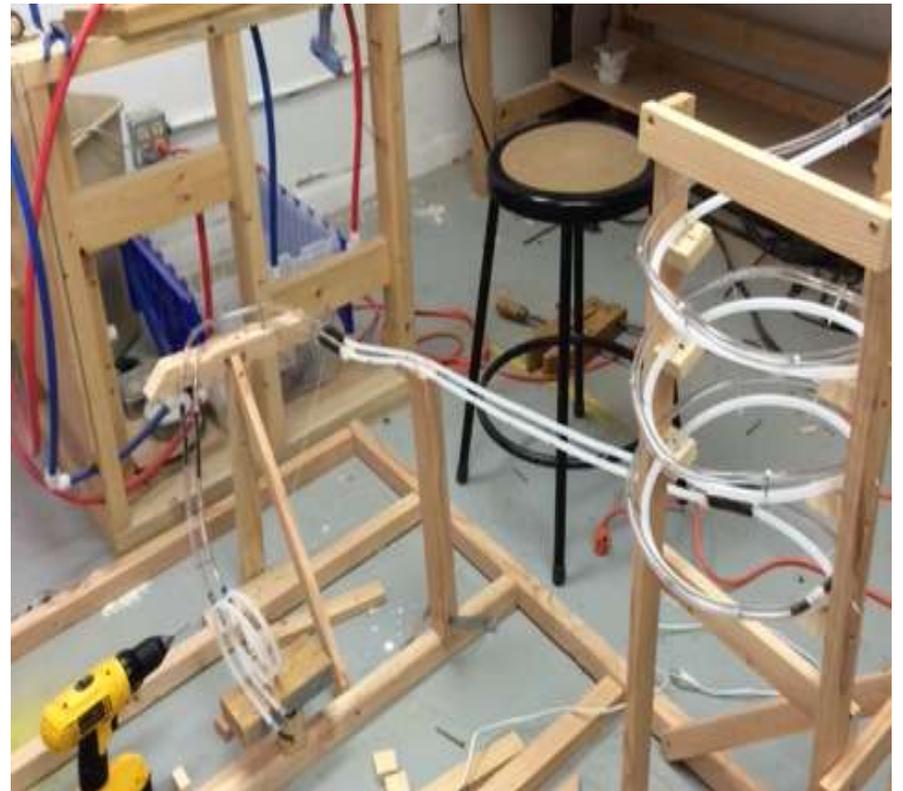
Frontier Oregon STEM Hub

Roller Coaster Construction:

Students from Vale High School created a model roller coaster to enter into the competition at Silverwood Theme Park.

They will present their final design on May 18th, Physics Day.

Video available:



GO-STEM Collaborative



Wallowa Resources WREN program offered “Soaring, Talons, & Feathers” Students were led to discover the wonderful world of birds of prey including skills in exploring, discussing, analyzing, and evaluating the environment. The program offers guided hands-on field research and includes local nature resource professionals and landowners, exposing students to future career opportunities, local knowledge, and real-life research.

Lane County STEM Hub



When you have a day like this at the lake, what should you do?

Use GLOBE Hydrology protocols to measure water quality!

Sky Camp, Fall Creek, Oregon, 5/12/16
Elizabeth Page Elementary School 5th Graders &
Lane Community College GLOBE Partner

Results – Good water quality – if a bit warm! But temperature, dissolved oxygen and conductivity were all indicative of a healthy water body for fish!

Sky Camp in Fall Creek with 5th graders most of the day doing GLOBE Hydrology Protocols (water testing) with students from Page Elementary School in Springfield

Oregon Coast STEM Hub

STEM Week on the Coast: *Inside and Out!*

Bandon High School robotics students shared their Remotely Operated Vehicle (ROV) with younger grades. Their team took 1st place in the Navigator class at the 2016 Oregon Regional MATE ROV Competition.



