STEM Investment Council

September 25, 2015
9:00am – 12:00pm
2 World Trade Center
Mezzanine 3 & 4
121 SW Salmon St., Portland

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

JIM PIRO, Chair

AUBREY CLARK

HERB FRICKE

LISA GRAHAM

DWAYNE JOHNSON

ERIC MESLOW

THOMPSON MORRISON

Staff:
MARK LEWIS

AGENDA

1. **Welcome & Director Updates**
2. **Expanded Council Ex-Oficio Membership**
3. **Proposed timeline for Innovation Grants**
4. **Regional STEM Hub RFP for current Hubs**
5. **Regional STEM Hub Report - South Metro-Salem**
6. **Discussion of STEM Legislation**
7. **Subcommittee Updates**
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 spokesman will have three (3) minutes.

All meetings of the STEM Investment Council are open to the public and will conform to Oregon public meetings laws. The upcoming meeting schedule and materials from past meetings are posted online. A request for an interpreter for the hearing impaired or for accommodations for people with disabilities should be made to Seth Allen at 503-378-8213 or by email at Seth.Allen@state.or.us. Requests for accommodation should be made at least 48 hours in advance.

Request for Application

Regional STEM Hub – Backbone Continuation Grant

2015-2017

Grant Application Due Date: Friday, October 9th, 2015

Oregon Department of Education
Office of Learning
255 Capitol Street NE
Salem, OR 97310-0203

Regional STEM Hubs – Backbone Continuation Grant
Request for Applications

I. Background and Legislative Intent

In 2013, Oregon's Regional STEM Hubs were created as a Strategic Initiative recommended and overseen by Oregon's STEM Investment Council and the Chief Education Office (formerly known as the Oregon Education Investment Board) to increase student interest, preparation, and attainment in science, technology, engineering, and mathematics for success in related degrees and careers.

These regionally-focused, multi-sector partnerships unite schools, institutions of higher education, non-profits, businesses, civic leaders and communities to drive local STEM innovation and improvements at the systems-level, while also working to identify systemic barriers and co-construct solutions with communities most affected by the barriers. The STEM Hubs leverage local resources and opportunities to bring STEM to students early and often, engaging them in and beyond the classroom. Hub borders are fluid, overlapping into surrounding communities and connected by multiple professional networks through which ideas and resources flow.

The Theory of Action for the Regional STEM Hub strategy is based upon a collective impact partnership model where partnerships engage with multiple sectors in the community; eliminate locally defined inequities; use data for continuous improvement; and leverage community assets in efforts to improve practice and increase opportunities related to STEM education.

Hubs align partner efforts towards a common agenda with a commitment to using relevant data for continuous improvement. Where regional programming gaps exist, STEM Hubs also implement strategies that include:

- educator professional development around best practices in STEM instruction,
- implementation of the Next Generation Science Standards and the Common Core,
- increasing in and out of school hands-on STEM learning experiences for students, and
- deepening student connections to the fast-growing STEM employment opportunities in the state of Oregon.

Local STEM employers provide internship and other career-related learning experiences for students and work alongside formal and informal educators to bring real-world contexts to enrich and deepen content understanding and its application.

Regional STEM Hubs form a mutually supportive statewide network of hubs for implementation and dissemination of best practices. Through HB 3072, the 2015 Oregon Legislature, in collaboration with the Governor's office and the STEM Investment Council, provided continued monetary support to increase organizational capacity for this work. The

intent is for all communities to have access to a STEM Hub in Oregon and to build an ecosystem to reach each and every student and educator.

All current and future Regional STEM Hub Grant sites are expected to incorporate and adopt the principles of Oregon's Equity Lens. Through this Equity Lens, the Oregon Department of Education considers the creation of strategic opportunities for educational equity and excellence for every child and learner in Oregon. The Equity Lens provides twelve core beliefs that fuel opportunities to bolster success for diverse student populations across the state. The beliefs most pertinent to the work of this grant are highlighted below:

- **We believe** that everyone has the ability to learn and that we have an ethical and moral responsibility to ensure an education system that provides optimal learning environments that lead students to be prepared for their individual futures.

- **We believe** that our community colleges and university systems have a critical role in serving our diverse populations, rural communities, English language learners and students with disabilities. Our institutions of higher education, and the P-20 system, will truly offer the best educational experience when their campus faculty, staff and students reflect this state, its growing diversity and the ability for all of these populations to be educationally successful and ultimately employed.

- **We believe** that the students who have previously been described as "at risk," "underperforming," "under-represented," or minority actually represent Oregon's best opportunity to improve overall educational outcomes. We have many counties in rural and urban communities that already have populations of color that make up the majority. Our ability to meet the needs of this increasingly diverse population is a critical strategy for us to successfully reach our 40/40/20 goal.

- **We believe** that resource allocation demonstrates our priorities and our values and that we demonstrate our priorities and our commitment to rural communities, communities of color, English language learners, and out of school youth in the ways we allocate resources and make educational investments.

- **We believe** that communities, parents, teachers, and community-based organizations have unique and important solutions to improving outcomes for our students and educational systems. Our work will only be successful if we are able to truly partner with the community, engage with respect, authentically listen—and have the courage to share decision making, control, and resources.

II. General Information

A. Purpose of the Regional STEM Hub Backbone Continuation Grant

The Regional STEM Hub Backbone Continuation Grant of 2015-2017 is intended to increase organizational backbone capacity to engage in cross-sector collaboration. These regional partnerships will ensure that community assets are leveraged in order to increasing students' proficiency, interest, and attainment of post-secondary credentials and degrees in STEM and CTE. This collaboration will be a catalyst for economic vitality for individuals, communities, and the State. This grant focuses on the continual coordination, data, and communication efforts of the STEM Hubs.

To support the success of this initiative, the Oregon Regional STEM Hubs will be connected through a larger statewide STEM network that will unify efforts to:

a) improve student performance in STEM related content,

b) increase interest and improve preparation for STEM careers, and

c) increase proficiency in STEM concepts necessary to make personal and societal decisions.

Across these focus areas, we prioritize efforts that close the opportunity gaps for culturally and linguistically diverse students and students navigating poverty; connect with local economic and workforce needs; and increase high school and post-secondary graduation and attainment.

B. Grant Eligibility and Funding Requirements

Partnerships that have received funding in the previous (2013-2015) biennium will be expected to provide evidence and explanation that their partnership is vibrant, has deeper understanding and clarity on their purpose and goals, and is making purposeful adjustments to their partnership plans. Continued financial support will be distributed to those partnerships that have:

a) strong and committed leadership/governance,

b) clearly understand the needs of the broader community and what it is trying to achieve,

c) know the assets and expertise that it has that can be leveraged for change,

d) engaging with the broader community to achieve results,

e) committed to addressing issues of equity, access, opportunity, and attainment for culturally and linguistically diverse learners and learners and families navigating poverty and,

f) willing to hold itself accountable with quantitative and qualitative data.

The minimum criteria for continuation funding are as follows:

1. Applicant must have received a Regional STEM Hub Grant during the 2013-2015 biennium and must have submitted their final grant report.

2. Applicant must have an established backbone organization to coordinate and support the various partners of the Regional STEM Hub to ensure effective communication, a focus on data and outcomes, and the alignment of programming to address the STEM-related needs of the community.

3. Applicant must have an approved and current Partnership Plan that guides the vision, goals, strategies, and outcomes of the Regional STEM Hub, which contributes to the achievement of the State's education goals and the STEM-related goals identified by the STEM Investment Council.

4. Fiscal agents must be one of the following:
   a) a public school district,
   b) an educational service district,
   c) a public charter school,
   d) community college, or
   e) a public university

Based on the availability of state resources, this grant is expected to begin November 9th, 2015 and ends June 30th, 2017 upon acceptance, review and approval of:

a) the 2013-2015 Biennium Final Regional STEM Hub Grant Report

b) an online self-assessment

c) a current *Partnership Plan and partner commitments

d) justification of additional considerations (optional – see section C)

e) a 2015-2017 budget narrative and worksheet

f) an individual review panel interview with Regional STEM Hub representatives

The intended grant award amounts are estimated to be between $120,000 - $270,000 including additional consideration for having an extensive reach (section C, part 1 below). These amounts will be in addition to the $30,000 that was previously received to ensure operational continuity. Technical assistance and cross-Hub collaboration support will also be provided as an on-going resource. The Oregon Department of Education, in collaboration with the Chief Education Office, intends to award monetary funding and technical assistance to all applicants that meet the criteria; however, there is no guarantee of award or funding dollar amount.

Funds will be available upon official notification through June 30, 2017. Under certain circumstances and with prior notification, ODE may approve use of grant funds between June 30, 2017 and September 30, 2017. Grant funds may not be used outside of the award period November 9, 2015 – June 30th 2017 without prior approval.

* Partnership plans are current if they are revised between May 1, 2015 and November 30, 2015. If the partnership plan has not been revised by submission, this will need to be a stipulation as part of the grant agreement and updated by November 30, 2015.

C. Additional Considerations (optional)
STEM Hubs may provide justification to be considered for an allocation of funds at the higher end of the estimated award range (see above). Two major categories of circumstances and/or activities of the Hub will be taken into account:

1) Extensive Reach (geographic range and density of populations served);
2) Statewide network support activities. In order to be considered for funding related to these two categories, please respond to the prompts below. In addition to your responses, evidence of these circumstances and/or activities should be evident in your partnership and budget plans.

1) Extensive Reach
STEM Hubs may have extenuating circumstances that justify a higher funding allocation due to serving populations across a vast geographic range or a large number of students and educators. These Hubs may need additional resources to ensure that they are able to adequately serve their partnership. Please provide your rationale and evidence for increased funding.

2) Statewide network support
One element in our theory of action is that Hubs will generate new ideas and resources that have the potential to be scaled across the entire network. If your Hub has developed, piloted, and is able to provide evidence of impact for a tool or resource of substantial benefit to other Hubs, please provide a request that includes:

- A description of the tool/resource and how it would benefit the larger statewide network of STEM Hubs.
- Evidence that other Hubs are interested in your tool/resource.
- A proposed budget and plan to scale and sustain the activities/resources.
- What implications scaling would have on other Hubs (e.g. Would they need to participate in professional development hours, or would they need staff time to implement?)

Note: funds awarded in this section are in addition to the other aspects of backbone funding.

D. Reporting and Assurances
Successful proposals will include specific outcomes and metrics that align to the STEM Pathways Document and the STEM Hub Outcomes Framework. Data collection and quality improvement process will provide evidence there has been progress toward meeting outcomes within the timeline of the grant. Progress must be documented and measureable and observable through anecdotal records or documented through other means. The results of the evaluation will be reported to ODE as part of an interim, Legislative, and final Grant Report. Evaluations will be included in the report to the Oregon Legislature. Submission of materials that include images of minors must be accompanied by a signed release form by a parent or guardian.

To facilitate evaluation of the grant by ODE and the Chief Education Office, recipients will provide additional data related to the impact of the STEM Hub on students, teachers and community partners. This data may include but are not limited to the following:

- Target Goals that address how culturally and linguistically diverse learners and learners and families navigating poverty will be an supported during the 2015-2017 biennium and beyond
- An interim grant report, due by October 15, 2016
- Data and information requests during legislative sessions
- A final grant report, due August 31, 2017
- Ongoing site visits and interviews and/or surveys conducted by the Chief Education Office, ODE staff and/or evaluators

By signing the assurances included in this application, school districts, non-profit organizations, post-secondary institutions, business, industry and community partners agree to cooperate with ODE and the Chief Education Office to collect and report such data to the extent that it is possible. In addition, products and materials created as a result of Region STEM Hub grants will be made available for unrestricted reuse and recombination according to the following Creative Commons licensing agreement: http://creativecommons.org/licenses/by-nc-sa/4.0/.

E. Budget Narrative and Worksheet

Describe how the funding amount requested was determined and will be utilized. This narrative should clearly reflect the descriptions to the proposed backbone functionalities. Major single expenditures should be itemized and linked to specific grant activities. Also, include the following:

- Identify roles and responsibilities for each individual with a salary funded partially or entirely though this grant.
- Identify the nature of the contracted services included in the professional and technical services.
- Identify specific events and venues if travel includes conferences and meetings in other states.

