

TO: Ways & Means, Transportation & Economic Development Subcommittee
Sen. Betsy Johnson, co-chair
Rep. David Gombert, co-chair
Sen. Bill Hansell
Sen. Rod Monroe
Rep. Mike Nearman
Rep. Tobias Read
Rep. Gail Whitsett
Rep. Brad Witt

FROM: Sean Robbins, Business Oregon director

RE: Phase 2 follow-up

DATE: Wednesday, April 29, 2015

We've compiled follow-up responses to questions that were raised during our Phase 2 hearings on Tuesday, April 21 and Wednesday, April 22. We've organized the responses by topic.

Topic	Page
Regional Solutions & Regional Accelerator & Innovation Network	2
SOAR Oregon	19
Seismic Rehabilitation Grant Program	23
Oregon Arts Commission	26
Oregon Nanoscience and Microtechnologies Institute	34
Oregon Manufacturing Extension Partnership	39



TO: Ways & Means, Transportation & Economic Development Subcommittee
Sen. Betsy Johnson, co-chair
Rep. David Gombert, co-chair
Sen. Bill Hansell
Sen. Rod Monroe
Rep. Mike Nearman
Rep. Tobias Read
Rep. Gail Whitsett
Rep. Brad Witt

FROM: Sean Robbins, Business Oregon director

RE: Regional Solutions and the Regional Accelerator & Innovation Network

DATE: Wednesday, April 29, 2015

The committee asked for more information about Regional Solutions and the Regional Accelerator & Innovation Network (RAIN). We collected their responses and enclosed them below. Please let us know if you need additional information.

Jim Coonan, RAIN's executive director, provided this background: RAIN's first accelerator was created in Corvallis in July 2013 and Eugene was created in July 2014. Since then, we've had 28 companies graduate from the two accelerators. One company closed and one is now located in Palo Alto, California. FTE's from these companies total 29.5 in the current biennium. These companies have generated more than \$5.2 million in revenues and attracted \$2.3 million of investment capital. We are still running down taxes paid but will provide it as soon as possible. Here are some short stories on a few of our graduates:

Baker Seed: Stan Baker has been in the seed industry for decades after getting his PhD from OSU he launched his company Baker Seed which employs a patented process for coating grass seed with fertilizer. Bottom line this produces a grass seed product that vs. the competition works faster and at half the cost. In April he started shipping his first product.

Valliscor: Rich Carter is using a technology spinout from OSU to create a biotech start-up that provides a revolutionary way to provide access to high-value organic building blocks for the pharmaceutical, biotech and agrochemical industries. Strong customer responses is driving Rich's need to quickly ramp up his company and he is seeking office/lab space in Corvallis/Albany region.

KW Associates: After 20+ years at the federal lab in Albany Paul King has developed a material science breakthrough that allows the equivalent of an MRI to evaluate large metal ingots that will save costly production failures as well as improve the safety of ultimate products like airplane wings. Paul has been joined in his company by an OSU student who through an internship at the Corvallis RAIN/OSU Advantage Accelerator helped develop the companies launch business strategy



Cascades

OSU-Cascades
Cascades Hall, 2600 NW College Way, Bend, Oregon 97701-5998
T 541-322-3100 | F 541-322-3170 | OSUcascades.edu

MEMORANDUM

TO: Senators Johnson and Gomberg, Co-Chairs

FROM: Becky Johnson, Vice President for OSU-Cascades

CC: Annette Liebe, Regional Solutions
Mike Hollern, Brooks Resources
Andrew Spreadborough, Central Oregon Intergovernmental Council

DATE: April 24, 2015

RE: Subcommittee hearing on 4/21

In follow up to the Ways and Means Subcommittee on Transportation and Economic Development of Tuesday, April 21, we respectfully submit this memo with further information.

Background:

The Regional Solutions Transformational Transportation project will meet immediate needs for transit capital, but is also an investment in the future expansion and sustainability of transit services across Central Oregon. It is a pivotal piece of the puzzle, and local partners will be able to leverage additional funding from this state investment.

The Transformational Transportation project leverages funding from two broader efforts aimed at improving transit services in Bend and Central Oregon. The first is the Bend Transit Service Expansion project chaired by Deschutes County Commissioner Tammy Baney and Community Leader Amy Tykeson. The City of Bend, St. Charles Health Services, Central Oregon Community College, OSU-Cascades, the Bend Chamber of Commerce, and Bend Parks and Recreation are partnering with Central Oregon Intergovernmental Council (COIC)/ Cascades East Transit (CET) to develop a plan for Bend transit service expansion. The partners are well on their way to securing \$1.2 million/year in operations funds required to implement the improvements. The funding is a combination of federal funding secured at \$300K/year, \$90K/year in state funding, and two local private businesses have agreed to a further \$200K/year. The City of Bend is currently planning an additional investment of \$300K/year. Discussions are well under way with other community partners for the remainder.

This is the first step of a broader regional process to implement the Cascades East Transit Funding Strategy that will allow CET service expansions across the region based on stable funding. This process relies on the development of public-private partnerships, increasing regional outreach and engagement regarding transit, and passing a transit ballot measure in the next 2-3 years. The Funding Strategy relies on increasing the convenience of services in Bend, the region's primary transit destination, in order to increase choice rider utilization of, and support for, the system. To this end, the Meyer Memorial Trust has already provided \$150K and ODOT a further \$80K to support regional outreach and engagement and planning to achieve the goals of the project.

Question:

We are very appreciative of Mike Hollern's testimony on behalf of the Regional Solutions Advisory Committee for Central Oregon. During the hearing, Mike was asked if federal funding had been explored to purchase buses. Andrew Spreadborough from Central Oregon Intergovernmental Council is a member of the Regional Solutions Advisory Committee and provided the following information about federal funds for buses.

Answer:

Cascades East Transit applies for the competitive federal grant programs offered by USDOT. However, the CET fleet has aged, so the highest priority has been replacement of the existing fleet. CET is unable to prioritize expansion buses at this point.

CET has been fairly successful in securing federal capital dollars, but they still have not replaced buses that are beyond their useful life and ready for replacement. The buses included in the proposal are for added capacity to meet community needs, and will support purchasing larger low floor buses that will help us draw more riders onto the system.

Thank you for the opportunity to clarify our proposal.

MEMORANDUM

TO: Senators Johnson and Gomberg, Co-Chairs

FROM: Becky Johnson, Vice President for OSU-Cascades



CC: Annette Liebe, Regional Solutions
Mike Hollern, Brooks Resources
Andrew Spreadborough, Central Oregon Intergovernmental Council

DATE: April 24, 2015

RE: Subcommittee hearing on 4/21

In follow up to the Ways and Means SubCommittee on Transportation and Economic Development of Tuesday, April 21, we respectfully submit this memo with further information.

We are very appreciative of Mike Hollern's testimony on behalf of the Regional Solutions Advisory Committee for Central Oregon. During the hearing, Mike was asked whether Cascades East Transit / Central Oregon Intergovernmental Council explored opportunities for federal funding for buses. Our Regional Solutions Transformative Transportation project that is aimed at expanding transit options in Central Oregon is only part of a larger effort involving many local entities. Andrew Spreadborough from Central Oregon Intergovernmental Council is a member of the Regional Solutions Advisory Committee and provided the following information about federal funds for buses.

Federal grant programs are available to help purchase transit capital, including buses. These are competitive grant programs; Cascades East Transit (CET) is not guaranteed federal resources on a year-to-year basis. CET applies for every competitive grant program available to them. However, the CET fleet has aged, so the highest priority has been replacement of the existing fleet. CET is unable to prioritize expansion buses at this point.