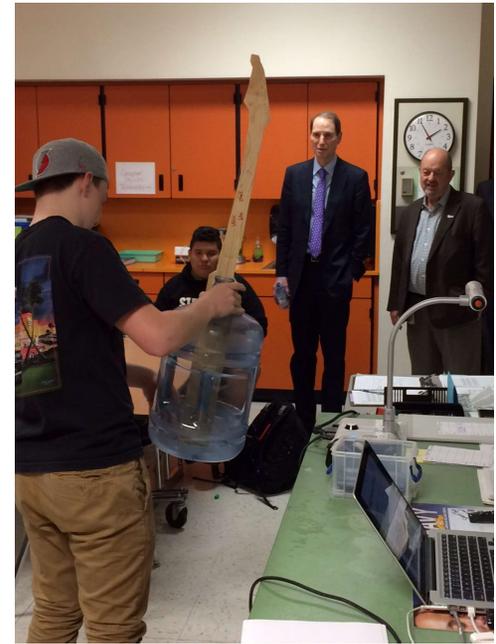
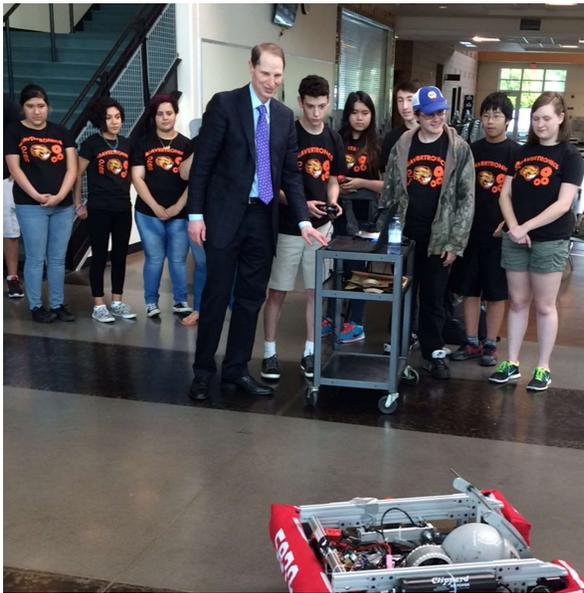
Student groups visiting Hatfield Marine Science Center explored estuarine ecosystems.



Blossom Gulch 3rd graders identified and counted sounds they heard in the forest behind their Coos Bay school.



Portland Metro STEM Partnership



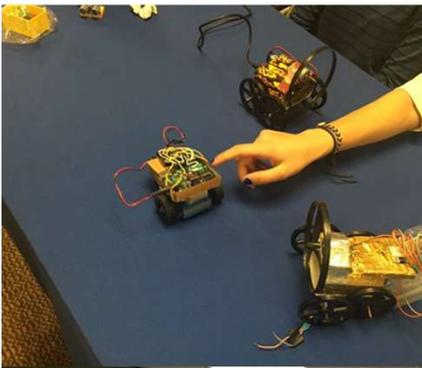
Senator Wyden visits Beaverton High School

South Metro-Salem STEM Hub- STEMMapalooza



Melissa Dubois @melissaedubois · May 5

This is what STEM looks like in SMS classrooms. #STEMWeekOregon
@stemoregon @OregonCTE @ORLearns



Southern Oregon STEM Hub



CSI Overnight | *ScienceWorks Hands On Museum*

Scouts worked with local experts and real tools to analyze fiber, fingerprints, foot prints, and blood typing to solve a case. Collaboration, attention to detail, and logic/problem solving prevailed!

STEM Connections | *Rogue Community College*

Southern Oregon students got their hands on some amazing equipment and participated in real life problem solving activities in the areas of engineering, chemistry, physics, electronics and coding. Participating with company engineers and top level management in real brainstorming sessions about how to solve actual company challenges was the perfect culmination to their experience with our STEM Academy.



Umpqua Valley STEAM Hub



In the Umpqua Valley, the Alder Creek Community Forest was busy everyday of STEM week with visits from K-3 students from south Douglas County exploring stream, field and forest biomes. The week began with events at Wildlife Safari and the YMCA in Roseburg and Canyonville highlighting the intersection of STEAM learning and healthy lifestyles. STEM week also provided time to promote registration for STEAM/CTE summer camp opportunities to happen across Douglas County for all ages.



