



PAsmart Grants Framework

Principles and Funding Priorities

As approved by the Pennsylvania Workforce Development Board
October 23, 2018



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Introduction

As the commonwealth's economy continues to grow, Pennsylvania's faces significant economic opportunities in the next decade. Pennsylvania has the 14th largest economy in the world and ranks 6th among states in job volume. As Pennsylvania's demographics change, the commonwealth is expected to experience a long-term shortage of workers in its labor force. Given this, Pennsylvania's future depends on the development of a strong workforce and business community able to compete in today's global economy.

To support Pennsylvania's future economic and business growth, and to remain competitive, Pennsylvania must grow its supply of skilled workers. Over the next decade, most good paying jobs in Pennsylvania, and across the country, will require some form of education or training after high school, especially in fast-growing fields of Computer Science (CS) and Science, Technology, Engineering, and Mathematics (STEM). These career pathways look different for different people and sectors, and a one-size-fits-all approach to education and training will not work for all students, workers, and businesses.

By 2025, more than 60 percent of good jobs in the commonwealth will require some postsecondary education, a demand that shaped the statewide attainment goal established by Governor Tom Wolf in 2015.¹ Currently, only 45 percent of Pennsylvanians hold these credentials, and a significant skills gap, especially for "middle skill" occupations requiring some postsecondary education but not a bachelor's degree, continues to persist for the commonwealth's current and emerging workforce.²

Over the past three years, Pennsylvania has established a strong and innovative culture for CS and STEM learning by strengthening STEM experiences for all students, supporting professional development for educators, and forming STEM ecosystems across the commonwealth. Pennsylvania is also expanding Registered Pre-apprenticeships and Apprenticeships to pair classroom instruction with skills training for careers with family-sustaining wages. Finally, Pennsylvania has also embraced the Next Generation Industry Partnership model to align education, workforce, and economic development to collaboratively support the overall competitiveness of an industry.

Governor's Middle Class Task Force

To ensure that Pennsylvania remains competitive in a rapidly changing economy, and to hear directly from students, workers, employers, and communities across the commonwealth, Governor Wolf established the non-partisan Governor's Middle Class Task Force in fall 2017. Co-chaired by business, labor, postsecondary education, and workforce development leaders, the Task Force held six regional roundtables to hear directly from Pennsylvanians on barriers they face getting and keeping good jobs, and on the need for businesses to increase their competitiveness.³ In response to these perspectives, the Task Force identified six critical areas to inform future policy considerations:

1. A skilled and quality workforce can sustain and grow a competitive economy in Pennsylvania.
2. Business hiring practices are impacted by multiple conditions, including liability concerns, global competition, and unknown long-term workforce needs.
3. Education, workforce, and economic development systems are not coordinating their efforts.

¹ This goal was also endorsed by the Pennsylvania's State Board of Education in November 2016.

² [Interactive Data Dashboard: Postsecondary Enrollment, Completion, and Educational Attainment in Pennsylvania](https://public.tableau.com/profile/padeptofed#!/vizhome/College-GoingRatesandEducationalAttainment_0/Main)
https://public.tableau.com/profile/padeptofed#!/vizhome/College-GoingRatesandEducationalAttainment_0/Main

³ <https://www.governor.pa.gov/governor-wolfs-middle-class-task-force-kicks-off-first-regional-roundtable/>

4. Many workers and students believe upskilling is risky and costly, and continuing education beyond high school outweighs economic benefit.
5. The “traditional” service delivery model in postsecondary education is not accessible or affordable for first generation, under-represented, and non-traditional students and workers.
6. Best practices and models in education and workforce exist, but are not widely shared, expanded, or invested in.

What is PAsmart?

In response to the Governor’s Middle Class Task Force findings, Governor Wolf proposed the PAsmart initiative, a new strategic approach to education and workforce development. The PAsmart initiative is designed to address the feedback Pennsylvanians shared with the Middle Class Task Force, to better align education, workforce, and economic development initiatives and funding.

By working in a smarter, more coordinated way, PAsmart makes public programs and initiatives more accessible and easier to navigate so Pennsylvanians can develop the skills and abilities they need to obtain quality jobs, and businesses can recruit and retain skilled workers.