III. Request for Application Timeline and Events

Completion Dates	Activities
July 31, 2015	Submission of Final 2013-2015 Biennium Grant Report
September 9, 2015	Request for Applications (RFA) available online – Announcement via email, web, etc.
September 15, 2015	4 PM Technical Assistance Webinar – Understanding the RFA
October 9, 2015	***Online Self-Assessment Completed by 12:00PM PDT and Applications due to ODE by 12:00PM PDT***
October 13-16, 2015	Applications individually reviewed and initially evaluated
October 19, 20 & 22, 2015	***Interviews with Cross-sector Review Panels***
November 9, 2015	Awards estimated to be finalized (applicants have one week from notification to appeal)
November 2015	1st Regional STEM Hub Phone/webinar meeting
January 2016	1st Statewide Regional STEM Hub Convening
Monthly Communication	Ongoing Regional STEM Hub Phone/webinar Meeting
October 15, 2016	Full Interim Report Due to support the 2017 legislative session
April 1, 2017	Notice of intent to use funds during the summer of 2017
June 30, 2017	Last day to expend funds
August 15, 2017	Last date to draw funds (note: EGMS system shutdown approx. two weeks to update index numbers in late July – early August)
August 31, 2017	Final grant report due (for awardees not delivering programs July 1 – September 30, 2017)

Funding for Summer Programming July 1 2017 through September 30, 2017

Proposals awarded under this RFP will be funded for eligible expenses incurred through June 30, 2017. Under specific ODE guidelines, awardees may also receive advanced payment for summer activities occurring between July 1, 2017 and September 30, 2017. Awardees will be required to submit an updated proposal to ODE that outlines anticipated summer expenditures no later than April 1, 2017. The proposal should be based on activities identified and budgeted for in this RFP and may only use remaining grant funds. **No additional funds will be awarded for summer activities.**

Any funds not expended by the awardee will need to be returned to ODE with the final report. **The following timelines are only applicable to funded programs that are intending on delivering summer activities between July 1, 2017 and September 30, 2017 with the existing funding**.

Completion Dates	Summer Related Activities
April 1, 2017	Application to utilize funds for summer programs July 1-September 30 2017
June 30, 2017	Summer activities transitional period
October 31, 2017	Final report for all grant related activities

IV. Application Process

Application Review, Scoring, and Appeals Process

The following process will be used to submit documents and determine the continuation funding for the Regional STEM Hubs:

1. Completion of the online Self-Assessment by 12:00 PM on Friday, October 9, 2015
2. Electronically submit via secure file transfer to Joy Blackwell (joy.blackwell@state.or.us) at the Oregon Department of Education by 12:00 p.m. on Friday, October 9, 2015 the following:
    - Cover Page,
    - Current Partnership Plan & Partner Commitments,
    - 2015-2017 Budget Narrative & Worksheet, and
    - Any additional information not previously documented in the 2013-2015 Biennium Final Regional STEM Hub Grant Report
3. A review panel will read and evaluate all required documents in this application process with the expectation that criteria outlined are addressed.
4. The Regional STEM Hub Grant Review Committee will conduct interviews with a panel from each applicant region. In addition the Hub Director/Coordinator, representatives from the Hubs should include key leaders from different sectors of the Partnership.
5. The Regional STEM Hub Grant Review Committee will make final recommendations and suggestions based on the submission and previous work of the grant recipient. The Deputy Superintendent of Public Instruction will make the final award decision.

The Oregon Department of Education, in collaboration with the Chief Education Office, will notify applicants of funding, provide a summary of comments and suggestions related to their applications. Applicants will have one week from the date of the notification letter to contest the funding decision through the process identified in the notification. Once appeals have been considered, the award decisions made by the Deputy Superintendent are final.

V. Partnership Plan and Self-Assessment

Regional STEM Hubs are expected to adopt a growth mindset and processes of continual improvement. If your governance committees and constituents have not had the opportunity to review progress to date and revise your Partnership Plan within the past four months, you will be expected to have plans in place to do so within two months of receiving funding.

As part of the review process, we are asking you and others from your executive team to complete a Self - Assessment Survey. This survey provides the opportunity for you to provide honest reflection on the status of your Partnership and provide additional input against the review criteria. In addition to yourself and/or other staff, please have at least four key leaders in your Partnership, representing different sectors, complete the **online Self-Assessment.**

Below are the questions that will be included in the survey:

A. Leadership, Vision & Regional Alignment

To what extent has…

- The STEM Hub partnership includes high-level leaders from P-20 education and entities such local business/industry, community-based organizations, parents, community youth, state agencies, foundations, etc. who are meaningfully engaged in the planning, governance, and implementation of the partnership activities.
- The STEM Hub partnership has articulated a compelling vision that is aligned with the core principles of the larger statewide STEM network and the State.
- The STEM Hub partnership complements, or integrates with, other regional initiatives (e.g. Early Learning Hubs, Regional Achievement Collaboratives, Workforce development, etc.)

B. Governance & Sustainability

To what extent has…

- The STEM Hub partnership has formalized partnership agreements and governance decision-making processes.
- The STEM Hub partnership has developed a culture of continuous improvement.
- The STEM Hub partners have committed human, material, and financial resources to this effort.
- The STEM Hub partnership engages funders and/or partners that provide sustained financial support for the ongoing operations and collaborative work of partners to improve outcomes.

C. Backbone Operations

To what extent has…

- The STEM Hub partnership has in place much of the necessary capacity to support the daily management of the partnership, data needs, facilitation, communication and engagement of the community.

D. Equity

To what extent has…

- The STEM Hub partnership uses an analytical tool, such as State of Oregon's Equity Lens, to guide decision-making processes with regards to equity.
- The STEM Hub demonstrates a commitment to addressing the components of culturally responsive pedagogy, leadership and community engagement.
- The STEM Hub partnership works with and represents the regional community, including partners who advocate for culturally and linguistically diverse learners and learners and families navigating poverty.
- The STEM Hub partnership has conducted rigorous examinations of community assets that can be leveraged in the service of the collaborative.

E. Evidence-based decision-making

To what extent has…

- The STEM Hub partnership collects and disaggregates baseline data for core outcomes and indicators.
- The STEM Hub partnership has released communications including a baseline report or similar comprehensive document(s) with vision, mission and community data (needs assessment/asset maps/progress).
- The STEM Hub partnership has identified relevant goals, outcomes and indicators related to the critical STEM-related needs and challenges of the community.

Appendix A

Definitions

(1) "Achievement Gap" means the gap in achievement (state test scores in science and mathematics as well as post-secondary degree attainment in STEM) that often exists between students who are economically disadvantaged, students learning English as a second language, African American, Hispanic or Native American compared to their peers.

(2) "Authentic Problem-Based Learning" means using real world questions, problems, and tasks—often drawn from local community issues and industries—as the focus to drive the learning experiences, deepen understanding, and developing rich contextual connections across a variety of STEM and non-STEM disciplines.

(3) "Career and Technical Education (CTE)" is a comprehensive educational program for students based on industry needs. CTE includes coursework in areas such as health care, engineering, and computer science.

(4) "Community Engagement" means a broad collaboration and participation between multiple sectors of the community for the mutually beneficial exchange of knowledge and resources to identify local needs and contribute to larger conversations on visioning planning which may include, but not limited to, parent groups and advocacy groups, industry and STEM agencies, economic and workforce groups, student input, and educators.

(5) "Culturally Responsive" means the implicit use of the cultural knowledge, prior experiences, frames of reference, and performance styles or diverse students to make learning more appropriate and effective for them.

(6) "Effective STEM Instruction" means the use of evidence-based practices that support interconnected, relevant STEM instruction as stated in definition number fifteen.

(7) "Effective STEM Leadership" means identifying schools, school districts, post-secondary institutions, business & industry, student-focused nonprofits and community leadership to support implementing and improving STEM teaching and learning in addition to creating a culture that fosters STEM learning with evidence-based resources. Effective STEM leadership develops an understanding of what effective and interconnected STEM education looks like in the classroom and supports the development of learning environments that empower educators to implement innovative STEM education approaches.

(8) "Effective STEM Learning Environments" means supporting student interaction with STEM education during formal and informal settings in ways that promote deeper understanding of real-world concepts. Such learning environments must engage all students in solving complex problems, using highly interactive learning opportunities that create new opportunities for STEM learning across the core curriculum.

(9) "Equity Lens" refers to the commitment and principles adopted by the Oregon Education Investment Board to address inequities of access, opportunity, interest, and attainment for underserved and underrepresented populations in all current and future strategic investments.

(10) "Post-secondary Institution" means:

- (a) A community college operated under ORS chapter 341.
- (b) The following public universities within the Oregon University System:
  - (1) University of Oregon.
  - (2) Oregon State University.
  - (3) Portland State University.

(4) Oregon Institute of Technology.
(5) Western Oregon University.
(6) Southern Oregon University.
(7) Eastern Oregon University.

(c) Oregon Health and Science University.

(d) An Oregon-based, generally accredited, not-for-profit institution of higher education.

(11) "Regional STEM Hub" means a commitment of a group of key stakeholders from different sectors such as, but not limited to, school districts, informal education providers, post-secondary institutions, business & industry, student-focused nonprofits, students, families, community members and policy makers, to advance state and local educational goals related to science, technology, engineering, mathematics and career & technical education (CTE).

(12) "School" means a public middle school, high school, community college, or post-secondary institution offering a comprehensive instructional program. A school may include a discreet comprehensive instructional program within a larger school or college.

(13) "Statewide STEM Network" means a supportive collaboration between and across Regional STEM Hubs to share knowledge, expertise, insights, and leadership to assist other communities in their efforts to create similar STEM partnerships.

(14) "STEAM Education" means the incorporation of strategies to enhance science, technology, engineering and mathematics (STEM) education by integrating art and design, and promoting creative possibilities.

(15) "STEM Education" means an approach to teaching and lifelong learning that emphasizes the natural interconnectedness of the four separate STEM disciplines which mirrors the practices and rich contexts of STEM practitioners. Developing and deepening content knowledge and skills in science and mathematics is the foundation of STEM teaching and learning. The natural connections among science, mathematics and STEM are made explicit through collaboration between educators resulting in authentic and appropriate context built into instruction, curriculum, and assessment. The common element of problem solving is emphasized across all STEM disciplines allowing students to discover, explore, and apply critical thinking skills as they learn.

(16) "STEM Lab School" means to establish a school that has a student-centered school culture of inquiry with meaningful and authentic learning environments that integrate STEM and/or STEAM education aligned with state, national and industry standards. This cutting-edge learning center will deepen connections between other educational institutions, business, industry, out-of-school educators, and the local community to create and promote STEM career pathways for students. An intentional focus of a lab school is to support the professional learning of current and future educators, the implementation of innovative education models, and educational research in a manner that increases knowledge and capacity of systems and institutions beyond the school itself.

(17) "STEM Practitioners" refers to individuals engaged in STEM-related professions such as but not limited to, natural resources management, high-tech manufacturing and product development, information technology, industrial design, health sciences, software, scientific research, engineering, data analytics, etc.

(18) "Student-Focused Nonprofits" means an organization that meets all of the following requirements:

(a) Is established as a nonprofit organization under the laws of Oregon;

(b) Qualifies as an exempt organization under section 501(c)(3) of the Internal Revenue Code as defined in ORS 314.011; and
(c) Is focused on providing services to students and/or educators whose goals or mission are focused on impacting and improving student outcomes in STEM education.

(19) "Underserved Students" are students whom systems have placed at risk because of their race, ethnicity, English language proficiency, socioeconomic status, gender, sexual orientation, differently abled, or geographic location.

(20) "Underrepresented Students" in STEM are from demographic groups whose representation in STEM fields and industries does not mirror regional and national focus populations specifically, women, African American, Native American, Hispanic and Pacific Islander students which systems have provided insufficient or inadequate balance of opportunity.

(21) "Wraparound" is the process involves a community care team that consists of the student, his/her natural support system (e.g. family members, friends, etc), and formal support (e.g. social workers, teachers, health care professionals, etc). In essence, the wraparound process, "demonstrates respect for and builds on the values, preferences, beliefs, culture, and identity of the child/youth and family, and their community" (Bruns, Walker, and al., 2004).

Appendix B

Application Cover Page
(Please Print or Type – **All** Fields Must Be Completed)

Requested Funding: _____
Total # of students directly served: _____
Total # of educators directly served: _____
Total # of active partners: _____

Name Regional STEM Hub: _____

Project Director: _____

Mailing Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ FAX: _____ E-mail: _____

Grant Fiscal Agent Name and Title: _____

Phone: _____ FAX: _____ E-mail: _____

2015 - 2017 Statement of Assurances

- The fiscal agent assures and certifies compliance with the regulations, policies, and requirements as they relate to the acceptance and use of state funds for programs included in this application.
- The recipient or the senior designate agrees to carry out the intent of the Regional STEM Hub and use of funding as proposed in the application.
- On or before October 15, 2016 the fiscal agent will submit an interim evaluation report and August 31, 2017 an end of grant report to the Oregon Department of Education as outlined in the RFA.
- Violations of the rules or laws may result in sanctions, which may include but are not limited to reduction or revocation of grant award.
- The fiscal agent is responsible for adopting and adhering to the Equity Lens and their principles throughout the Regional STEM Hub governance.
- The applicant certifies that to the best of his/her knowledge the information in this application is correct; that the filing of this application is duly authorized by the governing body of this organization, or institution, and that the applicant will comply with the general statement of assurances.
- The applicant certifies to the best of his/her knowledge the guidelines for Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. § 1232g; 34 CFR Part 99) are being followed. It is a Federal law that protects the privacy of student education records.
- By signing the assurances included in this application, Regional STEM Hubs agree to cooperate with ODE to collect and report such data to the extent that is possible.