Central Oregon STEM Hub

Science, Technology, Engineering, and Math in the heart of Oregon



Whitney Swander
STEM Hub Executive Director
High Desert Education Service District





STEM in the Heart of Oregon



- **Fastest growing industries by 2022:** Healthcare, Construction, Professional and Business Services (24%+); Advanced Manufacturing (19%+)
- **Established STEM Industries:** Aerospace, Semiconductors, Software, Renewable Energy, Medical Devices, Natural Resources, Agriculture, and Brewing
- **Key Industries targeted for development and growth:** High Tech (hardware and software); Bio-Tech; Recreation Equipment; Brewing/Distilling; Data Centers

*Sources: Business Oregon, *Regional Competitive Industry Analysis*; EDCO, *Business and Economic Data*

Key **needs** driving our partnership:

Student **Achievement** and
College and Career **Readiness**



Meeting the demand for
“**Home Grown Hiring**”



Equity in Opportunity and
Access



Central Oregon STEM Hub **Goals** and **Key Indicators**

COMMUNITY is aware and connected to regional STEM opportunities.

Priority Indicator:

- Increase participation of underrepresented populations.



EDUCATORS are equipped to engage students in exceptional STEM curriculum.

Priority Indicators:

- Increasing educator STEM pedagogical content knowledge.
- Increasing availability of STEM programs of study and dual credit courses.



STUDENTS are interested and ready to enter a STEM post-secondary track.

Priority Indicators:

- Increasing # of students taking STEM courses.
- Increasing math and science achievement scores.



Central Oregon has a skilled, homegrown **WORKFORCE** and **ECONOMY** that attract and retains STEM businesses.

Priority Indicators:

- Increase # of STEM certificates and degrees, especially for underrepresented and nontraditional students.



Central Oregon STEM Hub

Science, Technology, Engineering, and Math in the heart of Oregon



Collective Impact Strategy and Framework



What we are **learning**:

Collaboration is an *iterative* and *ongoing* process.



- *Intentionally re-structuring* Advisory Board (Balance: PreK-12, higher ed, industry, and business)
- *Making new connections* and building relationships to **sustain change processes**
- *Collaboratively* defining and empowering workgroups to use **outcomes and indicators to drive initiative planning**
- **Systems** must established to make programs **impactful**

Opportunity: Connecting CTE-STEM at the HDES

Leadership Team, Projects to Build Capacity (Advancing Career Pathways and Math in Real Life

Impact: Meaningfully *engaging* and *sustaining* partnerships with Business and Industry



The Path Ahead:

- Building a **cross-sector STEM System** across Central Oregon **that honors the diversity** of our STEM industries, our region, and our community
- Connecting the **STEM System** with other Systems, particularly Better Together (RAC) and East Cascade WIB, **reinforcing our shared priorities** around workforce capacity and **leveraging resources**.



Central Oregon STEM Hub

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Advisory Board

Responsible for central Hub governance, strategic direction, and support of Hub workgroups.

Current Priority Indicators: C1, E1, E2, S1, S2, W1

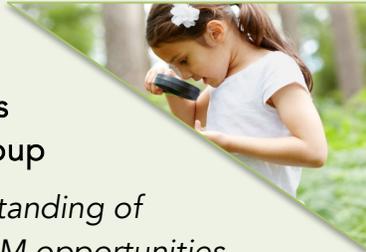
Executive Committee

Represents core partners carrying out hub backbone operations.

Hub Director

Manages day-to-day hub operations and facilitates workgroups.

Community Literacy & Awareness Workgroup



Raising understanding of STEM and STEM opportunities, particularly among underrepresented populations.

Priority Indicators: C1

Teaching & Learning Workgroup



Addressing formal and informal learning opportunities, educator advancement, including professional development, and other education support.

Priority Indicators: E1, S2, (C1)

Pathways & Participation Workgroup



Addressing availability of and engagement in regional pathways to STEM careers, such as CTE programs and vertical alignment preK-career.

Priority Indicators: E2, S1, W1, (C1)

Share your expertise! There's always room at the table and our success hinges on having the voices of preK through higher education teachers and administrators, informal educators and community organizations, business and industry leaders, and other stakeholders well represented in each workgroup. Strong representation from the entire region (Crook, Deschutes, and Jefferson Counties) and advocates from groups underrepresented in STEM fields are also critical. Have a passion for STEM? Join us today!

For more information or to join a workgroup, please contact info@centraloregonstem.org.

Central Oregon STEM Hub

Science, Technology, Engineering, and Math in the heart of Oregon

Long Term Outcomes & Indicators*



The Central Oregon **COMMUNITY** is aware of and connected to regional STEM opportunities.

- C1. Increasing participation of underrepresented populations.**
- C2. Increasing number of times kids have been exposed to STEM experiences.
- C3. Increasing engagement of businesses in community.
- C4. Utilization of unique assets and environment to raise STEM interest.



