

Increasing Access to Hands-on Science Learning in Washington's Schools

Community Partner: The Pacific Science Center

PROJECT DESCRIPTION

Describe the specific need within the K-12 system

Science, Technology, Engineering, and Math (STEM) careers are major contributors to Washington state's economy and tend to offer high-wage jobs to Washingtonians engaged in the sector. Sparking a love of and engagement with science from an early age is critical to developing the workers who will fuel and benefit from Washington's STEM economy.

Washington supports K–12 science learning by requiring school districts to teach the Washington State K–12 Science Learning Standards, adapted from the Next Generation Science Standards (NGSS), which set the expectations for what students should know and be able to do at each grade level. A key component of these standards is the expectation that students will engage in scientific practices and not merely learn about them secondhand. Unfortunately, a lack of resources—human, capital, time, and material—result in many students, particularly those at the elementary level, not having access to science instruction, or not having access to engaging, hands-on, interactive science learning environments. This lack of exposure to hands-on science experiences negatively impacts their likelihood of both meeting state science standards and developing a lasting interest in science and science-based careers.

How a state investment in community partnership meets this need

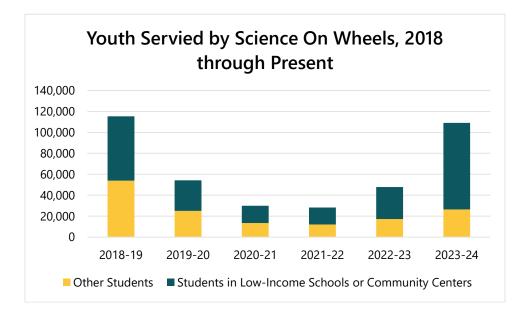
Pacific Science Center operates a Science on Wheels program, providing a targeted and mobile strategy to offer hands-on science learning to schools anywhere in the state regardless of school or community resources. Science on Wheels outfits mobile laboratories that can be driven to any school in the state allowing science teachers to supplement classroom instruction with lessons in these mobile lab spaces. This is particularly useful for elementary and middle schools that may not have laboratory facilities on site, or money in the budget for supplies and equipment needed for hands-on science learning. The program also offers virtual science instruction, providing additional flexibility to schools in embedding the program into their lesson plans and schedules. By funding this program's operation in Title I schools, Washington can support traditionally underserved students to have opportunities to engage in the kinds of hands-on science learning that is in line with the Washington State Science K–12 Learning Standards and inspires in students a love of science and confidence in their scientific knowledge and abilities, making them more likely to consider STEM career pathways in and beyond their K–12 education journeys.

Describe existing or previous state investment in this work

The 2018 Legislature funded the Pacific Science Center's mobile science laboratories in the Operating Budget, Senate Bill 6032, Sec. 501(44). In 2023, state lawmakers again appropriated funding for this program in that year's Operating Budget, Senate Bill 5187, Sec. 522(4)(m).

SUPPORTING DATA AND EVIDENCE OF POSITIVE IMPACT

While the COVID-19 pandemic and the move to remote and hybrid learning impacted youth access to educational programs like Science on Wheels, the program has fully recovered and is reaching nearly as many students now as it did in the 2018–19 school year. A strategic focus on services to Title I schools and students identified as low-income has ensured that these students are increasingly the ones served by this hands-on science program.



A survey of participating educators in the 2023–24 school year showed that 90% of these educators found that Science on Wheels supported STEM education in their classrooms, and 94% observed their students engaging in scientific practices such as asking questions, investigating, experimenting, using evidence, constructing explanations, or critical thinking while participating in Science on Wheels programs. Further, 92% of participating educators found the programs to be accessible to all students, and 85% believed Science on Wheels helped their students make stronger connections between science learning and their daily lives.¹

¹ Data in this section provided by the Pacific Science Center.