Please Print Name of Project Director	Signature of Project Director	Date

Note: Products and materials created as a result of the Regional STEM Hub grant will be made available for unrestricted reuse and recombination according to the following Creative Commons licensing agreement: http://creativecommons.org/licenses/by-nc-sa/4.0/

Appendix C

Statement of Commitment from Partners

(Please Print or Type)

Partner Institution Name: _____

Partner Type: (Post-secondary institution, school district, non-profit, business, industry, etc.): _____

Name: _____ Title: _____

Mailing Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ FAX: _____ E-mail: _____

Please explain the role of this partner in this Regional STEM Hub, contributions that this partner will make, and evidence that the proposed activities are integral to this partnership's plan:
Describe what supports this stakeholder will provide to enhance the collaborative STEM education model. Please provide a statement of commitment and contribution to the Regional STEM Hub resources (financial, in-kind, materials, expertise, etc.) that may continue beyond the life of the grant.

_____ _____ _____

Print Name of Authorized Agent | Signature of Authorized Agent | Date

Appendix D

Evaluation Rubric:

This rubric acknowledges the developmental continuum of partnerships and enables the reviewers to determine if the application meets the minimum criteria outlined in the previous sections.

Domain	Evidence of Concern	Evidence of Exploring/Emerging Partnership	Evidence of Developed Partnership
Leadership, Vision & Regional Alignment	***Leadership*** Application does not include sufficient evidence of commitments or show promise to gain commitments in the biennium from high-level leaders from P-20 education There is limited evidence of commitments from partners outside the education sector ***Vision*** The partnership appears to be struggling with defining a clear vision and/or with understanding the core principles of the larger statewide STEM network and the State ***Regional Alignment*** Application provides insufficient evidence that the partnership is aware of other regional efforts and histories in their community The partnership has no plans to communicate or coordinate with other regional initiative leadership	***Leadership*** Application includes sufficient evidence of commitments from high-level leaders from P-20 education and entities such as local business/industry, community-based organizations, parents, families, community youth, state agencies, foundations, etc. ***Vision*** The partnership has worked with partners to articulate a vision that may not fully align to the core principles of the larger statewide STEM network and the State ***Regional Alignment*** Application provides sufficient evidence that the proposed partnership is aware of other regional efforts and histories in their community The partnership plans to coordinate with regional efforts with similar focus to reduce service gaps and overlaps in programming	***Leadership*** Application includes compelling evidence that high-level leaders from P-20 education and entities such local business/industry, community-based organizations, parents, community youth, state agencies, foundations, etc. are meaningfully engaged in the planning, governance, and implementation of the partnership activities. ***Vision*** The partnership has articulated a compelling vision that is aligned with the core principles of the larger statewide STEM network and the State ***Regional Alignment*** The partnership complements, or integrates with, other regional initiatives

Governance & Sustainability	***Governance*** Partnership does not appear to have made significant efforts to formalize partnership agreements and governance decision-making processes Application does not provide sufficient evidence that the partnership has made progress in developing a culture of continuous improvement ***Sustainability*** Application provides limited evidence that partners have committed human, material, and financial resources to this effort Application provides limited evidence of, or plans to, engage funders or seek financial commitments to support/sustain the partnership	***Governance*** Partnership has begun or has plans to formalize partnership agreements and governance decision-making processes Application provides some evidence that the partnership has a developed a culture of continuous improvement ***Sustainability*** Application provides some evidence that partners have committed human, material, and financial resources to this effort The partnership engages funders and/or partners (or has plans to) to financially support the ongoing operations and collaborative work of partners to improve outcomes	***Governance*** Partnership has formalized partnership agreements and governance decision-making processes Application provides compelling evidence that the partnership has a developed a culture of continuous improvement ***Sustainability*** Application provides compelling evidence that partners have committed human, material, and financial resources to this effort The partnership engages funders and/or partners that provide sustained financial support for the ongoing operations and collaborative work of partners to improve outcomes
Backbone Operations	The partnership appears to have limited capacity to support the daily management of the partnership, data needs, facilitation, communication and engagement of the community	The partnership has in place some of the necessary capacity to support the daily management of the partnership, data needs, facilitation, communication and engagement of the community	The partnership has in place much of the necessary capacity to support the daily management of the partnership, data needs, facilitation, communication and engagement of the community
Equity	There is limited evidence of the use of an analytical tool, such as State of Oregon's Equity Lens, to guide decision-making processes with regards to equity The partnership has limited knowledge of culturally responsive pedagogy, leadership and community engagement strategies	There is sufficient evidence of the use of an analytical tool, such as State of Oregon's Equity Lens, to guide decision-making processes with regards to equity The partnership has provided an understanding of culturally responsive strategies and has provided specific some specific examples of implementation	There is compelling evidence of the use of an analytical tool, such as State of Oregon's Equity Lens, to guide decision-making processes with regards to equity The partnership exhibits a strong research-based, expert level of cultural responsiveness and provides strong connection to the Hubs implementation of pedagogy, leadership and community engagement strategies

	The partnership lacks a clear plan to work with and represent the regional community, including partners who advocate for culturally and linguistically diverse learners and learners and families navigating poverty The partnership lacks a clear plan to conduct rigorous examinations of community assets that can be leveraged in the service of the collaborative and to bring these assets to the attention of the leadership/governance team	The partnership has plans to work with and better represent the regional community, including partners who advocate for culturally and linguistically diverse learners and learners and families navigating poverty The partnership has clear plans to conduct rigorous examinations of community assets that can be leveraged in the service of the collaborative and to bring these assets to the attention of the leadership/governance team	The partnership works with and represents the regional community, including partners who advocate for culturally and linguistically diverse learners and learners and families navigating poverty The partnership has conducted rigorous examinations of community assets that can be leveraged in the service of the collaborative and have brought these assets to the attention of the leadership/governance team
Evidence-based decision-making	The application does not include evidence of or a plan to identify goals, outcomes and indicators or only includes a limited number of outcomes that do not span P-20 There is little evidence that the partnership plans to disaggregate baseline data for core outcomes and indicators. There is insufficient evidence that the partnership has plans to release communications with data reports to the broader community	The partnership has begun to identify relevant goals, outcomes and indicators related to the critical STEM-related needs and challenges of the community The partnership has begun to collect and disaggregate baseline data for core outcomes and indicators. Partnership has plans to release communications including a baseline report or similar comprehensive document(s) with vision, mission and community data (needs assessment/asset maps/progress).	The partnership has identified relevant goals, outcomes and indicators related to the critical STEM-related needs and challenges of the community The partnership collects and disaggregates baseline data for core outcomes and indicators. Partnership has released communications including a baseline report or similar comprehensive document(s) with vision, mission and community data (needs assessment/asset maps/progress).

Sources: State of Oregon's Equity Lens
Partially adapted from: http://www.strivetogether.org/sites/default/files/images/StriveTogether%20Theory%20of%20Action_0.pdf

Comments/Notes:

Meets criteria for support? : Yes/No and explanation

Additional Considerations Rubric:

STEM Hubs may provide justification to be considered for an allocation of funds at the higher end of the estimated award range (see RFA). Two major categories of circumstances and/or activities of the Hub should be taken into account: 1) Extensive Reach (geographic range and density of populations served); 2) Statewide network support activities. In addition to the applicant narrative responses, evidence of these circumstances and/or activities should be evident in the partnership and budget plans.

Directions to reviewers – Please rate the following

1. **Extensive reach**

Based on the application and narrative, to what extent do you agree with the following statements? (Place an X in the category that reflects your agreement)

	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat agree	Strongly Agree
1. The application provides compelling evidence that the STEM Hub serves a large population of students and educators relative to the other STEM Hubs in the statewide network.					
2. The application provides compelling evidence that the STEM Hub serves a population across an expansive geographic range relative to the other STEM Hubs in the statewide network.					

2. Statewide network supports

Based on the application and narrative, to what extent do you agree with the following statements? (Place an X in the category that reflects your agreement)

	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat agree	Strongly Agree
1. There is compelling evidence that the proposed tools/resources would benefit the larger statewide network					
2. There is a strong likelihood that the tools/resources described would benefit the larger statewide network					
3. The application provided strong evidence that other Hubs would be interested in the proposed tools/resources					
4. The proposed budget and plan to scale and sustain the tools/resources does not rely heavily on the budget of other STEM Hubs for implementation and sustainability.					

REGIONAL STEM HUBS

PARTNERSHIP PLAN DEVELOPMENT

A Regional STEM Hub is an action-oriented partnership that engages multiple stakeholders and organizations within a defined geographic area, working toward the common goal of increasing student interest, preparation, and success in STEM. Each STEM Hub will define concrete, measurable outcomes suited to the needs of students and their community, while leveraging local resources and opportunities to achieve those outcomes. This community-based strategy embraces the view that education is a shared responsibility and that learning takes place in both formal and informal environments. Thus, Regional STEM Hubs will leverage the assets of schools, nonprofits, businesses, civic leaders, and others to drive innovation and improvements in STEM learning at a systems level.

Regional STEM Hubs hold themselves accountable to ambitious goals and evidence-based practices across the birth to career continuum, including:

- Students—particularly those who are underserved and under-represented in STEM fields—develop proficiency in STEM knowledge, skills, and dispositions necessary to succeed in education and careers beyond high school;
- Students learn through cross-disciplinary, real-world applications of STEM, inspiring them and connecting them to potential career pathways;
- Teachers and out-of-school educators become confident and competent with STEM practices and content through professional interactions with their peers and with STEM practitioners;
- Out-of-school programs and free-choice learning environments complement in-school learning through place-based and engaging STEM programming; and,
- Community members understand the importance of STEM to their community, and become advocates for effective STEM education.

Key Components and Principles

Regional STEM Hubs will be led by a local organization, or a small consortia of organizations, which has the credibility and capacity to unify partners around a common vision, and hold each other accountable to agreed-upon milestones and outcomes. Lead organizations must develop a governance structure to allow the Hub to make specific, intentional decisions about what the Hub will do, who will participate, and how it will operate. All partners must agree to clear roles and responsibilities, committing to leverage their individual strengths, and the assets of their organizations, for greater impact.

The following components are critical for success:

- ***Common vision***—There is clear, common agreement about the primary needs that the Hub will address, the role(s) of the Hub itself to drive change, as well as the strategies and approaches that will be employed. This may result in individual organizations adjusting their individual agendas for the greater effectiveness of the partnership as a whole.
- ***Commitment to data and shared measures of success***—Hub partners hold each other accountable to common measures of success and agree to participate in baseline data collection, engage in data analysis, and adjust their work in response to findings.

- ***Aligned action***—Partner activities should be part of a coherent set of strategies, a plan of action, to address the articulated needs. Though some overlap in programming may exist, efforts are made to differentiate programming responsibilities across the various partners based on evidence of success and capacity.
- ***Effective communication***—Consistent and open communication is essential to the effectiveness of multi-stakeholder partnerships. Both internal and external communication is essential to keep partners engaged and informed, and also so that the broader community understands the purpose and progress of the Hub.
- ***Backbone organization(s)***—This local organization, or small consortia of organizations, serves as the primary point of contact, administers financial resources, and facilitates consistent and open communication and coordination amongst partners.

Design Principles - the following principles are foundational to the values of the statewide STEM network envisioned by the OEIB and the Oregon Department of Education:

- ***Equity:*** Hubs are responsive to the unique needs and cultures of underserved and under-represented students in STEM. STEM literacy is essential for each and every child and youth to be a full participant in today's complex and technologically rich society, and to access opportunities for family-wage earning careers.
- ***Student voice***: The focus of our collective efforts is the student. Students should be meaningfully involved as a primary partner, particularly those who are underrepresented in STEM fields.
- ***Inclusiveness:*** Regional STEM Hubs are comprised of multiple partners necessary to achieve systemic change and improved outcomes: preK-12, post-secondary, workforce, industry, out-of-school educators, and community-based organizations. The input, resources, and efforts of all interested sectors of a community should be welcome. Though increases in size of partnerships can be a challenge, diversity of thought and approach is a strength, and can lead to increased sustainability and impact.
- ***Sustainability:*** Hubs emphasize alignment of community and external resources toward long-term impacts and systemic change, rather than short-term projects and activities. Effective STEM Hubs ensure that there is a local commitment of both human and financial resources to achieve the shared vision. Sustainability is not just about financial resources, but also about relationships, governance, capacity-building, and communication.
- ***Openness, transparency, knowledge-sharing***—Hub partners agree to share findings and data with each other, across other the network of Regional STEM Hubs, and with their broader community in a spirit that values what didn't work as much as successes.
- ***Continuous improvement***—Your partnership efforts will evolve substantially as you learn more about the impact of your efforts, and the underlying barriers to student motivation and achievement in STEM. To that end, STEM Hubs are strongly encouraged to regularly reflect on progress indicators, and make adjustments to their Partnership Plan as needed.