CET has been fairly successful in securing federal capital dollars, but they still have not replaced buses that are beyond their useful life and ready for replacement.

The Regional Solutions Transformative Transportation project is connected to a much broader expansion effort to improve Bend CET services for the benefit of educational partners, medical partners, the business community, and the community as a whole. The buses included in the

proposal would be for adding capacity to meet community needs, and will allow us to purchase larger low floor buses that will help us draw more choice riders onto the system.

Lacking the Regional Solutions funding, we would likely be delayed several years in securing funding to purchase new, larger transit buses to meet this need. Consequently, in the short term we would be forced to use older assets as we launch the new/expanded services, and they would likely be less-appealing to new transit riders - which would be a detriment to our efforts to encourage new choice ridership onto the system.

Thank you for the opportunity to clarify our proposal.



RAIN

**REGIONAL ACCELERATOR
& INNOVATION NETWORK**

The RAIN Strategy

1. Launch the accelerator in Eugene, support the OSU Advantage Accelerator in Corvallis
2. Develop the Innovation Network: regional resources linked and navigable
3. Develop early stage, resident capital for region



Progress to Date

- Both Accelerators launched
- May 2014 RAIN incorporated and board established
- November 2014 501c3 accredited
- Identified as a Regional Solutions priority for next biennium
- Both Eugene/Corvallis working on developing strategies for entrepreneurial nodes
- Eugene gifted downtown building to U of O for purposes of RAIN Eugene
- Exceeded funding match from legislature (+25%)



Financial Partners

University of Oregon

U of O Foundation

Oregon State University

Lane County

City of Springfield

City of Eugene

Eugene Area Chamber of Commerce

City of Corvallis

Lane Workforce Partnership

Private Donors

Biennium Metrics

Actuals through March 2015

Companies Graduated from Accelerators	28
Companies Assisted	98
FTE's created	29.5
Revenues	+\$5.2 million
Total dollars invested	+\$2.3 million
Students Involved	1319
New Pools of Investable Capital	\$750,000
Funding Match	Exceeded by 25%

2 Graduating Classes



12 Total Companies





Next class launches on February 2, 2014





RAIN

**REGIONAL ACCELERATOR
& INNOVATION NETWORK**

<http://oregonrain.org>



Stan Baker
 PO Box 525, Corvallis, OR 97339
 Phone: (541) 829-2179
 Email: stan@bakerseedtechnologies.com

Fax: (503) 961-7556
 Web Address: www.bakerseedtechnologies.com

Management:
 Stan Baker / CEO
 Glenda Baker / VP Marketing & Sales

Industry: Agriculture

Number of Employees: 2

Bank: KeyBank

Auditor: Witzke & Mendenhall, LLC

Law Firm: Schwabe, Williamson & Wyatt

Financing Sought: \$1M equity

Current Investors: \$10,000 Personal Funds

Use of Funds: Infrastructure, marketing/sales, distribution, R&D

Business Description: Coated grass seed technology providing a beautiful lawn in half the time for half the cost.

Company Background: Dr. Baker has managed seed companies since 1975 with sales throughout the world (USA, EU, Cyprus, Turkey, and Asia). While continuing to run seed companies he worked towards a Ph.D. in Crop Science / Seed Technology, graduating from OSU in 2013. Baker Seed Technologies, Inc. was formed in May 2014 to enter the seed business based on pre-existing strong business relationships and innovative seed coating technologies.

Management:
 Stan Baker, Ph.D.: VP Infinity Lawn and Garden Seed Division; President Meadowland, Inc.
 Glenda Baker, M.A.: Director Sales and Logistics Infinity Lawn and Garden Seed Division; Executive VP Meadowland, Inc.

Products/Services: Seed coating technology which is able to infuse nutrients, fungicides, mycorrhizae, microbes, and hormones within the seed coating materials. This technology provides the correct additives required by the seed and seedling for optimum germination, emergence, and plant health without danger of excess quantities leeching into ground waters and creating environmental damage.

Technologies/Special Know-how: Coated seed nutrient infusion technology is protected as a trade secret. The product has previously been produced by toll coaters and successfully marketed since 2009. Further technological advancements under development by Dr. Baker include equipment and methodologies that are deemed patentable.

Market: (1) box stores, regional chain, lawn and garden stores; (2) farm stores and coops; and (3) native and environmental. One customer has ordered 160,000 lbs. delivery March, 2015. 2014 grass seed market size \$500,000,000 of which ~\$60,000,000 is coated. Projections by 2019 coated seed \geq 80% of market. Coated seed market growth restricted by lack of coating capacity.

Distribution Channels: Direct sales force, channel partners.

Competition: Scotts, Pennington, Barenbrug, Mountain View Seeds, X-Seeds.

Financial Projections (Unaudited):

	2015	2016	2017	2018	2019
Revenue:	217	6,586	14,844	33,351	50,162
EBIT:	-641	802	2,108	6,312	10,230

(Dollars in thousands)

Valliscor LLC

Production Facility: 1110 NE Circle Blvd, Bldg 11, Corvallis, OR 97330

Corporate Office: 4033 NW Princess St, Corvallis, OR 97330

Phone: 541-286-5082

Fax:

Email: info@valliscor.com

Web Address: www.valliscor.com

Management:

Rich G. Carter, co-founder & CEO

Michael C. Standen, co-founder &

COO

Industry: *chemical manufacturing*

Number of Employees: 7

Bank: *Umpqua Bank*

Auditor: *Knootz, Perdue, Blasquez & Co., P.C. .*

Law Firm: *Evashevski, Elliott, Cihak & Hediger, P.C.; Beveridge & Diamond, P. C.*

Current Investors

Privately held

Business Description: Valliscor is a chemical manufacturing company that provides innovative solutions to access fluorinated building blocks and enantiomerically enriched scaffolds for the pharmaceutical, agricultural, polymer and electronics industries. Valliscor harnesses licensed technology from Oregon State University and from industrial partners to provide unique and cost-effective solutions for producing high value chemical entities.

Company Background: Founded in 2012 by Rich G. Carter and Michael C. Standen, Valliscor exploits the synergy between industrial know-how and academic innovation to provide access to high-value organic building blocks for the pharmaceutical, biotech and agrochemical industries. Additionally, this combined expertise can be harnessed as a Contract Research Organization (CRO) to provide custom synthesis

services with expertise in continuous flow processes, asymmetric synthesis, unstable / reactive intermediates and fluorine incorporation.

Management: Rich G. Carter earned his B.S. degree in Chemistry from Gettysburg College in 1993 and his Ph.D. degree in Organic Chemistry from the University of Texas at Austin. Rich has authored of over 50 peer-reviewed publications and multiple patents including technology licensed by Valliscor on proline sulfonamides and their use in asymmetric carbon-carbon bond forming transformations. Rich's expertise are in multi-step organic synthesis and reaction development. Michael C. Standen earned his B.S. in Chemistry and his Ph.D. degree in Organic Chemistry from the University of Manchester, U.K. Mike has over 20 years of experience in process development, project management and business development and is author of some 33 publications and patents.

Products/Services: Valliscor has proprietary technology for the preparation of a wide range of ultra pure Bromofluoroalkanes (BFAs). Their lead product is bromofluoromethane (BFM), which is used in the manufacture of fluticasone propionate (active ingredient in Flonase & Advair). Valliscor also offers fluoroalkylation services to provide their customers with fluoroalkylated building blocks. With many years of experience with complex multi step organic and natural product synthesis as well as 25+ years of process development experience, Valliscor offers custom synthesis services based on either FTE or flat fee arrangements. Valliscor can take a preliminary lab protocol and develop it into a robust and scalable process suitable for operation in a pilot plant. Using a "quality by design approach" combined with state of the art lab and analytical facilities, Valliscor provides their customers with the most cost effective, safe and environmentally compliant process possible.