PAsmart is based on four goals:

1. Strategically investing resources in initiatives to support economic growth, and education and training opportunities;
2. Achieving successful outcomes for Pennsylvania students, workers, businesses, and communities;
3. Improving coordination and alignment of education and workforce development programs, services, and funding; and
4. Transforming inter-agency, cross-sector collaboration around education, workforce, and economic development at state, regional, and local levels.

As part of the PAsmart initiative, the FY2018-19 Enacted Budget included \$30 million for strategic, competitive, and cross-sector investments focused on meeting the education and workforce development needs of students, workers, employers, and communities across Pennsylvania, including those disconnected from education and workforce opportunities (e.g. opportunity youth and young adults, long-term unemployed, etc.). PAsmart grants funded by this investment will support cross-sector partnerships to address unique local, regional, and statewide education, workforce, and economic needs. Funding will support a variety of projects, but should be data-driven, align with and leverage existing initiatives and resources, and have a measurable impact.

The Pennsylvania Workforce Development Board (PA WDB) is the Governor’s business-led, industry-driven policy advisor on workforce development aligned with the commonwealth’s education and economic development goals. The PA WDB coordinates workforce development initiatives across the commonwealth and developed the PAsmart framework to guide the PA Departments of Education, Labor & Industry, and additional agency partners in developing the PAsmart grant initiatives aligned with this framework. The PA WDB is interested learning from PAsmart to inform state education and workforce development policy.

PAsmart Framework

PAsmart Principles and Funding Priorities

PAsmart is designed to provide flexible resources to support innovation, and cross-sector alignment and collaboration, to increase equity, remove barriers to access, and build on existing initiatives and fill gaps, to better serve Pennsylvania students, workers, businesses, and communities. PAsmart grants will support the following principles and funding priorities:

- **Data-driven Innovation:** Proposals identify a clear problem, challenge, or opportunity supported by relevant data and information, and include an innovative strategy to increase opportunity for Pennsylvania students, workers, employers, and communities.
- **Cross-sector Partnership:** Proposals demonstrate an effort to develop strong, high-quality cross-sector partnerships committed to working collaboratively to implement the proposal. Applicants are encouraged to have multiple partners across sectors (e.g. education partner, workforce development, business, economic development, and community partners) that demonstrate their commitment through letters of support.
- **Cross-sector Alignment:** Proposals align with existing local, regional, and state education, workforce, and economic development initiatives.
- **Stakeholder Engagement:** Proposals engage partners, customers, and stakeholders, including the target population, in the development of the proposal and its implementation.
- **Equity, Diversity, and Inclusion:** Proposals demonstrate a commitment to serve and increase access for historically under-represented and under-served students, workers, businesses, and communities. Applicants are encouraged to identify and address barriers to education and employment.
- **Capacity Building:** Proposals build the applicant's or partners' organizational capacity to better implement the proposal and support students, workers, businesses, and communities.
- **Leveraging Existing Resources:** Proposals demonstrate PAsmart resources will leverage and supplement, not supplant, existing public and private resources (e.g. other federal or state grants and philanthropic contributions, cash, in-kind, etc.). Proposals demonstrate efficient and effective use of resources.
- **Performance Outcomes:** Proposals include measurable performance outcomes and a strategy to collect, analyze, and report performance data.

PAsmart Grants

PAsmart will address local, regional, and statewide workforce, education, and economic needs aligned with state-level priorities through three grant initiatives:

- Up to \$20 million for K-12 Computer Science and STEM Education and Professional Development (administered by the PA Department of Education);
- Up to \$7 million for Registered Apprenticeships and Pre-apprenticeships (administered by the Apprenticeship and Training Office within the PA Department of Labor & Industry); and
- Up to \$4.6 million for Next Generation Industry Partnerships (administered by the PA Workforce Development Board and the PA Department of Labor & Industry).