PARTNERSHIP PLAN

In order to guide the work of your Regional STEM Hub—and to articulate your vision, goals, community needs, and strategies to internal as well as external entities—we are asking you to create a formal Partnership Plan as part of the requirements of this grant. However, it is critical to understand that the development of a Partnership Plan for your Regional STEM Hub is NOT a grant application! This document is intended to serve the purposes of your partnership; rather than solely be a matter of compliance.

The process by which you develop your plan will be important to your long-term success as a Hub. We strongly encourage you to take a "community engagement" approach that gathers input from a wide variety of community stakeholders, not just the people and programs that have been central to your efforts to date. One possible approach to guide the design of your approach is the North Carolina DIY Guide to STEM Community Engagement (http://www.ncpublicschools.org/docs/stem/resources/diy-guide.pdf).

With that in mind, we ask that you include the following minimum elements. Feel free to include additional sections if they are helpful for you and your community. Please refer to the original RFP for additional clarification.

- *Executive Summary*: Overview of the mission, vision, goals, and expected outcomes.

- *Asset Map and Analysis*: Describes the community assets (human, financial, and otherwise), and where there are opportunities to collaborate and leverage existing assets (e.g. educational, operational, intellectual, and infrastructure); identifies where gaps in service exist, particularly for the most vulnerable student populations.

- *Needs Assessment*: Identifies current local and regional educational and economic needs that are provides the sense of urgency and purpose to your collective work, and which will be addressed by the proposed strategies; makes connections to where local and regional needs mirror those at the state and national level.

- *High-leverage strategies and programs*: Describes the agreed upon interventions and approaches, and provides evidence supporting them. Explains how you anticipate that these strategies will lead to the expected outcomes, and what data will demonstrate impact on students, educators, and the local community.

- *Data & Evaluation Strategy*: Measurement, metrics, and success criteria for the Regional STEM Hub and its strategies; Includes logic models to illustrate how the strategies will lead to measurable outcomes—both short- and long-term.

- *Sustainability*:

    - Financial Strategy: Plans, targets, and dedication of resources for local sustainability; external development goals, revenue streams, and factors which will lead to ongoing success and scalability.

    - Governance and Operations: Describes the operating and legal structure; as well as the staffing, and governance plans—including roles and responsibilities of individuals and organizations who will be the primary implementers of the Partnership Plan.

Regional STEM Hub Overview

CTE STEM
Connecting Education to Careers

STEM Investment Council

September 25, 2015

OREGON DEPARTMENT OF EDUCATION

OEIB Oregon Education Investment Board

Oregon Regional STEM Hubs

- Linking education, workforce, and economic development to increase the number of students interested in and prepared for STEM careers throughout Oregon in order to fuel prosperity for individuals, communities, and the STATE.

Questions to establish the Statewide STEM Network (2013-2015)

- What is a STEM Hub at a fundamental level?
- What are successful strategies in other states?
- What partnership assets does Oregon already have established?
- How to move beyond the K12 educational system?
- How to develop specific criteria to achieve overarching goals and outcomes?
- How to align strategies across the Hubs?

Identified Key Attributes (2013-2015)

- Extent of Geographic Region
- Evidence of partnerships and programmatic success
- Understanding of their communities STEM related needs and challenges
- Alignment of to other regional efforts
- Leveraging community assets to close the opportunity gap for culturally and linguistically diverse students and students experiencing poverty
- Developed Partnership Plan (Business Plan) – Two Phase Application Process

Regional STEM Hub Application – Two Phases (2013-2015)

Phase 1

Provide support for Regional STEM partnerships to develop a formalized framework (Partnership Plan/Business Plan). Page 10-12

4 funded Regional STEM Hubs applied as a phase one

8 unfunded applications applied as a phase one

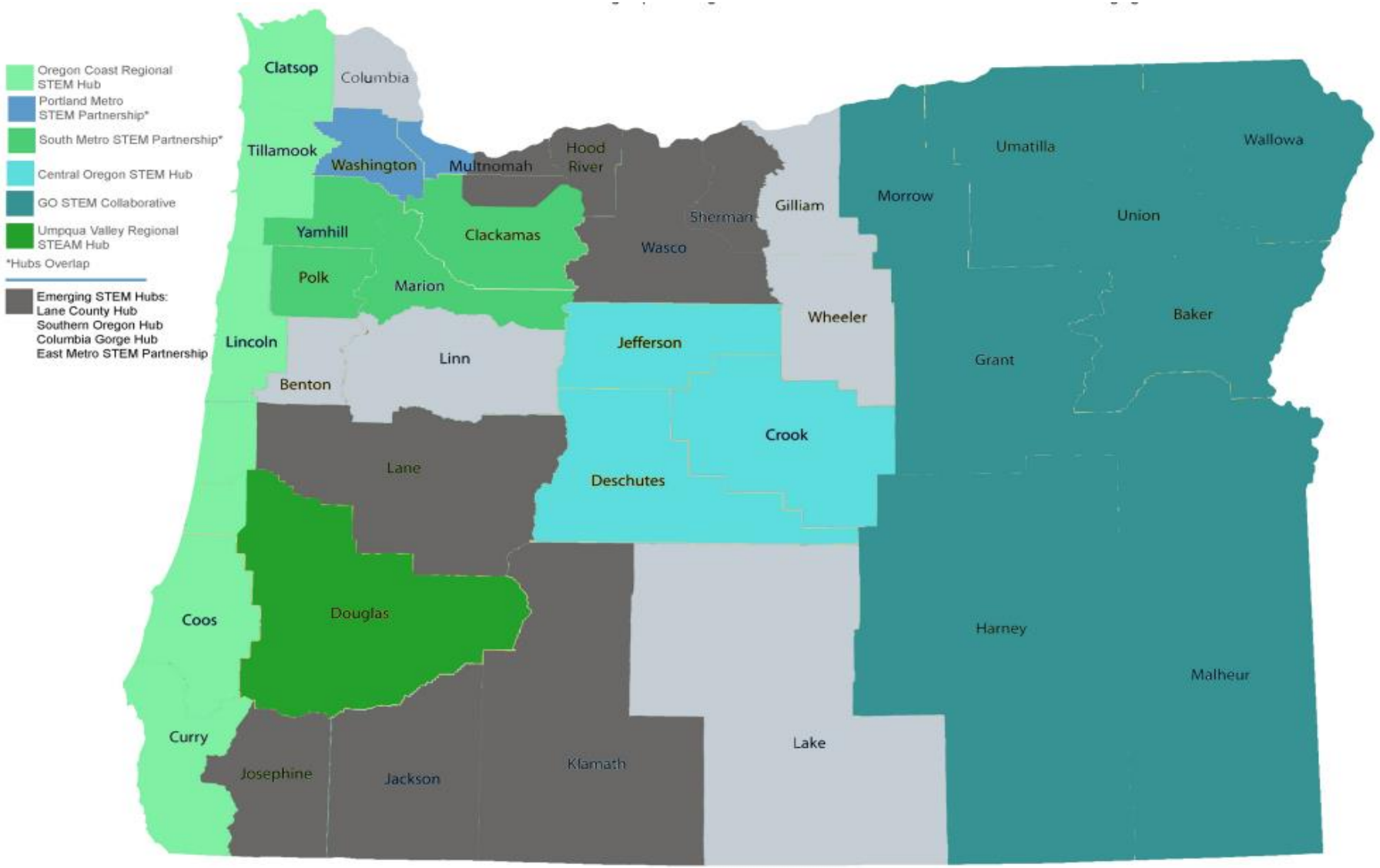
Phase 2

Support established Regional STEM Hubs that have a well-developed Partnership Plan/Business Plan that met the given criteria. Page 13-15