Management:

Paul E. King - President and Executive Director
C. Rigel Woodside - CTO

Industry: Sensors

Number of Employees: 2.5

Bank: OSU Federal Credit Union

Auditor: TBD

Law Firm: Reynolds Law LLP

Amount of Financing Sought:

Current Investors:

Use of Funds: Product development, marketing/sales, new feature development

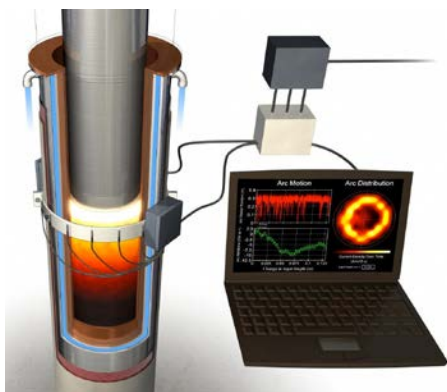
Business Description: *The Arc Position Sensing technology is a patented, award winning technology that will revolutionize the way titanium and other alloys of high value are manufactured. Invented at one of the U. S. Department of Energy national laboratories for the specialty metals and steels industry, the technology provides the unprecedented ability to identify operating conditions that lead to decrease in yield and consequently provides control system parameters in order to optimize the processing. In such a manner, this combination of hardware and software makes it possible for the metals suppliers to decrease their melting losses by 50% or more, saving them tens of millions per year.*

Company Background: *KW Associates LLC was founded by the inventors of the Arc Position Sensing technology in order to bring this exciting new technology to market for the specialty steels and industrial microwave industries. Formed in July of 2014, the company completed the Oregon State University Advantage Accelerator program, an OregonRAIN initiative to support the launch of new companies. We have recently received our first sales of goods and additionally have been notified of award of an OregonBEST Commercialization Grant.*

Management: *Dr. Paul King is the founder, President and Executive Director of KW Associates LLC. Dr. King is a scientist and entrepreneur with more than 30 years of experience in technology development/management. Prior to this, he was the Director of Strategic Partnerships at one of the Dept. of Energy's national laboratories where he was responsible for developing and maintaining strategic partnerships, including management of the labs intellectual property, marketing, agreements, and education programs. In so doing, Dr. King managed a research and implementation budget in excess of \$80M.*

Dr. Rigel Woodside is the co-founder and CTO of KW Associates LLC. As a graduate student under Dr. King, Dr. Woodside continued to develop and refine the Arc Position Sensing technology, culminating in its first industrial trials. Dr. Woodside is dedicating his time to the further development, refinement and deployment of the Arc Position Sensing technology for these, and other high temperature processes.

Products/Services: *The fundamental problem confronting the specialty metals industry is its inability to measure critical operating characteristics during operations. For example, it is known that the behavior of arcs utilized in the melting process impacts the product quality and yield, resulting in a 4-8% loss during operations. The Arc Position Sensing technology works by using magnetic field measurements that 'see' into the process, much like an MRI does in medical imaging. In this manner, we offer an integrated sensor solution that measures critical process characteristics, providing fully integrated systems through purchase, lease or licensing arrangements, training, consulting and process evaluation.*



Technologies/Special Know-how: *The Arc Position Sensing technology is based upon US Patent # 8,111,059 – Electric Current Locator. KW Associates LLC has an exclusive license agreement for this patent from the Dept. of Energy to commercialize for the industries indicated. The Arc Position Sensing technology won the coveted R&D 100 Award (2013) for one of the top innovations in the world as well as several Federal Laboratory Consortium awards for technical excellence and technology transfer.*

Market: *KW Associates LLC is targeting the specialty steels market for initial product rollout. This industry includes alloys of high value such as titanium, nickel super alloys, zirconium, niobium, hafnium, etc. 40% of this \$25B per market sector is from the direct sales of ingots from arc melting processes. The Arc Position Sensing technology can help this market realize a 50% decrease in melt loss, which equates to 1-4% overall savings, or a \$100M-\$400M annual savings industry wide in the United States alone. KW Associates is projecting an 8% market penetration in the first 5 years with annual revenues in excess of \$10M.*

Distribution Channels: *KW Associates LLC will provide its product as a consequence of direct sales efforts. Although the revenues are large within this industry, the number of players are relatively small and well known to the principals of KW Associates LLC.*

Competition: *There are currently no competitors to our technology. In fact, the industry has remained relatively unchanged for more than 30 years. Current state-of-the-art utilizes video cameras, without any online image recognition, and basic electrical signals to control their systems. The Arc Position Sensing technology provides the only mechanism for ‘looking into’ the furnace to gain a better fundamental understanding of the process and the effects of processing conditions.*

Financial Projections (Unaudited):

	2011	2012	2013	2014	2015
Revenue:				\$80	\$670
EBIT:				-\$17	\$105

(dollars in thousands)

TO: Ways & Means, Transportation & Economic Development Subcommittee
Sen. Betsy Johnson, co-chair
Rep. David Gombert, co-chair
Sen. Bill Hansell
Sen. Rod Monroe
Rep. Mike Nearman
Rep. Tobias Read
Rep. Gail Whitsett
Rep. Brad Witt

FROM: Sean Robbins, Business Oregon director

RE: SOAR Oregon

DATE: Wednesday, April 29, 2015

The committee asked for more information about SOAR Oregon, its FTEs, its capital projects and its hardware.

Business Oregon's Infrastructure Finance division is working with SOAR to fund the majority of capital improvement at the Pendleton, Warm Springs and Tillamook test sites. SOAR is responsible for the marketing, operations and range support staff at the local sites. SOAR is currently reevaluating the staffing support levels at the three sites to be commensurate with site demands.

We've enclosed additional background from SOAR Oregon on its operations and its proposed FTE. Please let us know if you need additional information.

Who is SOAR Oregon?

SOAR Oregon is the organization tasked with ensuring the state's three new UAS test ranges – located in Pendleton, Warm Springs, and Tillamook – receive adequate funding to create the infrastructure and hire the specialized staff required by the FAA.

Why Should the Oregon Legislature Invest in Unmanned Aircraft Systems?

- Oregon has a once-in-a-century chance to lead a new industry - civilian unmanned aircraft systems (UAS, or “commercial drones”). Commercial applications must be tested at a UAS test range before the FAA will approve their entry into the National Airspace System (NAS).
- UAS are a natural culmination of past state priorities and investments in high tech, software, data analytics, robotics and precision manufacturing, composites, battery and energy storage technology, forestry, agriculture, marine sciences, wild land firefighting and tsunami (disaster) management.
- Oregon is one of only 10 states to have FAA approved test ranges, and as such already has a distinct competitive advantage over other states.
- FAA requires that very specific personnel be assigned to test ranges. None of our test ranges are staffed to meet these requirements, nor do they have the budget to meet the FAA staff requirements.
- The test ranges are certain to bring economic development to rural areas, although the positive impacts of developing this sector will be felt state-wide.
- We anticipate 1,510 new jobs and the associated economic impact associated with UAS within 3 – 5 years after our ranges are fully operational.
- Jobs associated with UAS are highly skilled and net high wages, with an average income of +\$20k over the state's average of \$45,000.

What is SOAR Oregon asking from the Legislature in 2015?

SOAR Oregon is seeking \$3.5 million from the legislature for the very specific personnel needed to meet FAA requirements and successfully compete with other ranges in other states.