K-12 Computer Science and STEM Education and Professional Development (up to \$20 million)

Challenge/Opportunity: Nearly 300,000 jobs in Pennsylvania require skills in Science, Technology, Engineering, and Mathematics (STEM). Over the next decade, more than 70 percent of new jobs will require these skills. Recent labor-market analysis suggests that two-thirds of the highest-paying and fastest-growing jobs in non-tech fields, like marketing, design and manufacturing, value Computer Science (CS) knowledge.⁴ Yet, Pennsylvania has 17,000 unfilled CS-related jobs, and half of all STEM jobs in the commonwealth require CS skills. Statewide, five of the eight fastest-growing occupations are CS related.⁵

At the same time, [research](#) suggests, and [analysis](#)⁶ from the PA Department of Education confirms that students' access to high-quality CS and STEM education varies significantly. Too often students of color, low-income students, and girls are unable to access the opportunities available to their wealthier, white and male peers.⁷ Last year, 18,372 students in Pennsylvania enrolled in CS coursework, representing only 2.1 percent of Pennsylvania's middle and high schoolers. Additionally, CS courses are not offered consistently statewide. Of the more than 3,000 schools in the commonwealth, only 324 offered CS courses of any kind in 2016-2017.⁸

Funding Opportunity: PAsmart grants will invest up to \$20 million in K-12 CS and STEM education and professional development. At least \$5 million will support high-quality training and sustained professional

⁴ *Rebooting Jobs: How Computer Science Skills Spread in the Job Market*, Burning Glass Technologies, November 2017, <https://www.burning-glass.com/research-project/rebooting-jobs/>.

⁵ Southern Regional Education Board. Bridging the Computer Science Education Gap: Five Actions States Can Take. 2016.

⁶ Pennsylvania Department of Education Computer Science/Information Technology Data Dashboard:

https://public.tableau.com/profile/padeptofed#!/vizhome/PAITCourseEnrollment_0/StudentsInITandComputerScienceCourses

⁷ Google Inc. & Gallup Inc. (2016). Diversity Gaps in Computer Science: Exploring the Underrepresentation of Girls, Blacks and Hispanics. Retrieved from <http://goo.gl/PG34aH>. Additional reports from Google's Computer Science Education Research are available at g.co/cseducationresearch.

⁸ This [interactive data dashboard](#) includes three years of data on Computer Science and IT course enrollments (2014-15, 2015-16, and 2016-17 school years) based on information available through PIMS.

development,⁹ and/or preparation (including certification and endorsements) to increase the effectiveness of CS instruction.

Eligible Applicants: Local Education Agencies, Intermediate Units, public libraries, STEM ecosystems, community-based organizations, and nonprofits.

Expected Outcomes: PAsmart grants for K-12 CS and STEM education and professional development initiatives may support the following activities that:

- Create or expand high-quality CS and STEM courses to K-12 students across Pennsylvania;
- Create or expand CS and STEM awareness and/or after-school activities;
- Increase access of CS and STEM education for women, girls, students of color, students in rural and urban areas, students with disabilities, and other historically under-served and under-represented populations; and
- Support the high-quality training and professional development of CS and STEM educators.

Computer Science and STEM Resources: For more information on PAsmart grants for CS and STEM education and professional development, please contact the Pennsylvania Workforce Development Board at PAsmart@pa.gov.

- [PA Computer Science and IT Course Enrollments by LEA, Grades 7-12](#)

Registered Apprenticeships and Pre-apprenticeships (up to \$7 million)

Challenge/Opportunity: Pennsylvania established a goal to double the number of Registered Apprentices in the commonwealth to 30,000 by 2025. Registered Apprenticeship and Pre-apprenticeship are career pathways that integrate classroom instruction with real-world application (e.g. on-the-job training, paid work experience, classroom instruction, mentorship, career awareness, etc.). Registered Apprentices and Pre-apprentices are directly connected to employment opportunities, earn a living wage, and are a pathway to the Middle Class with family-sustaining wages. Expanding Pre-apprenticeship programs will create a pipeline of Registered Apprentices needed to meet Pennsylvania’s goal. There is also an opportunity to expand Registered Apprenticeship and Pre-apprenticeship programs, and expand into non-traditional industries, occupations, and populations.

Funding Opportunity: PAsmart grants will invest up to \$7 million to create and expand Registered Apprenticeships and Pre-apprenticeships for Pennsylvania students¹⁰ and workers¹¹ in traditional and non-traditional fields.¹²

Eligible Applicants: Local Workforce Development Boards, labor organizations, businesses, economic development organizations, industry associations, Local Education Agencies, Education Intermediaries, post-secondary education providers, STEM ecosystems, public libraries, community-based organizations, and nonprofits.

⁹ Note: Professional development activities should be sustained (i.e., not stand-alone, 1-day, or short-term workshops), intensive, collaborative, job-embedded, data-driven, and classroom-focused. See Every Student Succeeds Act (ESSA), Section 8101(42).