2 funded Regional STEM Hubs applied as a phase two

1 unfunded application applied as a phase two

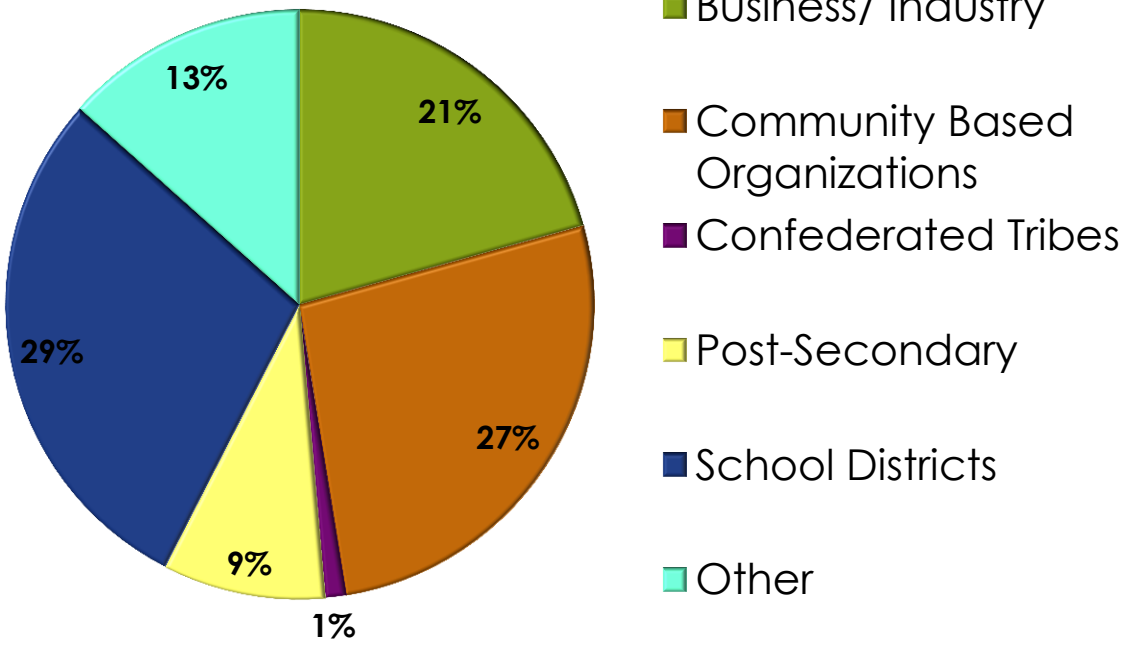
Geographic Regions



Regional STEM Hub Partnerships

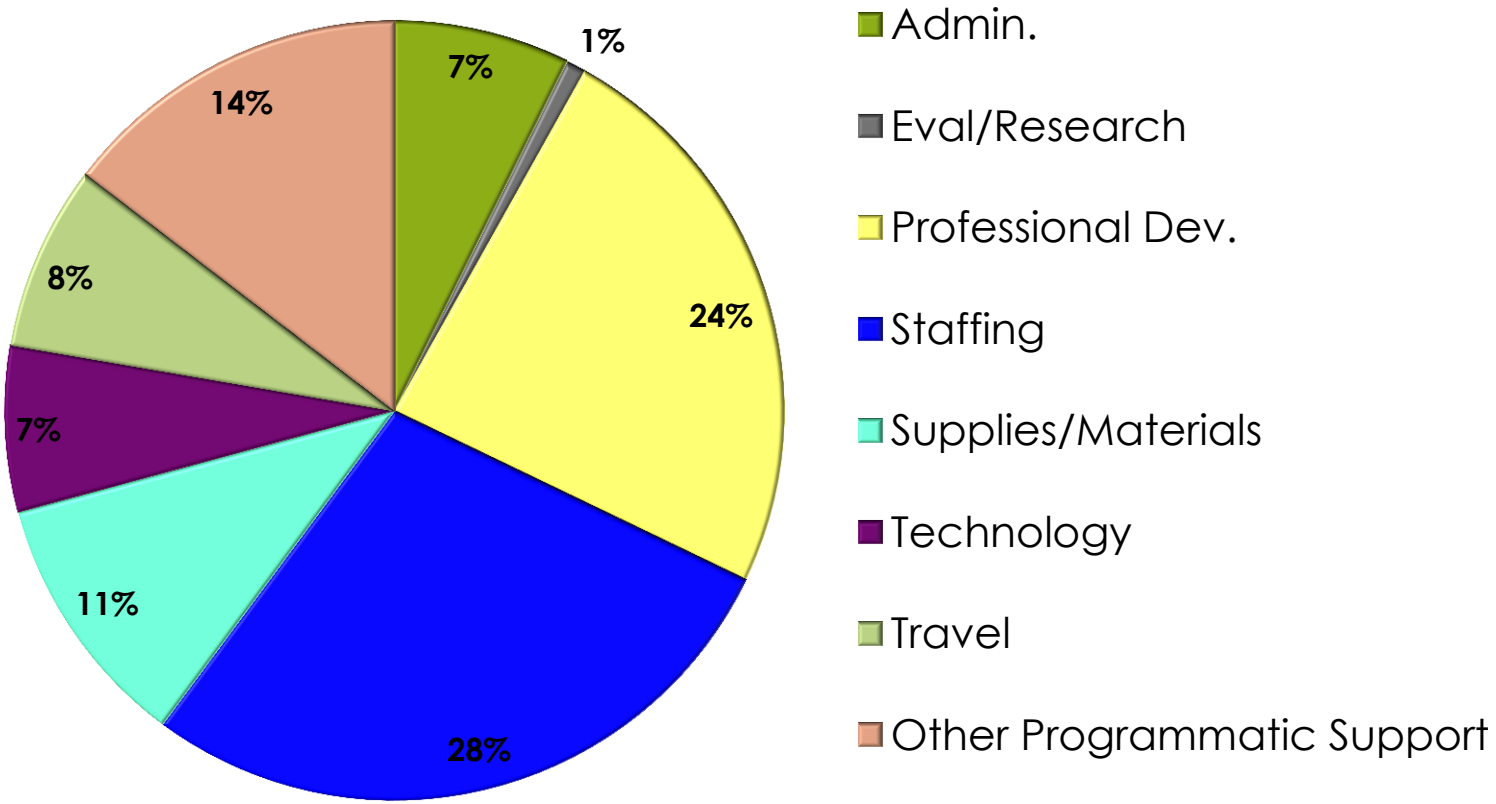
$2.6 Million awarded to **6 Regional STEM Hubs** to improve student performance in STEM related content, increase interest and proficiency in mathematics and science

STEM Hub Partnerships



Regional STEM Hub Funding Allocations

2013-2015 Regional STEM Hub Planned Budgets*



*These are estimates based on final grant report

Insights Gained & Moving Forward

- Increased amount of interest in communities around Oregon (15 Regional STEM Hub, 87 STEM, STEAM & CTE and six STEM Lab School Grant Submissions)
- Communication between Hub around programmatic and coordination alignment (beyond the K12 system) is critical
- Separating backbone functionality and programmatic strategies will assist in more focused intent
- **Need assistance defining and aligning outcomes**

Questions to identify Key Attributes (2015-2017)

- How to elevate and leverage successful partnerships?
- How to fully embrace culturally responsive practices?
- How to move beyond the K12 educational system?
- How to develop specific criteria to achieve overarching goals and outcomes?
- How to align strategies for a Statewide STEM Network?
- **What other questions should we be asking for indicators of success?**

Timelines for STEM Hub Grants

Regional STEM Hub – Continuation Backbone RFA

- Released Sept. 9th, 2015
- Interview Panel Oct. 19,20 & 22, 2015

Emerging Regional STEM Hub - RFP

- Expected Release in November
- Expected Review January

Programmatic Investment – RFP*

*Based on successful partnership plan submission

- Expected Release in November & March
- Expected Review in January & May

Thank you

OREGON DEPARTMENT OF EDUCATION

Request for Proposal

Regional STEM Hubs

2014-2015

Grant Application Due Date: Tuesday, January 21, 2014

Oregon Department of Education
Office of Learning
255 Capitol Street NE
Salem, OR 97310-0203

Table of Contents

It is the policy of the State Board of Education and a priority of the Oregon Department of Education that there will be no discrimination or harassment on the grounds of race, color, sex, marital status, religion, national origin, sexual orientation, age or disability in any educational programs, activities, or employment. Persons having questions about equal opportunity and nondiscrimination should contact the Oregon Department of Education, 255 Capitol Street NE, Salem, OR 97310; Telephone (503) 947-5600; Fax (503) 378-5156.

I. BACKGROUND and LEGISLATIVE INTENT

In 2013, under the leadership of Governor John Kitzhaber, the Oregon Education Investment Board proposed key strategic investments to support Oregon's attainment of the 40/40/20 goal. One of the focused strategies is to strengthen and expand Oregon's emphasis of Science, Technology, Engineering and Mathematic (STEM). Vital to this STEM Initiative is strong collaboration and shared vision between P-20 education, STEM related business and industry, student-focused nonprofits, government, informal education providers, parents and students. Understanding the critical importance of STEM skills for a successful workforce, the Legislature passed House Bill 3232 Strategic Investments: Connecting to the World of Work. This will provide funding for developing or expanding Regional STEM Hubs that may also support Science, Technology, Engineering, the Arts, and Mathematics (STEAM) & Career and Technical Education (CTE) programs and/or activities. The Regional STEM Hubs will foster 21st century STEM career skills and provide for student populations that have historically been underserved and underrepresented throughout the state. These Regional STEM Hubs will form a mutually supportive statewide network of hubs for implementation and dissemination of best practices.

STEM education has received national attention due to research projections that indicate a substantial amount of students are entering the workforce with underdeveloped 21st century skills. It has become imperative that more emphasis is needed in education not only on mathematics, scientific and technological innovations, but an expansion of STEM knowledge beyond what was once considered acceptable. In 2010, according to the Oregon Employment Department, about 95,000 Oregonians worked in STEM occupations; which is only 6% of the current workforce. However, it is now estimated that between the years 2010 and 2020 STEM occupations will grow nearly 18%, placing a much higher demand for a well-qualified STEM workforce.

An urgency to address student academic success specifically, in mathematics and science, is evidence-based on Oregon's National Assessment of Educational Progress (NAEP) scores and the 2011-2012 Oregon Assessment of Knowledge and Skills (OAKS) when comparing data of students in the 8th grade.

Achievement levels of 8th grade students on the NAEP mathematics and science assessment: 2011

8th Grade	Below Basic	Basic	Proficient	Advanced
Mathematics Students	27%	38%	27%	8%
Science Students	35%	33%	30%	2%

National Center for Education Statistics, NAEP Data Explorer, http://nationsreportcard.gov/data_tools.asp

Achievement levels of 8th grade students on the OAKS mathematics and science assessment: 2011-2012

8th Grade	Very Low/Low	Nearly Meets	Meets	Exceeds
Mathematics Students	24%	11%	46%	18%
Science Students	15%	19%	51%	15%

Oregon Department of Education 2011-2012 Statewide Report Card, www.ode.state.or.us

Also significant are the discrepancies in data representing the historically underserved and underrepresented student populations when compared to the entire student body population. As we break down the demographics of OAKS scores in mathematics and science, it becomes very

apparent that increased opportunities to STEM learning environments are critical for all students to become contributing STEM literate members of society.

Achievement levels of 8th grade students on the NAEP mathematics and science assessment: 2011

8th Grade	African American	American Indian/ Alaskan Native	Girls	Hispanic/Latino	Native Hawaiian/Pacific Islander
Mathematics Students Ave. score was 283	263	260	280	268	N/A*
Science Students Ave. score was 155	N/A*	N/A*	154	135	N/A*

National Center for Education Statistics, NAEP Data Explorer, http://nationsreportcard.gov/data_tools.asp *Reporting Standards Not Meet

Achievement levels of 8th grade students on the OAKS mathematics and science assessment: 2011-2012

8th Grade	African American	American Indian/ Alaskan Native	Girls	Hispanic/Latino	Native Hawaiian/Pacific Islander
Mathematics Students NOT Meeting Benchmark	55%	49%	36%	48%	40%
Science Students NOT Meeting Benchmark	60%	45%	32%	55%	50%

Oregon Department of Education 2011-2012 Statewide Report Card, www.ode.state.or.us

While test scores are one indicator of an increased need for STEM educational opportunities, according to the National Science Board (2010), "only 10 percent of all STEM doctorates are awarded to nonwhite, non-Asian students, although these groups now represent one-quarter of the U.S. population". It becomes very apparent with this data that we need to purposefully design support systems that will increase student achievement and outcomes in mathematics and science as it relates to engineering and technology to foster 21st century STEM career skills. Specifically, this data clearly demonstrates that students of color are not receiving adequate supports in STEM at the K-12 level to prepare them for a world of work that relies on 21st century career skills.

The Regional STEM Hub Grant is established as part of the Connecting to the World of Work Program with the specific intent to support the educational goals of the State, in addition to improving STEM education through statewide collaborative efforts. In order to promote coherent community collaboration, Regional STEM Hub partnerships, must include at minimum: 1) a school district, 2) a postsecondary institution, 3) a student-focused nonprofit and 4) a business, industry or other STEM focused community partner.

This grant opportunity seeks school districts, postsecondary institutions, and student-focused nonprofit organizations to apply to be the fiscal agent. It is critical that the fiscal agent understand how to provide high quality effective STEM instruction, leadership, and learning environments as well as the needs of the underrepresented and underserved populations of students where the opportunity gap clearly exist. In addition, the Regional STEM Hubs must focus on these five key elements for sustained success: 1) common agenda, 2) shared measurement systems, 3) mutually reinforcing activities, 4) continuous communication, and 5) backbone support organization.

All Regional STEM Hubs must also understand the Oregon Department of Education's STEM Education Initiative as: "An approach to teaching and lifelong learning that emphasizes ***the natural interconnectedness*** of the four separate STEM disciplines. The connections are made explicit through collaboration between educators resulting in real and appropriate context built into instruction, curriculum, and assessment. The common element of problem solving is emphasized across all STEM disciplines allowing students to discover, explore and apply critical thinking skills as they learn." Paramount to the success of the STEM Initiatives is the expanding collaboration between P-20 education, STEM focused business and industry, student-focused nonprofits, government, informal education providers, parents and students statewide. Through the development and growth of these sustainable partnerships within our community, we can successfully prepare students for the 21st century workforce.

In addition, all Regional STEM Hubs will be expected to incorporate and adopt the principles of OEIB Equity Lens and it is the perspective through which the Oregon Department of Education considers the creation of strategic opportunities for students of color. The Equity Lens provides twelve core beliefs that fuel opportunities to bolster success for diverse student populations across the state. The beliefs most pertinent to the work of this grant are highlighted below:

- **We believe** that everyone has the ability to learn and that we have an ethical responsibility and moral responsibility to ensure and education system that provides optimal learning environments that lead students to be prepared for their individual futures.
- **We believe** that the students who have previously been described as "at risk," "underperforming," "under-represented," or minority actually represent Oregon's best opportunity to improve overall educational outcomes. We have many counties in rural and urban communities that already have populations of color that make up the majority. Our ability to meet the needs of this increasingly diverse population is a critical strategy for us to successfully reach our 40/40/20 goals.
- **We believe** that resource allocation demonstrates our priorities and our values and that we demonstrate our priorities and our commitment to rural communities, communities of color, English language learners, and out of school youth in the ways we allocate resources and make educational investments.
- **We believe** that communities, parents, teachers, and community-based organizations have unique and important solutions to improving outcomes for our students and educational systems. Our work will only be successful if we are able to truly partner with the community, engage with respect, authentically listen—and have the courage to share decision making, control, and resources.

II. GENERAL INFORMATION

A. Purpose of the Regional STEM Hub Grant

The Regional STEM Hub Grant of 2014-2015 is intended to develop, expand and combine collaborative efforts established by local partnerships to increase students' proficiency, interest, and attainment of post-secondary credentials and degrees in STEM or STEAM and CTE. This collaboration will enhance not only scientific and technological innovations, but also an expansion of STEM knowledge. To drive this success, the Oregon Regional STEM Hubs will be connected through a larger statewide STEM network that will unify efforts to a) improve student performance in STEM related content, b) increase interest and improve preparation for STEM careers, and c) become proficient in STEM concepts necessary to make personal and societal decisions.

Across these focus areas, we prioritize efforts that align with the Oregon Education Investment Board adoption of the Equity Lens, the State's 40/40/20 goal and efforts that strive to close the achievement gap.

B. Type of Grant

Based on the availability of state resources this grant begins February 10, 2014 and ends on June 30, 2015. Oregon Department of Education, in collaboration with the office of the Chief Education Officer, will review progress reports and performance data to determine future and continued program funding.