Why is it important to fund test ranges in this biennium?

Oregon is competing with other states to attract players in the growing UAS industry. Our competitors in Nevada, North Dakota, Virginia, Texas, and elsewhere have invested millions of dollars in their test ranges, and in some cases, are better known to industry.

That being said, Oregon has distinct advantages to leverage, including home-grown technology companies, a world-class research university in OSU, desirable climatic diversity, and proximity to major industry players in Washington and California.

Time is of the essence to capitalize on our strengths and leverage the advantage of our FAA approved ranges. We sit on a relatively level playing field with our competitors today, but could be easily outstripped if we do not make an investment in this industry now. If Oregon misses the window of opportunity this session, we will lose jobs to other states.

The need for assuring adequate funding to set up the three new UAV test ranges in Oregon is now. Creating jobs in rural Oregon is a high priority and developing these test ranges is a clear solution to this challenge.

For more information please contact:

Chuck Allen, Executive Director, SOAR Oregon
callen@soaroregon.com 203-517-8100

Job category	Qty	Description
Range Director Annual Salary: \$161,000*	1	Acts as the Ranges' General Manager and provides a range level/customer level business development function as well. Reports to the SOAR COO to perform tasks of continuous Improvement and is responsible for the Safe execution of FAA requirements at the range level.
Range Operations Manager Annual Salary: \$119,000*	1	Processes the customer through all FAA, Pan Pacific Test Range Complex (PPUTRC) test site and other requirements for operational approval to fly. Processes Customer's FAA Certificates of Waiver or Authorization (COA). Schedules all Ranges' flight activity, ensures timely execution of Customers' requirements. Supervises all Range Technicians.
Range Safety Officer Annual Salary: \$119,000*	1	Reports directly to Range Director for issues of flight safety. Develops, implements and oversees all safety related programs across all Ranges including Flight Safety Analyses, Safety Resource Management, Independent Safety Review Board, ensures Safety of Flight during flight operations.
Flight Test Engineer/Range Project Manager Annual Salary: \$119,000*	1	Designs test programs and translates customer flight plans into a format suitable for data generation and reporting to the FAA. Ensures Customer Test Plans are properly structured to accomplish test objectives while ensuring compliance with FAA maturity evaluation. Facilitates creation of test plans which support Customers R&D as well as FAA Type Certification Show Compliance testing. FAA Designated Engineering Representative (DER) preferred.
Information Technology Manager Annual Salary: \$119,000*	1	Ensures Customer technical and proprietary information availability and security per FAA requirements (and Export of Arms Regulations, International Trafficking of Arms Regulations, as required). Ensures information assurance and redundancy. Ensures and maintains information connectivity among all Ranges, with PPUTRC and FAA.
Document Manager Annual Salary: \$70,000*	1	Manages Ranges Technical Publications Library including Master Range Procedures and supporting Documents (Flight Planning Guide, Test Plans, Test Reports, Anomaly Safety and Incident Reports). Ensures Ranges staff have automated updates of all emerging FAA UAS Rules, Orders, Notices, Advisory Circulars.
Range Technicians - Level 1 Annual Salary: \$70,000*	3	Set up launch and recovery sites, performs FAA required flight data management. Serve as payload operators, calibration and maintenance techs, telemetry and spectrum managers, radar and tracking operators. FAA Airframe and Powerplant (A&P) certified, act as ADS-B operators, serve as Piccolo/autopilot control center operators etc. Also serve as Range Safety Observer and Direct Customer liaison.

		Note: A Range Safety Observer is required for each UAS operation, reporting (dash line) directly to the Range Safety Officer.
Range Technicians - Entry Level Annual Salary: \$56,000	3	Run flight line and flight recovery tasks. Perform the task of Visual Observer (VO) under line of sight rules (FMRA Section 333 Exemptions FAA Certificates Of Waiver or Authorization). Under existing FAA Rules, an FAA Second Class Medical Certificate is required. Note: The Visual Observers may not perform additional duties while monitoring flight activity.

*All salaries are fully burdened (base salary x 1.4).

SOAR expects that Customer flight activities will occur simultaneously at all three Oregon Ranges, and at all hours of the day and night. The above Table represents the minimum staffing required to operate the Oregon UAS Test Ranges with three simultaneous flight operations, or multiple flight operations occurring at any Oregon Range dispersed over a 24 hour period. Range personnel directly observing or supervising flight operations have a crew day limit of 8 hours.

TO: Ways & Means, Transportation & Economic Development Subcommittee
Sen. Betsy Johnson, co-chair
Rep. David Gomberg, co-chair
Sen. Bill Hansell
Sen. Rod Monroe
Rep. Mike Nearman
Rep. Tobias Read
Rep. Gail Whitsett
Rep. Brad Witt

FROM: Sean Robbins, Business Oregon director

RE: Seismic Rehabilitation Grant Program

DATE: Wednesday, April 29, 2015

The committee asked for more information about the Seismic Rehabilitation Grant Program and the location of our projects. That information is enclosed below. Please let me know if you need additional information.

Background

Oregon's Seismic Rehabilitation Grant Program established from Senate Bill 3 of the 2005 Legislative Session provides grant funds to seismically rehabilitate critical public buildings.

The program's mission is to reduce seismic risks at schools and emergency services buildings. The goal is to complete all seismic rehabilitation by Jan. 1, 2022 for emergency services buildings and by Jan. 1, 2032 for school buildings.

Buildings that qualify for the grant program include:

- Schools
 - Buildings with a capacity of 250 or more persons routinely used for student activities by K-12 public schools, community colleges, Education Service Districts, and higher education institutions.
- Emergency services
 - Hospital buildings with acute inpatient care facilities

- Fire stations
- Police stations
- Sheriff's offices

The 2001 Legislature approved Senate Bills 4 and 5 to authorize the use of bonds to pay for the seismic rehab projects.

The 2013 Legislature moved the program from the Oregon Emergency Management to Business Oregon's Infrastructure Finance Authority. That year, the Legislature also authorized \$30 million for the program, with half allocated for emergency services and half for schools.

Project summaries

Business Oregon received 46 applications for school seismic rehabilitation projects with a total request of \$45.3 million, three times the \$15 million we had been allocated by the Legislature.

In December 2014, the Seismic Rehabilitation Advisory School Subcommittee recommended 13 projects. The projects were selected based on a benefit-cost analysis tool modeled after one used by the U.S. Federal Emergency Management Agency. The committee also made it a priority to fund projects across as many Oregon communities as possible where there is seismic risk. These 13 projects will save an estimated 1,000 children and adults from injury or loss of life on the day a seismic event occurs.

Bandon High School classroom building: Bandon School District

The retrofit will correct structural deficiencies in the 1974 building. Grant amount and total project cost: \$824,496.

Butte Creek Elementary: Silver Falls School District (City of Mt. Angel)

The school consists of eight buildings built between 1949 and 1990. The retrofit project will include four buildings. Grant amount and total project cost: \$1.5 million.

Central Elementary School: La Grande School District

The 1954 school is an unreinforced masonry building. Grant amount and total project cost: \$1.5 million.

Franklin High School: Portland Public Schools

This high school was constructed in 1915 and is eligible for the National Register of Historic Places. Total project cost: \$5.2 million. Grant amount: \$1.3 million.

Klamath High School gym: Klamath Falls School District

The gym is a 1937 building with a very complex structural system. The total project cost: \$2.5 million. Grant amount: \$1.5 million.

McLoughlin High School gym: Milton-Freewater School District

The gym is a 1963 reinforced concrete masonry building with a steel roof structure. Grant amount and total project cost: \$645,995.