Central Oregon **EDUCATORS** are equipped to engage students in exceptional STEM curriculum.

- E1. Increasing educator STEM pedagogical content knowledge.**
- E2. Increasing availability of STEM programs of study and dual credit courses.**
- E3. Increasing time allocated for science instruction in elementary school.
- E4. Increasing educator confidence in teaching STEM subjects.
- E5. Increasing number of STEM professionals involved in classrooms.
- E6. Increasing resources and equipment available to teachers.



Central Oregon **STUDENTS** are interested and ready to enter a STEM post-secondary track.

- S1. Increasing number of students taking STEM courses.**
- S2. Increasing math and science achievement scores.**
- S3. Increasing STEM career choice at graduation.
- S4. Decreasing post-secondary enrollments in remedial math.
- S5. Increasing student retention in STEM certificate and degree programs.
- S6. Increasing participation in out-of-school STEM experiences.



Central Oregon has a skilled, homegrown **WORKFORCE** and **ECONOMICS** that attract STEM businesses.

- W1. Increasing number of STEM certificates and degrees, especially for underrepresented and nontraditional students.**
- W2. Increasing number of people ready to choose a STEM career.
- W3. Increasing recognition of STEM skills and opportunities in traditionally non-STEM fields.

Z1. Increasing interaction and communication within and between stakeholder audiences.

*Current priority indicators in bold.

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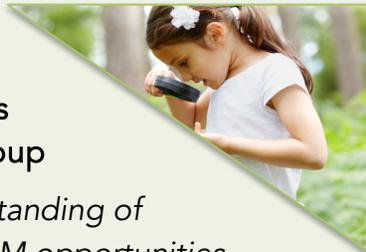
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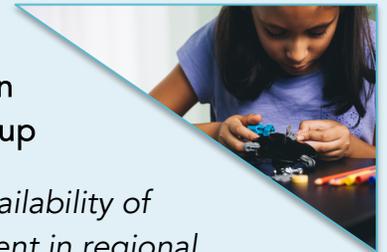
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Whitney Swander
STEM Hub Executive Director
High Desert Education Service District





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- **Established STEM Industries:** Aerospace, Semiconductors, Software, Renewable Energy, Medical Devices, Natural Resources, Agriculture, and Brewing
- **Key Industries targeted for development and growth:** High Tech (hardware and software); Bio-Tech; Recreation Equipment; Brewing/Distilling; Data Centers

*Sources: Business Oregon, *Regional Competitive Industry Analysis*; EDCO, *Business and Economic Data*

Key **needs** driving our partnership:

Student **Achievement** and
College and Career **Readiness**



Meeting the demand for
“**Home Grown Hiring**”



Equity in Opportunity and
Access



Central Oregon STEM Hub **Goals** and **Key Indicators**

COMMUNITY is aware and connected to regional STEM opportunities.

Priority Indicator:

- Increase participation of underrepresented populations.



EDUCATORS are equipped to engage students in exceptional STEM curriculum.

Priority Indicators:

- Increasing educator STEM pedagogical content knowledge.
- Increasing availability of STEM programs of study and dual credit courses.



STUDENTS are interested and ready to enter a STEM post-secondary track.

Priority Indicators:

- Increasing # of students taking STEM courses.
- Increasing math and science achievement scores.



Central Oregon has a skilled, homegrown **WORKFORCE** and **ECONOMY** that attract and retains STEM businesses.

Priority Indicators:

- Increase # of STEM certificates and degrees, especially for underrepresented and nontraditional students.



Central Oregon STEM Hub

Science, Technology, Engineering, and Math in the heart of Oregon



Collective Impact Strategy and Framework



What we are **learning**:

Collaboration is an *iterative* and *ongoing* process.



- *Intentionally re-structuring* Advisory Board (Balance: PreK-12, higher ed, industry, and business)
- *Making new connections* and building relationships to **sustain change processes**
- *Collaboratively* defining and empowering workgroups to use **outcomes and indicators to drive initiative planning**
- **Systems** must established to make programs **impactful**

Opportunity: Connecting CTE-STEM at the HDES

Leadership Team, Projects to Build Capacity (Advancing Career Pathways and Math in Real Life

Impact: Meaningfully *engaging* and *sustaining* partnerships with Business and Industry



The Path Ahead:

- Building a **cross-sector STEM System** across Central Oregon **that honors the diversity** of our STEM industries, our region, and our community
- Connecting the **STEM System** with other Systems, particularly Better Together (RAC) and East Cascade WIB, **reinforcing our shared priorities** around workforce capacity and **leveraging resources**.