Between $100,000-$750,000 will be available per application. Grants will be funded based on detailed information submitted by grantees on the budget template provided in this application and shall be distributed as follows:

Phase 1- The purpose of Phase 1 is to provide initial funding to develop a local framework of sustainable partnerships and to create a formalized Partnership Plan for the Regional STEM Hub.

(1) Phase 1 funding will be no more than 10 percent of the full grant request or $25,000, whichever is higher. Awardees will have up to six months to establish evidence of readiness by completing a high-quality Partnership Plan. Once approved by the Oregon Department of Education, in collaboration with the office of the Chief Education Officer, full funding for Phase 2 implementation will be released.

Phase 2- The purpose of this funding level is to support established Regional STEM Hubs that have a well-developed Partnership Plan that meets all of Phase 2 criteria (see Application Narrative: Phase 2), and are prepared to advance the implementation of their local framework and programs.

(2) Phase 2 funding will be released immediately if the Oregon Department of Education, in collaboration with the office of the Chief Education Officer, determines that the grantee has established evidence of readiness.

C. Eligibility

The Regional STEM Hub Grant is a competitive grant. Any school district, student-focused nonprofit, or postsecondary institution is eligible and may apply on behalf of the partnership. An eligible recipient must be the fiscal agent for the project and must retain control over the implementation of the program activities and full evaluation of the project. Eligible recipients may contract with other partners for services related to the proposed project.

D. Grant Requirements

Grantees will:

(1) Identify the backbone support organization to manage and support the Regional STEM Hub by serving the roles of project manager, data manager, communication provider and professional development facilitator.

(2) Engage in continuous communication both within and between Regional STEM Hubs to support a Statewide STEM Network by participating in at least four statewide STEM network meetings.

The Oregon Department of Education (ODE) in collaboration with the office of the Chief Educational Officer will:

(1) Provide grantees access to facilitated exchanges of best practices and shared expertise.

(2) Facilitate communications between Regional STEM Hubs to create a sustainable Statewide STEM Network.

(3) Share evidence-based practices that foster positive learning outcomes.

E. Use of Funds

Grantees must be able to spend funds according to acceptable accounting procedures and be able to provide evidence of such procedures. All funds will be provided through the Electronic Grants Management System (EGMS). Costs must be necessary and reasonable to complete the project and be authorized and not prohibited under State or local laws.

Reasonable costs will not exceed that which would be incurred by a prudent person, are ordinary and necessary for the operation of the program, and represent sound business practices. Lack of documentation is a primary reason for audit findings. Documentation must be available to support each expenditure and may be requested by the Oregon Department of Education at any time.

Funds will be available upon official notification (anticipated on or about February 10, 2014) through June 30, 2015. Grant funds may not be used outside of the award period.

Use of funds may include (but are not limited to) the following:

- Stipend and travel reimbursements for individuals attending meetings, conferences, or other professional development activities with a strong alignment to the project outcomes and activities.
- Release time for educators during the school year for planning activities related to the project.

- Materials and equipment for classroom implementation related to the content of project activities.
- Direct staff expenses related to program, activities, coordination and evaluation to project activities. Salary and benefits not to extend beyond June 30, 2015.
- Consultation services with a direct alignment to the project outcomes and activities.
- Support of professional development programs aligned to the project outcomes and activities.
- Reasonable expenditures for food at professional development sessions.
- Indirect administrative costs not to exceed 7% of the total proposed budget.
- Materials used primarily for general classroom use and professional development trainings.

Funds may not be used for:

- Costs associated with writing the proposal.
- Contractual obligations that extend beyond June 30, 2015, or began prior to the award date.
- Purchase of equipment that becomes the property of any individual or organization other than eligible project partners or recipients.
- Purchase of services for personal benefit beyond the project outcomes and activities.
- Support for travel to out-of-state professional meetings/conferences unless the meeting is identified in the proposal and attendance will directly and significantly advance the project.
- Purchase of office equipment unless directly linked to the program outcomes.

F. Reporting and Assurances

Successful proposals will include specific project outcomes, and an evaluation plan that will provide evidence that there has been progress toward meeting those outcomes within the timeline of the grant. Progress must be measureable through collection of appropriate data, observable through anecdotal records, or documented through other records. The results of the evaluation will be reported to ODE as part of the Final Grant Report. The evaluations will be included in the report to the Oregon Legislature. Any submission of evaluation materials that include images of minors must be accompanied by a signed release form by a parent or guardian.

To facilitate program analysis, recipients will provide additional data related to the impact of the project on students, teachers, and community partners. This data may include but are not limited to the following:

- Two progress reports (see timetable for approximate dates).
- Interviews and/or surveys conducted by ODE staff or evaluators.
- Data on specific measures of student and teacher knowledge and skills related to project outcomes.

By signing the assurances included in this application, school district, postsecondary institution, student-focused nonprofits and business, industry or STEM community

partners agree to cooperate with ODE and OEIB to collect and report such data to the extent that it is possible.

G. Scoring and Appeals Process

A review committee will score all complete grant applications that were electronically submitted to Jamie Rumage (jamie.rumage@ode.or.us) at the Oregon Department of Education by 3:00 p.m. on Tuesday, January 21st, 2014. All applications will be scored using the scoring criteria similar to that provided in this document. Each application will have at least three reviewers. When possible, each proposal will be scored by at least two reviewers from the following sectors: business, industry, STEM community member, student-focused nonprofit, Oregon's equity team, education, professional development, or afterschool provider. No direct applicant will be accepted as a reviewer.

After scores are compiled, the applications will be placed in rank order. The STEM Review Committee will make final recommendations based on the score, funding requirements established in the Oregon Legislative Budget Notes for the STEM Initiatives, adequate geographic distribution, and overall number of students and educators impacted. The Deputy Superintendent of Public Instruction will make the final award decision.

The Oregon Department of Education will notify both successful and unsuccessful applicants and will provide a summary of comments and suggestions related to their applications. Applicants will have one week from the date of the notification letter to contest the funding decision through the process identified in the notification. Once appeals have been considered, the award decisions made by the Deputy Superintendent are final.

III. Application Process

A. Timeline and Important Dates

Completion Dates	Activities
December 4, 2013	Release of Request for Proposal (RFP)
December 16, 2013	Webinar on Application Process and Submission
January 21, 2014	***Applications due to ODE by 3:00 PM PDT***
January 27-31, 2014	Applications reviewed and scored
February 5, 2014	Applicants expected to be notified of preliminary award
February 10, 2014	Applicants expected to be notified of final award
April 2014	Statewide STEM Network Meeting
August/September 2014	Statewide STEM Network Meeting
September 30, 2014	Interim progress report due
November/December 2014	Statewide STEM Network Meeting
March/April 2015	Statewide STEM Network Meeting
May 15, 2015	Last date to expend funds on grant activities
June 30, 2015	Last date to draw funds
July 31, 2015	Final grant report due

B. Required Application Section

(1) **Application Cover Page** – Complete and include the form provided in Appendix B

(2) **For Phase 1 Applicants Only: Statement of Commitment from Each Lead Partner** – School District, Student-focused Nonprofit, Postsecondary Institution and an Industry, Business of STEM focused Community Partner complete and sign the Statement of Commitment provided in Appendix B and include in the application.

(3) **List of Additional Partners** – Complete and include this form provided in the appendix

(4) **Application Narrative** – Please refer to the specific format section listed as Application Narrative in the following section. This section may not exceed **14** pages.

(5) **Budget Worksheet and Budget Narrative** – The budget worksheet should clearly reflect activities in the grant and represent reasonable costs associated with the activities. Budget worksheets are provided in Appendix C. The budget narrative should provide clarity to the budget worksheet by describing how the amounts in the

worksheet were determined. Major single expenditures should be itemized and linked to specific grant activities.

(6) **Appendix** – Not required, however, any supporting charts, graphs, and tables may be placed in the appendix and referenced in the Grant Narrative.

C. Format and Application Instructions for Submission

- 12-point font, Times New Roman
- Double spaced
- 1-inch margins on the sides, top, and bottom of 8½" by 11" paper
- **14** page narrative maximum, (excluding cover page, assurances, bibliography, and budget template)
- No faxed applications
- Numbered pages
- Name the file in this format: **The agency** it is being submitted from, **underscore**, and **Regional STEM Hub Grant** (ex. Oregon Department of Education_Regional STEM Hub Grant)

An **electronic version of the completed application including a scanned copy of the signed Statement of Assurances and Statement of Commitment**, in Word (.doc or .docx), or PDF format must be received by 3:00 pm on Tuesday, January 21st, 2014. Please use the Secure File Transfer Process outlined below to submit the electronic version of the grant application.

Secure File Transfer Process – An electronic version of the complete application must be submitted to Jamie Rumage jamie.rumage@state.or.us using the Secure File Transfer system available on the ODE district website: https://district.ode.state.or.us/apps/xfers/. Follow the instructions provided on the secure file transfer website. Multiple files must be compressed (zipped) into a single folder for submission. Please name the files as follows: **the agency** it is being submitted from, **underscore**, and **Regional STEM Hub Grant** (ex. Oregon Department of Education_Regional STEM Hub Grant). Only complete applications submitted by the due date will be scored. Contact the ODE helpdesk at 503-947-5715 if you need assistance with the Secure File Transfer Process. **Phase 1 Applicants, please send a hard copy of the original signed Statement of Assurances which should be postmarked by Tuesday, January 21, 2014 to:**

Oregon Department of Education
Office of Learning
255 Capitol Street NE
Salem, Oregon 97310-0203
Attention: Jamie Rumage

Envelopes must be plainly marked: *Request for Application-Regional STEM Hub Grant*

An electronic version of the Grant Application,

must be received by

3:00 PM on Tuesday, January 21, 2014

IV. Application Narrative

Please complete the following if you are applying at Phase 1:
The purpose of the Phase 1 application is to provide support for regional STEM partnerships to develop a formalized local framework, a "Partnership Plan" (a.k.a. business plan or operational plan), that will specify the goals, outcomes, and strategic programs as well as guide the long-term governance and activities of the Regional STEM Hub. Successful applicants will be able to demonstrate a "readiness to benefit" by articulating: a compelling regional need for such a Hub; a clear vision as to the Hub's purpose and the changes being sought; leadership capacity and community commitment; initial, highly-probable programmatic strategies that will achieve the outcomes; and inclusive community engagement process that will be used to create a more comprehensive Partnership Plan. *(Note: Applicants who can already demonstrate a successful and active Regional STEM Hub consistent with the principles and requirements of this grant should only complete the application narrative for Phase 2.)*

(A) Vision and Purpose (No more than two pages in length.)

- What is the extent of the geographic region that is included in your partnership?
- What is long-term vision and purpose of the partnership?
- What are the STEM related needs and challenges to students, teachers, and the community? In particular, address issues of the historically underserved and underrepresented population; specifically, African American, American Indian/Alaskan Native, girls, Hispanic/Latino and Native Hawaiian/Pacific Islander populations. Provide relevant student and economic data that relate to those needs.
- Why is this partnership critical to the community being served?
- What are the expected changes you hope to see because of this collaboration?

(B) History and Content

- Describe your current STEM collaborations and the history of this partnership in terms of programmatic success that are the foundations for this broader partnership initiative.
- How are current partnership resources being provided? (ex. human, financial, in-kind)
- What are the special attributes and resources in the community that will enable this partnership to be effective?
- What additional partners and stakeholders should be involved for long-term sustainability of this Regional STEM Hub?
- What is the relationship between your STEM Hub and other regional efforts? (e.g., regional achievement compact, math and science partnership, early learning council hubs, CTE regional networks, health collaborative, etc.)

(C) Partnership Plan Development

- What community engagement process will be used to draw additional stakeholders into this collaborative and to create your Partnership Plan? What additional data or input do you need? *Approval of your Partnership Plan (see Phase 2 questions and elements) will be required to receive full awarded funding.* (Here is a link to one example of how to establish a Regional STEM Hub using a community engagement approach.)

- What is the anticipated timeline needed to complete your Partnership Plan? *(Note: it is expected to be less than 6 months for this grant.)*
- Please note any work on Phase 2 elements that have already been undertaken or completed.

(D) Programmatic Strategies

- What evidence-based promising approaches do you anticipate using in order to achieve the goals and needs of the partnership? (e.g., educator professional development, integration between in-school and out-of-school time, problem-based learning, leveraging interactions with STEM professionals, mentorships and internships, 21st Century skills and/or habits of mind development, parent engagement, addressing barriers such as pre-college math, etc.)
- In what ways will your approaches complement the effective implementation of the Common Core Standards and Oregon state science standards?
- How will your partnership implement the principles of the Equity Lens, in order to reduce the Achievement Gap in your region?

(E) Application Process

- What process was used, and who was involved, to develop and finalize this application?