Reynolds Middle School gym: Reynolds School District (City of Fairview)

The gym was built in 1975 and its structure has a well-documented history of failure in earthquakes. Grant amount and total project cost: \$378,020.

Richmond Elementary School: Salem-Keizer School District

The original 1911 school building is a three-story unreinforced masonry building and has a high likelihood of collapsing during an earthquake. Total project cost: \$2.7 million. Grant amount: \$1.5 million.

Riley Creek Elementary: Central Curry School District (City of Gold Beach)

Six buildings included in the retrofit project were built from 1957 to 1970. Grant amount and total project cost: \$1.1 million.

Roseburg High School gym: Douglas County School District

The 60-year-old roof structure is extremely vulnerable to failure. Total project cost: \$2.3 million. Grant amount: \$1.5 million.

Scotts Mills Elementary gym: Silver Falls School District (Scotts Mills)

The gym was built in 1974 and the retrofit will address structural deficiencies. Grant amount and total project cost: \$996,976.

Sitkum Hall: Southwestern Oregon Community College (City of Coos Bay)

The retrofit will correct structural deficiencies in the 1965 building. Grant amount and total project cost: \$497,755.

Toledo High School gym: Lincoln County School District (City of Toledo)

The gym was built in 1955. It has a very unusual construction and has a high seismic hazard level. Grant amount and total project cost: \$1.5 million.



TO: Ways & Means, Transportation & Economic Development Subcommittee
Sen. Betsy Johnson, co-chair
Rep. David Gombert, co-chair
Sen. Bill Hansell
Sen. Rod Monroe
Rep. Mike Nearman
Rep. Tobias Read
Rep. Gail Whitsett
Rep. Brad Witt

FROM: Sean Robbins, Business Oregon director

RE: Oregon Arts Commission and the Percent for Art program

DATE: Wednesday, April 29, 2015

Rep. Gail Whitsett asked for more information on the Oregon Arts Commission's public art projects. That information is enclosed below.

In a previous memo, we provided additional background on the county and tribal coalition grants from the Oregon Cultural Trust. That memo is also included below.

Background

Oregon's statewide Percent for Art program, which began statewide in 1977, is administered by the Oregon Arts Commission, a division of Business Oregon. The Oregon Arts Commission works with state agencies, construction teams and artists to select, manage and install public art projects.

The program requires that State of Oregon construction projects set aside at least 1 percent of the direct construction or renovation costs for public art. The Department of Corrections is exempted from the program and projects that cost less than \$100,000 are also exempted.

Oregon's public art program includes more than 2,500 pieces and involves more than 1,000 artists.

The numbers

The Percent for Art program completed 27 public art projects between 2013 and 2015. The average contribution was \$285,000 for a total contribution of \$7.7 million. The Percent for Art program has 12 additional projects that are active and 11 projects that are pending. The full list is enclosed below. We should note that many projects span more than one year and involve multiple artists. This list reflects the year when the artwork was completed and installed.

Installed/Status	Agency	City	Project	1% amount
2013	WOU	Monmoth	Health & Wellness Center	\$229,570
2013	OSU	Corvallis	INTO-Temporary Housing	\$38,890
2013	OSU	Corvallis	Softball Stadium	\$65,000
2013	OSU	Corvallis	McAlexander Field House	\$17,500
2013	OSU	Corvallis	Native American Cultural Center	\$14,750
2013	OSU	Corvallis	Student Success Center	\$103,400
2013	WOU	Monmouth	Werner Center	\$17,122
2014	WOU	Monmouth	Bellamy Hall , Masske and West (combined project)	\$13,000
2014	WOU	Monmouth	Alderview II	\$40,000
2014	SOU	Ashland	Churchill Hall	\$47,000
2014	OSU	Corvallis	INTO-OSU Live Learn	\$369,270
2014	PSU	Portland	Science Research & Teaching Center (Science II)	\$160,000
2014	DAS	Junction City	State Hospital, Junction City	\$504,821
2014	DAS	Salem	State Hospital Replacement, Salem	\$2,187,390
2014	ODOT	Bend	ODOT/DMV R4, Bend	\$56,030
2014	ODOT	Salem	Transportation Building	\$400,000
2014	OSU	Corvallis	Sports Performance Center II	\$120,000
2014	OSU	Corvallis	Memorial Union	\$63,220

Installed/Status	Agency	City	Project	1% amount
2014	OSU	Corvallis	Student Experience Center	\$330,270
2014	PSU OHSU OSU	Portland	CLSB Collaborative Life Sciences Building	\$1,205,870
2014	UO	Eugene	Matthew Knight Arena	\$850,000
2015	ODFW	Salem	Salem Headquarters	\$54,900
2015	PSU	Portland	Lincoln Hall	\$191,100
2015	OSU	Corvallis	Austin Business School	\$350,000
2015	OIT	Klamath Falls	Village for Sustainable Living	\$135,000
2015	WOU	Monmouth	Devolder Science	\$65,000
2015	EOU	La Grande	Pierce Library	\$54,900
ACTIVE	SOU	Ashland	Science Complex	\$165,000
ACTIVE	PSU	Portland	School of Business Add/Renovation	\$387,000
ACTIVE	UO	Eugene	Lewis Integrative Science	\$450,000
ACTIVE	PSU	Portland	Blumel Hall	\$46,000
ACTIVE	UO	Eugene	Anset Chiles Center	\$108,000
ACTIVE	VA	Lebanon	ODVA Lebanon	\$275,000
ACTIVE	OSU	Corvallis	Furman Hall	\$32,000
ACTIVE	OSU	Corvallis	Black Cultural Center	\$13,000
ACTIVE	SOU	Ashland	North Campus Village Raider Village	\$400,000

Installed/Status	Agency	City	Project	1% amount
ACTIVE	UO	Eugene	Miller Theater Complex	\$58,500
ACTIVE	OSU	Corvallis	Cesar Chavez Cultural Center	\$15,000
ACTIVE	UO	Eugene	Student Recreation Center Addition	\$350,000
WAITING	ODOT	Salem	Train Depot Salem	TBD
WAITING	OSU	Corvallis	Chemical, Biological, Environmental Engineering	\$400,000
WAITING	OSU	Corvallis	Asian and Pacific Cultural Center	\$13,000
WAITING	OSU	Corvallis	New Classroom Facility/Quad	\$480,000
WAITING	OSU	Corvallis	Tebeau New Residence Hall	\$280,000
WAITING	UO	Eugene	Zebrafish Expansion	\$75,000
WAITING	DAS	Salem	State Capitol Seismic Alterations	TBD
WAITING	UO	Eugene	Erb Memorial Union Addition and Renovation	\$300,000
WAITING	UO	Eugene	Allen Hall	\$100,000
WAITING	EOU	La Grande	Zabel Hall	\$45,000
WAITING	UO	Eugene	Straub Hall/Earl Hall Classroom Expansion Project	\$160,000

TO: Ways & Means, Transportation & Economic Development Subcommittee
Sen. Betsy Johnson, co-chair
Rep. David Gombert, co-chair
Sen. Bill Hansell
Sen. Rod Monroe
Rep. Mike Nearman
Rep. Tobias Read
Rep. Gail Whitsett
Rep. Brad Witt

FROM: Sean Robbins, Business Oregon director

RE: Oregon Cultural Trust county and tribal coalition grants

DATE: Tuesday, March 24, 2015

Rep. Gail Whitsett asked for a list of county and tribal coalition grants from the Oregon Cultural Trust. We've enclosed an overview of our distribution models and a list of grants by county and tribe. Please let me know if you have any additional questions.