Workforce Innovation & Opportunity Connections

STEM Investment Council

May 18, 2016

Karen M. Humelbaugh, Workforce Division Director
Office of Community Colleges and Workforce Development

PURPOSE

2

- Workforce Innovation and Opportunity Act (WIOA)
- State Workforce Board
- Local Workforce Development Boards
- Initiatives
- Connectivity

WORKFORCE INNOVATION & OPPORTUNITY

3

- Federal job-driven public system
 - Links talent pipeline and business needs

- Four Titles
 - Adult, Dislocated Worker, Youth- \$36m
 - Adult Basic Skills- \$5m
 - Wagner-Peyser Labor Exchange- \$8m
 - Vocational Rehabilitation- \$45m



WIOA PRINCIPLES

4

- Integrated

- Industry driven

- Individual skills
 - Training
 - Credentials
 - Certificates
 - Badges

OREGON WORKFORCE INVESTMENT BOARD (OWIB)

5

■ Strategic Plan- 2020

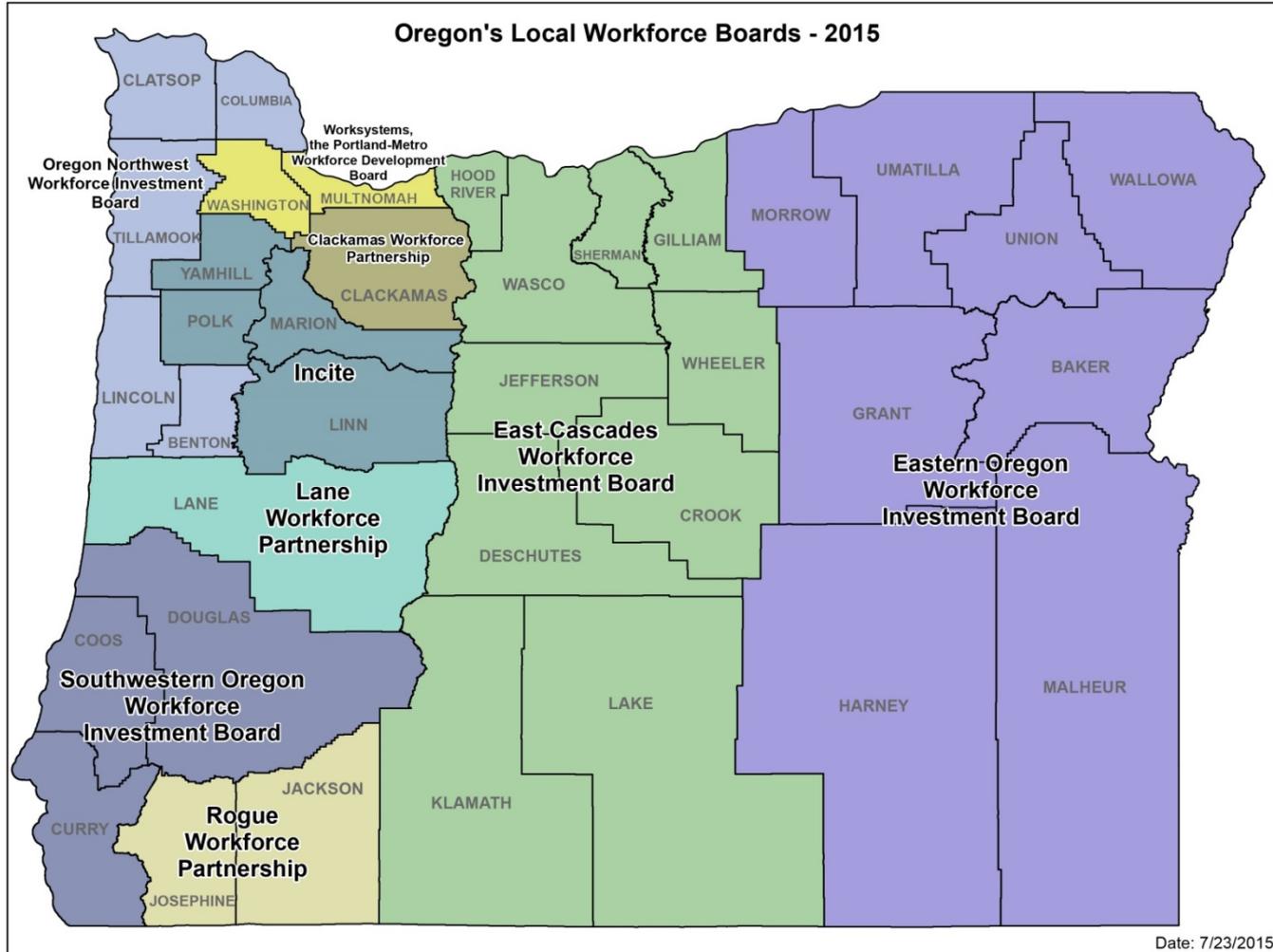
1. System alignment
2. Serve business customers
 - Assure skills are available in pipeline
3. Serve adult customers
 - Skills, training, work
4. Serve youth customers
 - Work experience