(F) Budget Worksheet

Complete the budget worksheet for the Regional STEM Hub and describe how state funds will be leveraged by private funding, or in-kind donations of time and materials. These matching funds will be used as indicators of support by partners and priority will be given to those which demonstrate the following percentages, based on population densities of your region:

- Metropolitan: 50%
- Micropolitan 35%
- Rural 20%

Please refer to the map located Appendix C to identify the matching fund percentage of the region you directly serve. Additionally, in-kind calculations of staff time should be based on the number of volunteer hours as a % of salaried time for a 40-hour week. Please list additional support that has been committed for the development and implementation to support this Regional STEM Hub.

Please develop a budget based on anticipated **Phase #1 AND Phase #2** activities through the end of the biennium. Only 10% of your total budget or $25,000, whichever is greater, will be released for Phase #1. We need to know the total budget request, so that Phase #2 funds can be released once your Partnership Plan has received approval.

(G) Budget Narrative

Describe how the amount in each line item of the budget was determined. These should clearly reflect the descriptions to the proposed activities. Major single expenditures should be itemized and linked to the specific grant activities. Also, include the following:

- Identify roles and responsibilities for each individual with a salary funded partially or entirely though this grant.
- Identify the nature of the contracted services included in the professional and technical services.
- Identify specific events and venues if travel includes conferences and meetings in other states.
- List representative examples of supplies and materials.

Please complete the following if you are applying at Phase 2:
The purpose of this funding level is to support established Regional STEM Hubs that have a well-developed Partnership Plan that meets all of Phase 2 criteria below, and are prepared to advance the implementation of their local framework and programs. Successful applicants will have a sound governance structure in place, will have diverse stakeholder involvement, will have the capacity and leadership to be sustainable, and will use scalable, evidence-based programmatic approaches to achieve clearly articulated outcomes that significantly advance progress toward 40/40/20 and closing the Achievement Gap.

(A) Mission and Vision (No more than one page).

- What is the long-term vision and purpose of the partnership, tied to the broader economic and social needs of the community?
- Why is this partnership critical to the community being served?
- What are the overall changes you hope to see as a result of this collaboration?

(B) Community Demographics and Needs Analysis

- What is the extent of the geographic region and a general overview of the communities served in your partnership? Please provide the ethnicity and socioeconomic status of populations directly impacted by the STEM Hub.
- What are the STEM-related needs and challenges facing student, educators, and the community? In particular, address issues related to historically underserved and underrepresented populations; African American, American Indian/Alaskan Native, girls, Hispanic/Latino and Native Hawaiian/Pacific Islander populations. Provide relevant student demographic and economic data that relate to those needs.

(C) Goals and Outcomes

- What are the specific agreed upon goals, outcomes and shared measures related to student, teacher and community needs, with particular attention to the Equity Lens, closing the achievement gap and furthering the 40/40/20 goal?
- What are the interim indicators that you are going to use in the during this grant timeline to gage success? Please justify why you think that these interim indicators are useful proxies for determining progress toward the longer-term outcomes.
- Who are the direct beneficiaries of your programs? How many students, teachers, post-secondary faculty and others?
- Please note any progress made to date towards achieving these goals and outcomes.

(D) Strategies

- What evidence-based promising approaches are being used in order to achieve that goals and outcomes? (e.g., educator professional development, integration between in-school and out-of-school time, problem-based learning, leveraging interactions with STEM professionals, mentorships and internships, 21st Century skills and/or habits of mind development, parent engagement, addressing barriers such as pre-college math, etc.) Please provide support and justification of your approaches and why they will enable you to achieve the desired outcomes.
- In what ways do your approaches complement the effective implementation of the Common Core Standards and Oregon state science standards?

- How is your partnership incorporating the principles of the Equity Lens, in order to reduce the Achievement Gap in your region? What are the specific activities within your program that are intended to recruit, encourage, engage, and provide opportunities to underserved and underrepresented students and/or educators?

(E) Evaluation Plan

- Please provide a logic model that articulates the linkages between your long-term outcomes, interim indicators of success, and your program activities/strategies. Explain any underlying assumptions in making causal claims in your model.
- What are the evaluation questions that you will answer in order to support your theory of change?
- Describe the data collection and methodologies that you will use to determine the extent to which your education intervention impacts your intended outcomes.
- Provide a description of the measures you will use to assess your impact on student, educator, and/or community outcomes, including how they were developed and evidence of their reliability and validity.

(F) Partnership and Community Assets

- What is the involvement of community leadership within the partnership?
- What are the STEM-related community assets that bring value to your partnership and how are they being leveraged?
- What is the extent of current STEM programs, organizations, and natural resources that are available to promote STEM education within your partnership? (e.g., informal STEM programs, math-science partnerships, nature reserves, research organizations, etc.)

(G) Governance & Backbone

- What is the operating and legal structure of your STEM Hub, including: backbone organization, staffing, committees, and partnership agreements?
- What process was used to create the Partnership Plan (a.k.a. ”business plan” or “operational plan”) that guides the governance and focus of your regional STEM Hub?
- Describe your capacity to implement funding efficiently and effectively throughout the Regional STEM Hub?
- What processes and key performance indicators are used to assess, and to improve, the quality of the partnership itself?

(H) Sustainability Plan

- What is the plan to sustain the programs and infrastructure beyond the funding period? Where will additional revenues come from?
- What is your plan for regularly communicating and engaging with external and internal stakeholders? How will you keep partners engaged and focused on your common work? How will you keep partners engaged and focused on your common work? How will you sustain the involvement of your greater community in your efforts?
- How do you see your regional partnerships growing and adapting over time? Also include, the potential challenges in the long-term viability of the Hub.

- What advocacy and policy issues could support the long-term effectiveness of your Regional STEM Hub, and the statewide network of hubs?
- Please provide a sample, in the appendix, of your partnership agreements and a compiled list of the organizations directly involved in the Hub.

(I) Participation in the Statewide STEM Hub Network

- What specific expertise could you contribute to benefit others in the statewide STEM network?
- How could you benefit from participating in the statewide STEM network?
- What is the relationship between your STEM Hub and other regional efforts? (e.g., regional achievement collaboratives, math-science partnerships, early learning council hubs, CTE regional networks, health collaboratives, etc.)
- Note: Please include travel costs in your budget for 3-5 participants to attend four state meetings though the end of the biennium in different regions. (See timetable for potential dates.)

(J) Budget Worksheet

Complete the budget worksheet for the Regional STEM Hub and describe how state funds will be leveraged by private funding, or in-kind donations of time and materials. These matching funds will be used as indicators of support by partners and priority will be given to those which demonstrate the following percentages, based on population densities of your region:

- Metropolitan: 50%
- Micropolitan 35%
- Rural 20%

Please refer to the map located Appendix C to identify the matching fund percentage of the region you directly serve. Additionally, in-kind calculations of staff time should be based on the number of volunteer hours as a % of salaried time for a 4-hour week. Please list additional support that has been committed for the development and implementation to support this Regional STEM Hub.
Complete a budget worksheet for the Regional STEM Hub.

Any commitments that extend beyond the timeline of this grant should be described in the sustainability section. (Section H)

(K) Budget Narrative

Describe how the amount in each line item of the budget was determined. These should clearly reflect the descriptions to the proposed activities. Major single expenditures should be itemized and linked to the specific grant activities. Also, include the following:

- Identify roles and responsibilities for each individual with a salary funded partially or entirely though this grant.
- Identify the nature of the contracted services included in the professional and technical services.
- Identify specific events and venues if travel includes conferences and meetings in other states.
- List representative examples of supplies and materials.

Appendix A
Definitions

(1) "Achievement Gap" means the gap in achievement (state test scores in science and mathematics as well as postsecondary degree attainment in STEM) that often exists between students who are economically disadvantaged, students learning English as a second language, African American, Hispanic or Native American compared to their peers.

(2) "Authentic Problem-Based Learning" means using real world questions, problems, and tasks—often drawn from local community issues and industries—as the focus to drive the learning experiences, deepen understanding, and developing rich contextual connections across a variety of STEM and non-STEM disciplines.

(3) "Career and Technical Education (CTE)" is a comprehensive educational program for students based on industry needs. CTE includes coursework in areas such as health care, engineering, and computer science.

(4) "Community Engagement" means a broad collaboration and participation between multiple sectors of the community for the mutually beneficial exchange of knowledge and resources to identify local needs and contribute to larger conversations on visioning planning which may include, but not limited to parent groups and advocacy groups, industry and STEM agencies, economic and workforce groups, student input, and educators.

(5) "Effective STEM Instruction" means the use of evidence-based practices that support interconnected, relevant STEM instruction as stated in definition number fourteen.

(6) "Effective STEM Leadership" means identifying schools, school districts, postsecondary institutions, business & industry, student-focused nonprofits and community leadership to support implementing and improving STEM teaching and learning in addition to creating a culture that fosters STEM learning with evidence-based resources. Effective STEM leadership develops an understanding of what effective and interconnected STEM education looks like in the classroom and supports the development of learning environments that empower educators to implement innovative STEM education approaches.

(7) "Effective STEM Learning Environments" means supporting student interaction with STEM education during formal and informal settings in ways that promote deeper understanding of real-world concepts. Such learning environments need to engage all students in solving complex problems, using highly interactive learning opportunities that create new opportunities for STEM learning across the core curriculum.

(8) "Equity Lens" refers to the commitment and principles adopted by the Oregon Education Investment Board to address inequities of access, opportunity, interest, and attainment for underserved and underrepresented populations in all current and future strategic investments.

(9) "Postsecondary Institution" means a:

- (a) A community college operated under ORS chapter 341.
- (b) The following public universities within the Oregon University System:
  - (A) University of Oregon.
  - (B) Oregon State University.
  - (C) Portland State University.
  - (D) Oregon Institute of Technology.
  - (E) Western Oregon University.
  - (F) Southern Oregon University.

(G) Eastern Oregon University.

(c) Oregon Health and Science University.

(d) An Oregon-based, generally accredited, not-for-profit institution of higher education.

(10) "Regional STEM Hub" means a commitment of a group of key stakeholders from different sectors such as, but not limited to school districts, informal education providers, postsecondary institutions, business & industry, student-focused nonprofits, students, families, community members and policy makers to advance state and local educational goals related to science, technology, engineering, mathematics and career & technical education (CTE).

(11) "Statewide STEM Network" means a supportive collaboration between and across Regional STEM Hubs to share knowledge, expertise, insights, and leadership to assist other communities in their efforts to create similar STEM partnerships.

(12) "STEAM Education" means the incorporation of strategies to enhance science, technology, engineering and mathematics (STEM) education by integrating art and design, and promoting creative possibilities.

(13) "STEM Education" means an approach to teaching and lifelong learning that emphasizes the natural interconnectedness of the four separate STEM disciplines. Developing and deepening content knowledge and skills in science and mathematics is the foundation of STEM teaching and learning. The natural connections among science, mathematics and STEM are made explicit through collaboration between educators resulting in authentic and appropriate context built into instruction, curriculum, and assessment. The common element of problem solving is emphasized across all STEM disciplines allowing students to discover, explore, and apply critical thinking skills as they learn.

(14) "STEM Practitioners" refers to individuals engaged in STEM-related professions such as but not limited to, natural resources management, high-tech manufacturing and product development, information technology, industrial design, health sciences, software, scientific research, engineering, data analytics, etc.

(15) "Student-Focused Nonprofits" means an organization that meets all of the following requirements:

(a) Is established as a nonprofit organization under the laws of Oregon;

(b) Qualifies as an exempt organization under section 501(c)(3) of the Internal Revenue Code as defined in ORS 314.011; and

(c) Is focused on providing services to students and/or educators who's goals or mission are focused on impacting and improving student outcomes in STEM education.

(16) "Underserved Students" are students whom systems have placed at-risk because of their race, ethnicity, English language proficiency, socioeconomic status, gender, sexual orientation, differently abled, or geographic location.

(17) "Underrepresented Students" in STEM are from demographic groups whose representation in STEM fields and industries does not mirror regional and national focus populations specifically, women, African American, Native American, Hispanic and Pacific Islander students which systems have provided insufficient or inadequate balance of opportunity.