Where the Oregon Cultural Trust receives its funds

The Oregon Cultural Trust is primarily funded through donations from the public. Individuals and businesses donate to one or more of the 1,400 qualifying arts, heritage and humanities nonprofits, make a matching donation to the Cultural Trust and are eligible to receive a tax credit for up to \$500 per individual, \$1,000 for couples filing jointly and \$2,500 for corporations.

Donations and investment earnings on the Trust fund support administration of the Cultural Trust and grants to arts and culture partners, cultural nonprofits and county and tribal cultural coalitions through a distribution model outlined in statute (ORS 359.426). In addition, the Cultural Trust receives the proceeds from the sale of Oregon Cultural Trust license plates. Funds from the sale of license plates are used exclusively for marketing and promotion of the Cultural Trust.

How the Oregon Cultural Trust distributes its funds

Under statute, the donations and investment earnings received by the Cultural Trust are distributed annually using the following model:

- 58 percent goes directly into the permanent fund
- 42 percent is distributed statewide through grants and services

With the 42 percent

- 7.5 percent is allocated to fund the administration of the Oregon Cultural Trust.
- 34.5 percent is distributed to organizations across Oregon in the following formula
 - 33 percent to five key statewide arts and culture partners
 - 33 percent to a competitive grant program for cultural nonprofits
 - **33 percent to county and tribal cultural coalitions**

How the Oregon Cultural Trust distributes funds to counties and tribes

- **\$6,000** is distributed to each county and tribe as a base allocation
- **Per capita:** The remaining funds are distributed to each county and tribe on a per capita basis

In fiscal years 2014 and 2015, we funded 36 counties and six federally recognized tribes. The enclosed spreadsheet lists the funding and formulas used for each county and tribe.

A note on tribal funding: We have since added a seventh tribe (Confederated Tribes of Siletz) to our funding list after the tribe finished a cultural plan. We're currently working with two additional tribes -- Burns Paiute Tribe and Klamath Tribe – on a cultural plan to add them to the funding list.

Oregon Cultural Trust // County and tribal funding allocations

County/Tribe	Population	Popualation %	Base	Per capita*	FY 14 Total	FY 15 Total
Baker County	16,134	0.42%	\$6,000	\$1,472	\$7,258	\$7,472
Benton County	85,579	2.22%	\$6,000	\$7,805	\$12,674	\$13,805
Clackamas County	375,992	9.77%	\$6,000	\$34,292	\$35,324	\$40,292
Clatsop County	37,039	0.96%	\$6,000	\$3,378	\$8,889	\$9,378
Columbia County	49,351	1.28%	\$6,000	\$4,501	\$9,849	\$10,501
Confederated Tribes of Coos, Lower Umpqua and Siuslaw	955	0.02%	\$6,000	\$87	\$6,074	\$6,087
Confederated Tribes of Grand Ronde	5,251	0.14%	\$6,000	\$479	\$6,410	\$6,479
Confederated Tribes of Umatilla	2,916	0.08%	\$6,000	\$266	\$0	\$6,266
Confederated Tribes of Warm Springs	5,036	0.13%	\$6,000	\$459	\$6,393	\$6,459
Coos County	63,043	1.64%	\$6,000	\$5,750	\$10,917	\$11,750
Coquille Indian Tribe	941	0.02%	\$6,000	\$86	\$6,073	\$6,086
Cow Creek Band of Umpqua Indians	1,556	0.04%	\$6,000	\$142	\$6,121	\$6,142
Crook County	20,978	0.55%	\$6,000	\$1,913	\$7,636	\$7,913
Curry County	22,364	0.58%	\$6,000	\$2,040	\$7,744	\$8,040
Deschutes County	157,733	4.10%	\$6,000	\$14,386	\$18,302	\$20,386
Douglas County	107,667	2.80%	\$6,000	\$9,820	\$14,397	\$15,820
Gilliam County	1,871	0.05%	\$6,000	\$171	\$6,146	\$6,171
Grant County	7,445	0.19%	\$6,000	\$679	\$6,581	\$6,679
Harney County	7,422	0.19%	\$6,000	\$677	\$6,579	\$6,677
Hood River County	22,346	0.58%	\$6,000	\$2,038	\$7,743	\$8,038
Jackson County	203,206	5.28%	\$6,000	\$18,533	\$21,848	\$24,533
Jefferson County	21,720	0.56%	\$6,000	\$1,981	\$7,694	\$7,981
Josephine County	82,713	2.15%	\$6,000	\$7,544	\$12,451	\$13,544
Klamath County	66,380	1.73%	\$6,000	\$6,054	\$11,177	\$12,054
Lake County	7,895	0.21%	\$6,000	\$720	\$6,616	\$6,720
Lane County	351,715	9.14%	\$6,000	\$32,078	\$33,430	\$38,078
Lincoln County	46,034	1.20%	\$6,000	\$4,199	\$9,590	\$10,199
Linn County	116,672	3.03%	\$6,000	\$10,641	\$15,099	\$16,641
Malheur County	31,313	0.81%	\$6,000	\$2,856	\$8,442	\$8,856

Oregon Cultural Trust // County and tribal funding allocations

County/Tribe	Population	Popualation %	Base	Per capita*	FY 14 Total	FY 15 Total
Marion County	315,335	8.20%	\$6,000	\$28,760	\$30,593	\$34,760
Morrow County	11,173	0.29%	\$6,000	\$1,019	\$6,871	\$7,019
Multnomah County	735,334	19.11%	\$6,000	\$67,066	\$63,349	\$73,066
Polk County	75,403	1.96%	\$6,000	\$6,877	\$11,881	\$12,877
Sherman County	1,765	0.05%	\$6,000	\$161	\$6,138	\$6,161
Tillamook County	25,250	0.66%	\$6,000	\$2,303	\$7,969	\$8,303
Umatilla County	75,889	1.97%	\$6,000	\$6,921	\$11,919	\$12,921
Union County	25,748	0.67%	\$6,000	\$2,348	\$8,008	\$8,348
Wallowa County	7,008	0.18%	\$6,000	\$639	\$6,547	\$6,639
Wasco County	25,213	0.66%	\$6,000	\$2,300	\$7,966	\$8,300
Washington County	529,710	13.77%	\$6,000	\$48,312	\$47,312	\$54,312
Wheeler County	1,441	0.04%	\$6,000	\$131	\$6,112	\$6,131
Yamhill County	99,193	2.58%	\$6,000	\$9,047	\$13,736	\$15,047
Total	3,847,729	100.00%	\$252,000	\$350,932	\$545,858	\$602,932

* Per capital = (Population %) * (Remaining funds of \$350,932)

TO: Ways & Means, Transportation & Economic Development Subcommittee
Sen. Betsy Johnson, co-chair
Rep. David Gombert, co-chair
Sen. Bill Hansell
Sen. Rod Monroe
Rep. Mike Nearman
Rep. Tobias Read
Rep. Gail Whitsett
Rep. Brad Witt

FROM: Sean Robbins, Business Oregon director

RE: Oregon Nanoscience and Microtechnologies Institute

DATE: Wednesday, April 29, 2015

Sen. Betsy Johnson asked for more information on the Oregon Nanoscience and Microtechnologies Institute (ONAMI) and the companies it has worked with. The ONAMI staff prepared a report that is enclosed below.

Please let me know if you have any additional questions.



ONAMI
OREGON NANOSCIENCE
AND MICROTECHNOLOGIES
INSTITUTE

April 22, 2015

TO: Mr. Steve Bender, Principal Legislative Analyst
State of Oregon

FROM: Robert (Skip) Rung, President and Executive Director
Cindy Dahl, Vice President, Operations
Oregon Nanoscience and Microtechnologies Institute, Inc.