LOCAL BOARDS

6

- Locally Driven Strategies
- Neutral Convening Table
- Maximize Resources
- High Value Solutions and Results
- Industry Sector Strategies

OREGON'S NINE LOCAL BOARDS



Date: 7/23/2015

WORKFORCE INITIATIVES

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- Work based learning
 - Oregon Youth Conservation Corps (OYCC)
 - Work experience
 - Internships
 - On the Job Training
 - Apprenticeship

STEM CONNECTIVITY

9

- Industry Driven
- Out of School Youth
- Career Technical Education
- Apprenticeship
- STEM Hubs-Local Boards

WORKFORCE QUESTIONS

10

- Questions?

- Karen M. Humelbaugh

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503.551.9322



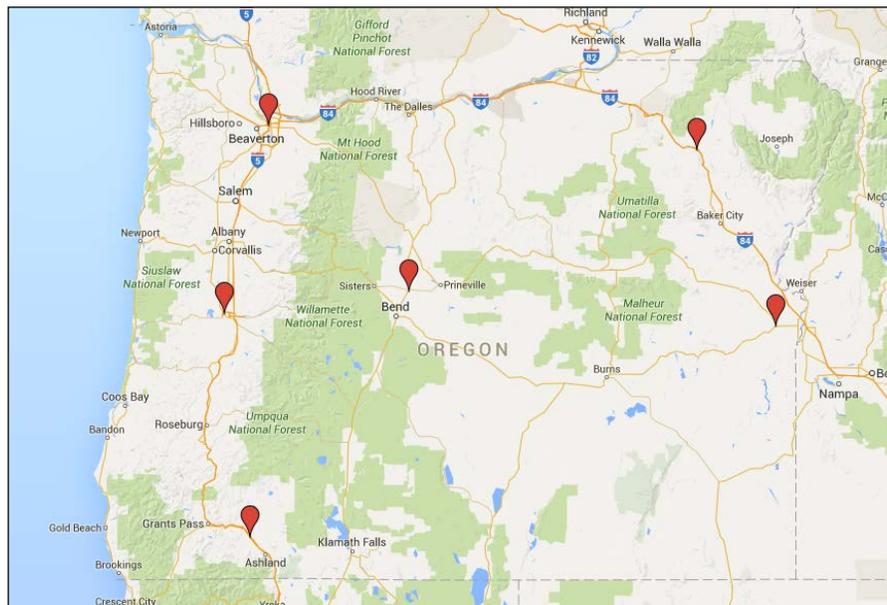
Purpose

The Math in Real Life project supports the expansion of regional networks to create an environment of innovation in math teaching and learning. The focus on applied mathematics supports the natural interconnectedness of math to other disciplines while infusing relevance for students.

During 2015 to 2017, the project will support six networked math learning communities that will focus on developing and testing applied problems in mathematics in grades 7 to 10. The networks will help math teachers refine innovative teaching strategies with the guidance of regional partners and the Oregon Department of Education.

Recipients

Recipient	Related STEM Hub
Eastern Oregon University	Greater Oregon STEM Hub
High Desert ESD	Central Oregon STEM Hub
Lane ESD	Lane County STEM Hub
Malheur ESD	Frontier Oregon STEM Hub
Portland State University	Portland Metro STEM Hub
Southern Oregon ESD	Southern Oregon STEM Hub



Progress

Team Leader Meeting

Team leaders from each project met in Salem on April 19 as a networked community to develop a common understanding of math in real life, math-rich context, and context-rich lesson planning.

