THE MID-COLUMBIA STEM NEXUS:
Laying the Groundwork Today for a Better Tomorrow

The Need—In Washington State alone, an unprecedented percentage of jobs require postsecondary credentials and, increasingly, science, technology, engineering, and mathematics (STEM) proficiency at some level. Yet only 40% of Washington's high school students earn such a credential by the age of 26. If we are to increase STEM proficiency and move attainment of postsecondary credentials to 70% by 2030, we need sustainable, collaborative solutions.

> *"In 7th grade, I developed an interest in math. In 8th grade, my math teacher brought in professionals who use math to better the world. In 12th grade, I interned at a local research facility where I learned there are STEM careers for everyone. Now, after graduation, I plan to major in mathematics with a minor in computer science."*

The Vision—Generating understanding about the pathways to STEM-related jobs is essential for every young person. Battelle, the U.S. Department of Energy (DOE), educators, families, and regional community leaders alike are prepared to come together to help energize and prepare students, especially students from historically underrepresented and underserved populations. Working together, we will create the relevant, real-world experiences that are key to building awareness and opening doors to future STEM careers.

The Solution—A multi-pronged, community-engaged approach that immerses students in interactive learning experiences will serve to unlock curiosity and fuel interest in STEM subjects and career paths, forming a hub of knowledge-building and a partnership that can be leveraged and sustained over years.

How do we get there?

- **Teaming** with educators, regional community partners, and STEM professionals to leverage successful practices and co-create curriculum and experiences that meet the unique needs and interests of individual students.
- **Equipping** historically underrepresented, underserved students with access to high-caliber resources, personalized educational experiences, and role models needed to enhance STEM aptitude.
- **Sustaining** STEM education efforts by continuously infusing talent, leadership, and investment into existing programs. With a rich array of business and community leaders, DOE contractors—including a thriving DOE national laboratory, educational leaders, and STEM professionals—the Mid-Columbia region is uniquely positioned to serve as a national model for community-based STEM outreach and education efforts.
- **Transforming** the learning experiences of today's students will help inspire and ensure tomorrow's workforce. By leveraging evidence-based, hands-on approaches, and conveying the relatability of STEM professionals through initiatives such as the "STEM Like ME!℠" model created by the Washington State STEM Education Foundation and the PNNL STEM Ambassador programs, more and more students will aspire to be and become STEM professionals.