COPIES: Heather Stafford, Business Oregon
Robyn Sellers, Business Oregon

RE: Testimony to the Ways and Means Transportation and Economic Development
Subcommittee on April 21, 2015

ONAMI would like to supply the following information in answer to the question raised by Senator Betsy Johnson.

ONAMI has begun commercialization (Gap Grant) projects with 44 distinct Oregon Startup companies. We have done multiple projects with a few companies. Therefore, the total number of projects either completed or underway is 48.

Of the 44 companies, 40 are still active (3 have been dissolved, and one is on hiatus while a new project team is formed and seeks funding). Only one company has left Oregon, after operating in the state for almost 9 years, raising over \$62M during that time, and spending much, if not all of that investment in Oregon.

By our count, the current company portfolio employs 187 FTE, as of December 2014. This number includes the company owners, W-2 employees, 1099 employees, and contractors. Through December 2014, portfolio companies have raised over \$161M in funding, including \$18M in Federal funds, \$132M in private investments, and \$11M in revenue.

Attached is a summary table listing the portfolio companies, the date they entered the ONAMI Commercialization program, project status, company location, market characteristics, and status. Also attached is a graphic presentation of some of this material.

We would be happy to meet with you, Senator Johnson, or any of the subcommittee members to discuss this material or answer other questions. Thank you for the opportunity to provide this information.

ONAMI Commercialization Portfolio - 2007 - 2015																					
Company Name	Project Start Date (fiscal year)	ONAMI Project Status	Company Location	Advanced Manufacturing	Agriculture	Aviation	Bioscience	Clean Tech	Electric Vehicles	Energy	Environmental Tech	Medicine	Nanotechnology	Nuclear Science	Semiconductor	Wave Energy	Infotech	Materials/chemicals	Food and Beverage	Company Status, Notes	
AbSci	expected - 2015	in process	Oregon								x						x			negotiating gap project	
Diatomix	expected - 2015	in process	Oregon				x				x						x			negotiating gap project	
Neuromedica	expected - 2015	in process	Oregon	x						x							x			negotiating gap project	
Stratus Diagnostics	expected - 2015	in process	Oregon			x					x						x			negotiating gap project	
Cascade Prodrug	2012/2015	1 completed project; 1 ongoing	Oregon			x					x	x					x			Operating	
Dune Sciences	2008/2012/2015	3 projects; 2 completed, 1 ongoing	Oregon	x		x					x						x			Operating	
Onboard Dynamics Inc.	2015	ongoing	Oregon	x			x		x											Operating	
Tomegavax	2015	ongoing	Oregon			x					x									Operating	
Artielle Immunotherapeutics	2014	cancelled	Oregon			x					x	x								Operating	
OR-CAL	2014	ongoing	Oregon		x							x							x	Operating	
Valliscor	2014	ongoing	Oregon	x							x						x			Operating	
Amorphyx	2013	complete	Oregon	x									x		x					Operating	
Element 1	2013	complete	Oregon	x			x		x	x										Operating	
Polaris Battery Labs	2013	complete	Oregon	x			x	x	x										x	Operating	
SupraSensor Technologies	2013	complete	Oregon	x	x		x			x				x					x	Operating	
CSD Nano	2012	complete	Oregon	x			x		x	x		x							x	Operating	
Energy Storage Systems Inc.	2012	complete	Oregon	x			x		x	x									x	Operating	
Microflow CVO	2012	complete	Oregon	x		x						x							x	Operating	
NemaMetrix	2012	complete	Oregon	x		x					x									Operating	
OnTo Technology LLC	2012	complete	Oregon	x			x	x	x	x									x	Operating	
Pacific Light Technologies	2012	complete	Oregon	x			x		x							x	x			Operating	
QE Chemicals	2012	complete	Oregon			x													x	Operating	
Applied Exergy	2011	complete	Oregon				x		x	x										Company in hiatus	
Mtek - Biodiesel, Desal	2008/2011	2 projects completed	Oregon	x			x		x	x										Operating	
Northwest Medical Isotopes	2011	complete	Oregon	x		x					x		x						x	Operating	
PDX Pharma	2011	discontinued	Oregon			x					x								x	Operating	

Company Name	Project Start Date (fiscal year)	ONAMI Project Status	Company Location	Advanced Manufacturing																Company Status, Notes
				Agriculture	Aviation	Bioscience	Clean Tech	Electric Vehicles	Energy	Environmental Tech	Medicine	Nanotechnology	Nuclear Science	Semiconductor	Wave Energy	Infotech	Materials/chemicals	Food and Beverage		
Voxel Nano	2011	complete	Oregon	x									x		x		x	x		Operating
ZAPS Technologies	2011	complete	Oregon	x	x			x			x									Operating
NWUAV Propulsion Systems	2010	complete	Oregon			x		x		x										Operating
Puralytics	2010	complete	Oregon	x				x			x		x							negotiating 2nd project
Apex Drives	2009	closed - incomplete							x	x										Dissolved
DesignMedix	2009	complete	Oregon				x					x						x		Operating
Floragenex	2009	complete	Oregon		x		x													Operating
PDX Bio	2009	cancelled	Oregon				x					x								Dissolved
Perpetua	2009	complete	Oregon	x				x		x					x			x		Operating; spun out Thermogen 2015
Trillium FiberFuels, Inc.	2009	complete	Oregon		x		x	x											x	Operating in associated business area
Virogenomics/Flash Sensor	2009	complete	Oregon				x					x						x		Operating
CNXL	2008	complete								x								x		company never formed
Inpria	2008	complete	Oregon	x									x		x		x	x		Operating, raised \$15.5M, incl. Intel Capital & OAF
Peregrine Power	2008	complete	Oregon	x							x							x		Operating
American Biodiesel	2007	complete						x		x										Dissolved
Crystal Clear Technology (CCT)	2007	complete	Oregon					x			x									Operating
Home Dialysis Plus	2007	complete	California	x			x					x	x							raised \$62+M while operating in Oregon (8 years); moved to CA in 2012
Nanobits	2007	complete	Oregon	x						x			x							Dissolved



>\$161M leverage to date

187 FTE estimated job impact

>20 ONAMI Gap Fund Portfolio Companies have been SBIR/STTR Awardees

Advanced Materials

- Amorphyx
- CSD Nano
- Dune Sciences
- Inpria
- Microflow CVO
- OnTo Technology
- OrCal
- Pacific Light Technologies
- QE Chemical
- Voxel Nano/SEMI
- Supra Sensor Technologies
(Diatomix)

Energy

- Applied Exergy
- Element One
- Energy Storage Systems
- Mtek Energy Solutions
- NWUAV
- Perpetua Power/Thermogen
- Polaris Battery Laboratories
- Trillium FiberFuels

Water

- Crystal Clear Technologies
- Mtek Desal
- Puralytics
- ZAPS Technologies

Bio and Health Care

- (Artielle)
- Cascade Prodrug
- DesignMedix
- Floragenex
- Flash Sensor
- Home Dialysis Plus
- Northwest Medical Isotopes
- NemaMetrix
- PDX Pharma
- Valliscor
- Tomegavax
(Stratus)
(AbSci)
(Neuramedica)



TO: Ways & Means, Transportation & Economic Development Subcommittee
Sen. Betsy Johnson, co-chair
Rep. David Gombert, co-chair
Sen. Bill Hansell
Sen. Rod Monroe
Rep. Mike Nearman
Rep. Tobias Read
Rep. Gail Whitsett
Rep. Brad Witt

FROM: Sean Robbins, Business Oregon director

RE: Oregon Manufacturing Extension Partnership

DATE: Wednesday, April 29, 2015

The committee asked for more information about the Oregon Manufacturing Extension Partnership (OMEP). The information below and the documents enclosed were provided by OMEP's staff., Please let us know if you need additional information.