Appendix B

APPLICATION COVER PAGE

(Please Print or Type – **All** Fields Must Be Completed)

REQUESTED FUNDING _____

TOTAL # OF STUDENTS THAT WILL BE SERVED: _____

TOTAL # OF EDUCATORS THAT WILL BE SERVED: _____

Name of School District(s): _____

County(s): _____

Regional STEM Hub Name: _____

Project Director: _____

Mailing Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ FAX: _____ E-mail _____

Grant Fiscal Agent Name and Title: _____

Phone: _____ FAX: _____ E-Mail _____

2014-2015 Statement of Assurances

- The fiscal agent assures and certifies compliance with the regulations, policies, and requirements as they relate to the acceptance and use of state funds for programs included in this application.
- The recipient or the senior designate agrees to carry out the partnerships and use of funding as proposed in the application.
- On or before September 30, 2014 the Regional STEM Hub will submit an interim evaluation report and July 31, 2015 an end of grant report to the Oregon Department of Education as outlined in the RFP.
- The Regional STEM Hub assures that the project director and at least two others from the partnership will attend all required meetings as published in the application timeline.
- Violations of the rules or laws may result in sanctions, which may include but are not limited to reduction or revocation of grant award.
- The fiscal agent is responsible for adopting and adhering to the Equity Lens and their principles throughout their Regional STEM Hub.
- The applicant certifies that to the best of his/her knowledge the information in this application is correct; that the filing of this application is duly authorized by the governing body of this organization, or institution, and that the applicant will comply with the general statement of assurances.
- The applicant certifies to the best of his/her knowledge the guidelines for Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. § 1232g; 34 CFR Part 99) are being followed. It is a Federal law that protects the privacy of student education records.

_____	_____	_____
Please Print Name of Project Director	Signature of Project Director	Date

****Completion by Phase 1 Applicants Only****
Statement of Commitment from Lead Partners
(Please Print or Type)

Regional STEM Hub Name: _____

Main Partner Organizations: _____

Contact Name: _____ Title: _____

Mailing Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ FAX: _____ E-mail: _____

Please explain the role of this partner in the proposed Regional STEM Hub Partnership, contributions that this partner will make, and evidence that the proposed activities are integral to this partnership's plan:
Describe what supports this stakeholder will provide to enhance STEM education. Please provide a statement of commitment and contribute to the Regional STEM Hub resources (financial, in-kind, materials, expertise, etc.), that may continue beyond the life of the grant.

Print Name of Authorized Agent	Signature of Authorized Agent	Date

List of Additional Partners
Regional STEM Hub Partnership

The following individuals and/or organizations have reviewed, discussed, and agreed to their part in implementing the Regional STEM Hub Plan proposed in this grant application:

	Name	Title	Organization	Role/Responsibilities
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				

***In addition a signed commitment form is required from each of the following stakeholders:**

- **A School District**
- **A Postsecondary Institution**
- **A Student-focused Nonprofit**
- **Business, Industry or STEM Community Partner**

Appendix C

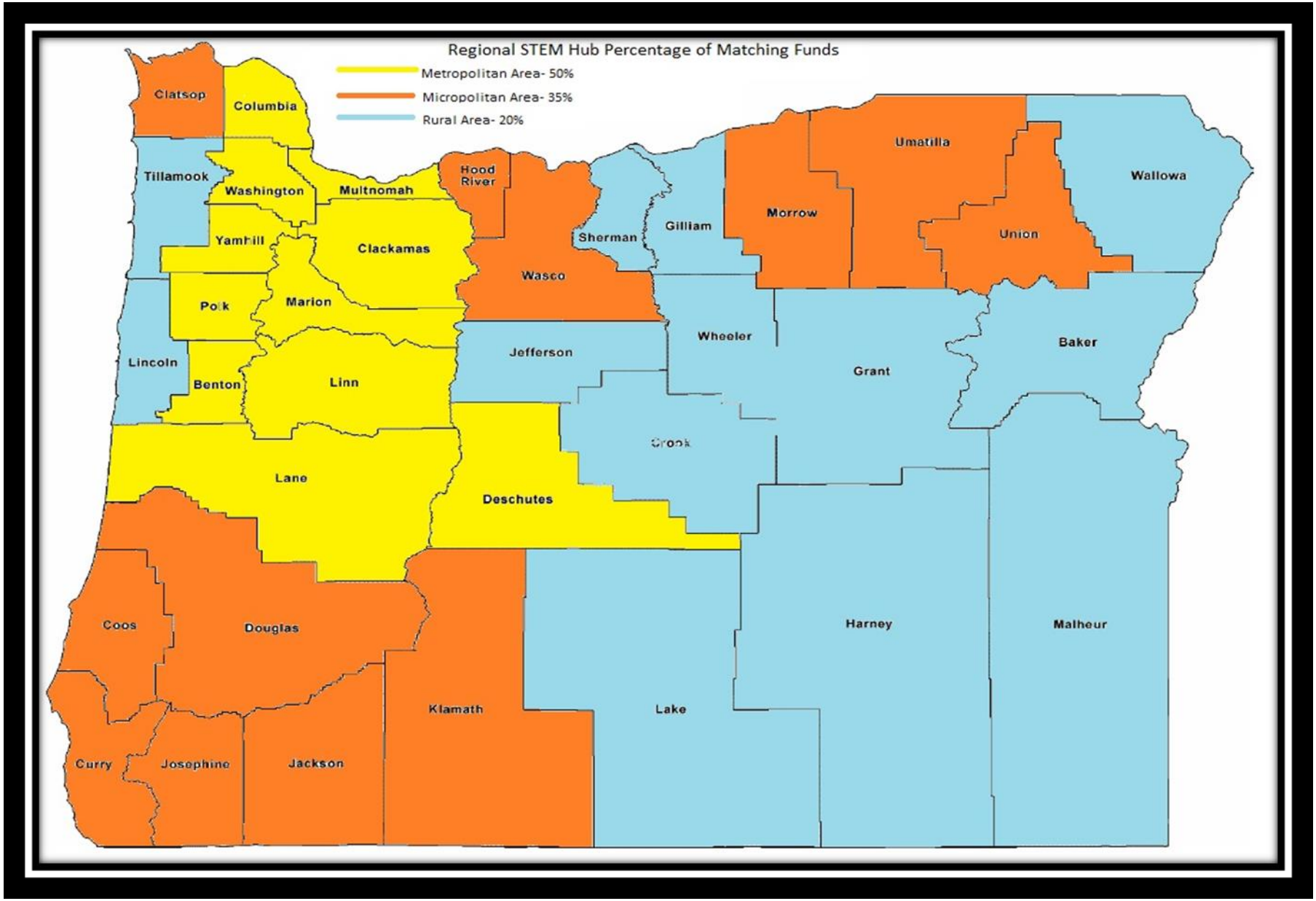
Sample Regional STEM Grant Budget Worksheet

Please modify as needed.

Project Name: _____

Fiscal Agent: _____

Possible Grant Charges Object Codes if necessary	In-School Programing (Expenditures NOT related to Staff Development)	Out-of-School Programing (Expenditures NOT related to Staff Development)	Instructional Staff Develop (Instructional Staff Development)	Line Total	Anticipated Matching Funds
Staff Salaries					
Staff Benefits					
Instructional, Professional & Technical Services					
In-State Travel					
Travel for Evaluation Meeting (See Grant Requirements)					
Evaluation services					
Other general Professional & Technical Services					
Supplies & Materials					
Non-Consumable Items					
Computer Software					
Computer Hardware					
Capital Outlay (Depreciable Technology)					
Administrative Costs @ 7 %					
Total by Function					


Regional STEM Hub Percentage of Matching Funds
Metropolitan Area- 50%
Micropolitan Area- 35%
Rural Area- 20%
Clatsop
Columbia
Tillamook
Washington
Multnomah
Hood River
Umatilla
Wallowa
Morrow
Gilliam
Sherman
Union
Yamhill
Clackamas
Wasco
Polk
Marion
Jefferson
Wheeler
Baker
Lincoln
Benton
Linn
Grant
Crook
Lane
Deschutes
Coos
Douglas
Harney
Malheur
Klamath
Lake
Curry
Josephine
Jackson

Appendix D

Phase 1: Regional STEM Hub Grant Scoring Rubric

Applicants may use this as a guide when responding to the RFP. This is not intended to be a final scoring rubric.

Narrative Elements and Criteria
A. Vision and Purpose (20%) • The mission and vision statement clearly identify the purpose and a compelling need for the STEM Hub using supporting data. • Clearly identifies issues and needs of underserved and underrepresented students in STEM. • The partnership aligns with the core principles of, and will contribute to, the larger statewide STEM network. • Expected changes are feasible and attainable based on the region's current needs.
B. History and Context (15%) • STEM Hub initiative builds from prior successful programs and partnerships. • Local resources (human, financial, in-kind) are being leveraged from within the community. • Recognizes that broad stakeholder involvement is critical for sustainability, and there are thoughtful plans on how to engage additional partners. • Provides evidence of coordination with other regional partnership networks where applicable.
C. Partnership Plan Development (25%) • Has a specific plan to engage the broader community to gather input and build support for quality STEM outcomes. • A detailed timeline is provided to deliver a completed Partnership Plan within 6 months.
D. Programmatic Strategies (25%) • Evidence-based practices are being considered that would enable the Hub to address their identified needs and goals. • Proposed strategies complement the effective implementation of the Common Core and Oregon Science Standards. • Describes clear strategies to provide access, promote interest, and increase attainment for underserved and underrepresented students consistent with the Equity Lens.
E. Phase 1 Application Process (5%) • Process used meaningful input and involvement of multiple stakeholders and partners.
F. Budget Worksheet and Narrative (10%) • Proposed budget is reasonable and appropriate for the scope of the proposed partnership and strategies. • Budget narrative matches budget items. • Budget narrative explains what budget items are and their purpose. • Budget items are allowable based on RFP guidelines.

Phase 2: Regional STEM Hub Grant Sample Scoring Rubric

Applicants may use this as a guide when responding to the RFP. This is not intended to be a final scoring rubric.

Narrative Elements and Criteria
A. Mission and Vision (5%) • The mission and vision statement are clear and compelling. • The partnership vision aligns with the core principles of, and will contribute to, the larger statewide STEM network. • The purpose of the partnership is directly tied to the broader needs of the community. • The high-level changes envisioned are feasible and attainable based on the region's current needs.
B. Community Demographics and Needs Analysis (10%) • Paints a general picture of communities and the geographic area involved in the partnership. • Provides detailed ethnicity and socioeconomic status of populations directly impacted by the STEM hub. • STEM-related needs and challenges are clearly articulated and supported by relevant data. • The issues and needs of underserved and underrepresented students in partner communities are made explicit.
C. Goals and Outcomes (20%) • Comprehensive goals and common outcomes are provided that include closing the achievement gap and relate to achieving the 40/40/20 goal. • Outcomes align with student, teacher, and community needs. • Interim indicator data and measures are logically linked to long-term outcomes, are readily collected, and will provide meaningful indication of progress and program impact. • Provides realistic estimates of the numbers of direct beneficiaries (students, teachers, faculty, service providers, etc.) from STEM Hub programs and activities.
D. Strategies (20%) • Implementation plan and programs are clearly linked to overarching goals and outcomes. • Evidence-based practices are used that enables the Hub to address their identified needs and goals. • Strategies complement the effective implementation of the Common Core and Oregon Science Standards. • Explicit strategies are incorporated to provide access, promote interest, and increase attainment for underserved and underrepresented students consistent with the Equity Lens.
E. Evaluation Plan (15%) • A logic model is provided which clearly links long-term outcomes, interim indicators, and program activities. • Elements of logic model are well justified and supported by evidence and research. • Interim measures enable the Hub to meaningfully assess program impact on students, educators, and organizations. • Data collection plans are realistic and at an appropriate frequency.
F. Partnership and Community Assets (5%) • There is demonstrated support and engagement of community leaders from multiple sectors.

• A community asset mapping process has been completed and a wide variety of STEM assets are identified. • Partnership plan leverages assets to advance Hub goals.
G. Governance & Backbone (10%) • Clear description of leadership team, backbone organization, Governance committee, advisory or other committees, meetings, operations, etc.; including structures and decision-making processes. • A community-engagement process was used to establish the Partnership. • Sufficient capacity and infrastructure in place to efficiently and effectively implement grant funding. • Key performance indicators and processes are in place to ensure continuous improvement and quality of the partnership.
H. Sustainability (10%) • Formal partnership agreements are in place that detail responsibilities and appropriate commitment of resources (human and/or financial). • Clearly stated financial sustainability plan that outlasts the grant funding timeline. • Communication and long-term community engagement plans ensure ongoing support and participation of internal and external stakeholders. • Thought has been given to how the partnership might evolve and expand over time. • Awareness exists of potential challenges to the sustainability of the partnership.
I. Participation in the Statewide STEM Hub Network (0%) • Is committed to contributing and participating in the development of a statewide STEM Network. • Is coordinating with other regional efforts locally.
J/K. Budget Worksheet and Narrative (5%) • Proposed budget is reasonable and appropriate for the scope of the proposed partnership and strategies. • Budget narrative matches budget items. • Budget narrative explains what budget items are and their purpose. • Budget items are allowable based on RFP guidelines.