Common Measures

Projects met on May 13 to discuss use of common measures of outcomes across projects. Teams agreed to use instruments developed by the Portland Metro STEM Hub.

First Progress Report

The first online progress report was due May 16. The report is one of several approaches we will use to track project progress.

Developing Teams

Each regional project is currently assembling teams of teachers for networked learning communities. Most will have teachers meet starting in the summer at a central location. Malheur ESD is using a TOSA model for implementation to reduce the need for extensive travel by teacher teams.

Networking Website

A password protected website has been developed for teams to share lessons and resources. When lessons are finalized they will be moved to an open resource.

Next Steps

Regional Professional Development

Regional projects have scheduled professional development through the summer. Greater Oregon STEM Hub had one day of professional development in May. Lane ESD is holding a session on June 3 to focus on cultural competency in lesson planning.

Implementing Lessons

Teams will be required to implement designed lessons during the school year and make changes based on what they have learned from the implementation.

Second Team Leader Meeting

A team leader meeting in October will focus on improving lesson quality and assessing student work.

The logo for the Oregon Talent Council features the word "Oregon" in a serif font, "TALENT" in a large, bold, serif font, and "Council" in a smaller serif font. The text is enclosed within a large, dark red circular outline that is partially open at the top and bottom.

Oregon TALENT Council

A close-up photograph of a hand holding a white eraser. The hand is positioned as if about to erase a mark. In the background, there are several blue icons of people, with one icon in the foreground being circled in red.

Council Grants & Lifecycle

May 18, 2016

Melissa Leoni | Executive Director

Making Oregonians the first and best choice of Oregon employers

Mission and Goals

Bridge needs of industry to education and workforce so:

- **Oregon employers can quickly find qualified workers** that can hit the ground running
- **Oregon enhances its reputation** as a go-to state for high quality talent



Round 1 Grants



Mount Hood Community College (\$453,129)

Advanced Manufacturing Certification Center (AMC Center).

- MHCC will design and implement the AMC Center to incorporate a career pathway model for industry certifications as well as develop an Associate of Applied Science degree program in Mechatronics.
- Planned and developed with industry leaders and will have the capacity to train 500 new and existing manufacturing workers by 2021.
- Increases the quantity and quality of the talent available to the over 600 manufacturers in the region by providing the best-educated and most skilled workforce possible for the community.

Round 1 Grants



Oregon Health & Science University (\$672,403)

Industry Relevant Training and Research Experiences for Biomedical Engineering and Data Science Students.

- OHSU in partnership with Oregon State University will provide the skilled professionals needed to sustain Oregon's growth in biomedical engineering and will integrate industry-centric training and experiential learning activities within new transdisciplinary undergraduate and graduate programs at OHSU and OSU.
- With Oregon Bioscience Association will establish a program enabling trainees to cross traditional disciplinary boundaries and transition from academia into commercial enterprise through the use of industry-oriented BioPro short courses, including e-campus courses and internships.

Round 1 Grants



Oregon Institute of Technology/Oregon Tech (\$340,783) *Cybersecurity Workforce Development.*

- Undergraduate dual major and a graduate level certificate in cybersecurity starting in the Fall of 2016 at both the Klamath Falls and Wilsonville campuses and online.
- Undergrads will earn a degree with a second major in cybersecurity in four years by completing additional specialized coursework during the summers.
- Cybersecurity courses will be aligned with industry standard certifications, and where possible, use actual certification exams in place of final exams, giving students additional credentials and immediate industry qualifications while they are completing their degree.

Round 1 Grants



Oregon State University (\$533,686)

Pacific NW Electrical System Resiliency/Disaster Preparedness Training.

- Addresses the urgent talent gap for energy systems engineers.
- OSU will partner with Portland State University and industry partners Central Lincoln Public Utility District, Portland General Electric and Pacific Power to develop graduate level, professional development, and industrial short-courses for incumbent and emerging talent in the electrical power systems area.
- Electrical power systems engineers will be trained for disaster preparedness and electrical system resiliency, with particular attention to a Cascadia Subduction Zone event.

Recurring Investment Lifecycle