The committee asked specifically about OMEP's investments in 18 companies and what the return was on those investments. Here is OMEP's response to that question:

No funds (state or federal) are paid by OMEP to the companies it serves. Instead, the companies pay OMEP for the services they receive. The state and federal funding subsidizes the cost that is charged to businesses, and in the normal case, reduces the daily consulting rate from approximately \$2,000/day to \$1,500/day. Although there may be a very few companies in extraordinary financial circumstances where no fees are charged to the company receiving OMEP services, OMEP seeks to ensure that every company makes a significant payment. (There are also some exceptions when a particular federal grant provides that service funded by the grant be provided at no cost.) The amount of the subsidy for special programs funded by the special state appropriation in the 2014 session are also set forth in the attached policy paper.

As you can see from the attached graphs, the client fees are always the largest portion of OMEP's budget, even in the projected 2015-17 biennium when federal funding will increase significantly. These charts reflects the overall breakout between client fees, federal funds, state funds and special federal grants in 2011-13, 2013-15, and projected for 2015-17.



Policy and Principles Surrounding Application of Federal and State Funding

Background: OMEP delivers management and production-related consulting services to small and mid-sized manufacturers throughout Oregon. Services are delivered on a fee-for-service basis. To help make the fees more affordable and to cover the costs associated with delivering services to Oregon's broad geography, OMEP receives state and federal funding. These funds are applied in different ways pursuant to the specific grant award. In every client engagement, OMEP seeks to ensure that the client company makes a cash commitment to service. The rare exceptions to this are for companies whose financial condition makes this impossible or where the service is specifically fully subsidized in accordance with grant requirements. OMEP does not provide cash grants to companies.

Base Awards: OMEP receives annual funding from the National Institute of Standards and Technology (NIST) to operate the Manufacturing Extension Partnership center in Oregon. Since 2003, OMEP has also received \$500,000 in state funding per biennial to assist with the match necessary to drawdown the federal funds and help further state priorities of rural service and job creation. These funds are used to reduce OMEP's standard day rate from the full recovery amount of approximately \$2,000 per day to the standard rate of \$1,500 per day.

Grant Specific Direct Subsidies: In addition to the rate-lowering effect of the base awards which all clients benefit from, OMEP receives specific, mostly federal, grants that are targeted at certain sectors or certain company profiles. For example, OMEP received a \$500,000 reward from NIST in 2014 to provide specialized technology acceleration services for the food processing industry. Through that grant, OMEP provided certain specific services to very small food manufacturers at no cost.

In 2014, OMEP received \$750,000 from the state to provide a variety of services to manufacturers. In consultation with Business Oregon, OMEP created the following programs, each with differing client costs and subsidies. Because some of these programs were new to the market, it was believed that deeper subsidies than normal were required until the record of delivery was strong enough to attract companies through normal marketing and sales efforts. The specific fee and subsidy policies for this program are as follows:

Small Business Initiative: This program provides consulting services to smaller companies in both urban and rural areas designed to increase their competitiveness. Services are focused on business management and operational excellence. Utilizing state funds, the standard fee for service was reduced from \$1,500 to \$750 per day. In certain cases, where for more remote locations or for companies in difficult financial circumstances, the fee could be further reduced to \$275 per day.

Business Innovation Workshop: In each workshop 3-4 companies receive 4 half-day classroom sessions addressing key questions about leadership, financial success, operational excellence and top line growth for your company. Between the sessions, companies receive an on-site visit from an OMEP consultant for individualized coaching and implementation guidance. The workshop content is delivered by a combination of OMEP staff and outside contractors with specialties in desired areas. It is estimated that OMEP's full cost of each 4-session workshop and site visits is \$24,000 or \$6,000 per company. Using the state funds as a subsidy, the fee for each participating company is set at \$2,500. In certain cases, for companies in difficult financial circumstances, the fee could be further reduced to an affordable amount.

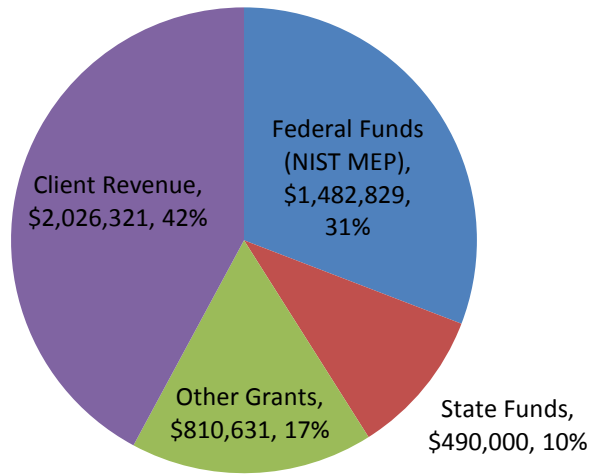
Growth and Innovation Initiative: This program assists companies to develop new products or explore new markets. Utilizing state funds, the standard fee for service was reduced from \$1,500 to \$750 per day.



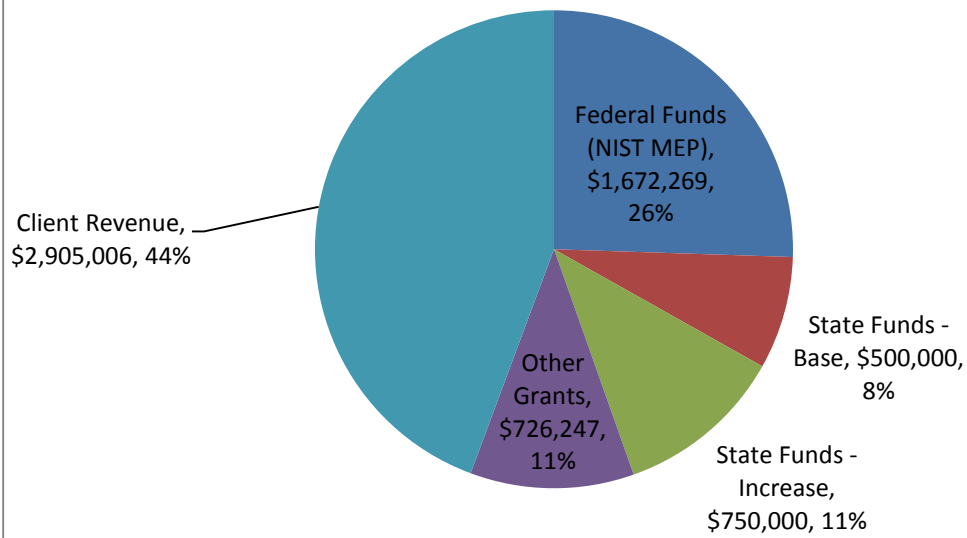
In certain cases, where for more remote locations or for companies in difficult financial circumstances, the fee could be further reduced to \$275 per day.

Business Transition Program: This program provides advisory services for companies facing a leadership or ownership transition in the next five years. In partnership with OMEP Preferred Providers, OMEP offers strategic, legal, financial and operational guidance to company owners. The total cost of this program varies on the basis of the complexity of the company's financial and ownership structure and the amount of outside legal and financial assistance required. Utilizing state funds, OMEP provides a subsidy to the total cost of the engagement from between \$7,100 to \$11,100.

OMEP Funding 11-13 Biennium



OMEP Funding 13-15 Biennium



OMEP 15-17 Biennium (Estimate)