¹⁰ <https://na-production.s3.amazonaws.com/documents/Youth-Apprenticeship-Today.pdf>

¹¹ <https://na-production.s3.amazonaws.com/documents/Connecting-Apprenticeship-HigherEd.pdf>

¹² <https://www.burning-glass.com/research-project/apprenticeships/>

Expected Outcomes: PAsmart grants for Registered Apprenticeship and Pre-apprenticeship initiatives may support the following activities that:

- Create new or expand Registered Apprenticeship and Pre-apprenticeship programs that meet federal and state standards;
- Expand Registered Apprenticeship and Pre-apprenticeship into non-traditional industries, occupations, and populations;
- Connect youth and young adults to Registered Apprenticeship and Pre-apprenticeship; and
- Use intermediaries with expertise on Registered Apprenticeships and Pre-apprenticeships for technical assistance.
- Build a system of Registered Apprenticeship and Pre-apprenticeship intermediaries across the commonwealth to support businesses, labor organizations, students, and workers.

Registered Apprenticeship and Pre-apprenticeship Resources: For more information on PAsmart grants for Registered Apprenticeship and Pre-Apprenticeship, please contact the Pennsylvania Workforce Development Board at PAsmart@pa.gov.

- [Apprenticeship and Training Office Resources](#)

Next Generation Industry Partnerships (up to \$4.6 million)

Challenge/Opportunity: Pennsylvania is a national leader in Next Generation Industry Partnerships, a sector strategy to coordinate and align workforce, education, economic development, and other public and community partners to support the shared business-driven goals and initiatives of an industry. By addressing these business-driven priorities, Next Generation Industry Partnerships not only support the overall economic competitiveness of an industry and the regional economy, but also benefit workers and students.

Pennsylvania has embraced this model because in addition to increasing the responsiveness and effectiveness of state-level and regional public and community partners, Next Generation Industry Partnerships support training and credential attainment, increased wages, talent recruitment and retention, networking and collaboration across an industry, and increased career and industry awareness.

Through PAsmart, Pennsylvania will expand Next Generation Industry Partnerships to reach more Pennsylvania businesses and industries to ensure employers have access to a skilled workforce and talent pipeline.

Funding Opportunity: PAsmart grants will invest up to \$4.6 million to sustain existing and create new Next Generation Industry Partnerships.

Eligible Applicants: Local Workforce Development Boards, in partnership with: labor organizations, businesses, economic development organizations, industry associations, Local Education Agencies, Education Intermediaries, post-secondary education providers, community-based organizations, and nonprofits.

Expected Outcomes: PAsmart funding for Next Generation Industry Partnerships may support the following activities that:

- Support Next Generation Industry Partnerships at various stages, including transitioning, planning to launch, facilitation, and implementation;
- Convene business and industry, public, and community partners using the Next Generation Industry Partnership model;
- Address business-driven priorities developed using the Next Generation Industry Partnership model;
- Share best practices and provide technical assistance and coaching to Next Generation Industry Partnerships, conveners, businesses, and public and community partners.
- Align and coordinate public partners and services (e.g. workforce, education, economic development, and human services); and
- Leverage additional resources to support the operational and funding sustainability of the Next Generation Industry Partnership.

Next Generation Industry Partnership Resources: For more information on PAsmart grants for Next Generation Industry Partnerships, please contact the Pennsylvania Workforce Development Board at PAsmart@pa.gov.

- [PA WDB Next Generation Industry Partnership Website](#)
- [Act 114 of 2001, Chapter 13-Industry Partnership Law](#)

PAsmart Grants Detail

Technical Assistance

More detail on each of the PAsmart grant opportunities will be available in the Request for Proposals (RFP) and Notice of Grant Availability (NGA) for each initiative. Each grant initiative will include a bidder's webinar for interested applicants, an easy to understand application and checklist, and Frequently Asked Questions guidance located <https://www.governor.pa.gov/PAsmart-Grants>.

Application Evaluation Process

Applications that meet the eligibility criteria will be evaluated by a cross-sector team of evaluators. Evaluation criteria must align with the PAsmart framework.

Proposed Timeline and Grant Period

PAsmart funding can be used for grant-related activities between February 1, 2019, and June 30, 2020.