FISCAL DETAIL

Operating Expenditures	FY 2026	FY 2027	FY 2028	FY 2029
Fund 001-1 (Program 05X)	\$2,118,000	\$2,517,000	\$2,967,000	\$3,467,000
Total Expenditures	\$2,118,000	\$2,517,000	\$2,967,000	\$3,467,000
Biennial Totals	\$4,635,000		\$6,434,000	
Staffing	FY 2026	FY 2027	FY 2028	FY 2029
FTEs	0.10	0.10	0.10	0.10
Average Annual	0.10		0.10	
Object of Expenditure	FY 2026	FY 2027	FY 2028	FY 2029
Obj. A	\$10,000	\$10,000	\$10,000	\$10,000
Obj. B	\$5,000	\$5,000	\$5,000	\$5,000
Obj. E	\$1,000	\$1,000	\$1,000	\$1,000
Obj. G	\$1,000	\$1,000	\$1,000	\$1,000
Obj. J	\$1,000	\$0	\$0	\$0
Obj. N	\$2,100,000	\$2,500,000	\$2,950,000	\$3,450,000
Revenue	FY 2026	FY 2027	FY 2028	FY 2029
	\$0	\$0	\$0	\$0
Total Revenue	\$0	\$0	\$0	\$0
Biennial Totals	\$0		\$0	

ASSUMPTIONS AND CALCULATIONS

Expansion, reduction, elimination or alteration of a current program or service:

This request is for the expansion of Pacific Science Center's current Science on Wheels grant program. In the 2023–25 biennial Operating Budget, the program received \$750,000 in fiscal year 2024 and \$750,000 in fiscal year 2025. This proposal would continue the work in the 2025–27 biennium and beyond.

Detailed assumptions and calculations:

OSPI requests \$18,000 in fiscal year 2026 and \$17,000 in fiscal year 2027 ongoing to support 0.10 full-time equivalent (FTE) Associate Director. Fiscal year 2026 includes \$1,000 in one-time costs for technology upgrades. This position will manage the Science on Wheels state grant program, attend meetings between OSPI and the Pacific Science Center, and represent OSPI at Pacific Science Center events.

OSPI requests the following funding to provide grant support to the Pacific Science Center for the expansion of the Science on Wheels program:

Program Infrastructure

- Funding will be used to upgrade technology, equipment, curriculum materials, and vehicles necessary to bring programming to students at low-income schools across Washington state.
 - \$750,000 in fiscal year 2026 ongoing (one upgraded Science on Wheels experience each year)

Operational Support

- Funding will be used to provide free Science on Wheels and Digital Discovery Workshops for schools serving grades K–5 and expand outreach, registration, and ongoing program evaluation services. The funding requests are based on an estimated number of students served and an annual 10% increase in average cost per student (*amounts are rounded*).
 - Fiscal year 2026: \$1,350,000 (75,000 students served X \$18.00 per student)
 - Fiscal year 2027: \$1,750,000 (88,000 students served X \$19.80 per student)
 - o Fiscal year 2028: \$2,200,000 (102,000 students served X \$21.57 per student)
 - Fiscal year 2029: \$2,700,000 (117,000 students served X \$23.08 per student)

Workforce Assumptions

Fiscal Year 2026 (Total = \$18,000)

Associate Director: 0.10 FTE

- Salary: \$10,074
- Benefits: \$5,477
- Goods/Services: \$668
- Travel: \$668
- Equipment: \$1,113

Fiscal Year 2027 (Total = \$17,000 annually)

Associate Director: 0.10 FTE

- Salary: \$10,074
- Benefits: \$5,590
- Goods/Services: \$668
- Travel: \$668

Historical funding

There is no funding in carry-forward level budget to continue this project into 2025–27.

Fiscal Year 2026

• FTE = 0.00

- Total Funds = \$0.00
- Near General Fund = \$0.00
- Other Funds = \$0.00

Fiscal Year 2027

- FTE = 0.00
- Total Funds = \$0.00
- Near General Fund = \$0.00
- Other Funds = \$0.00