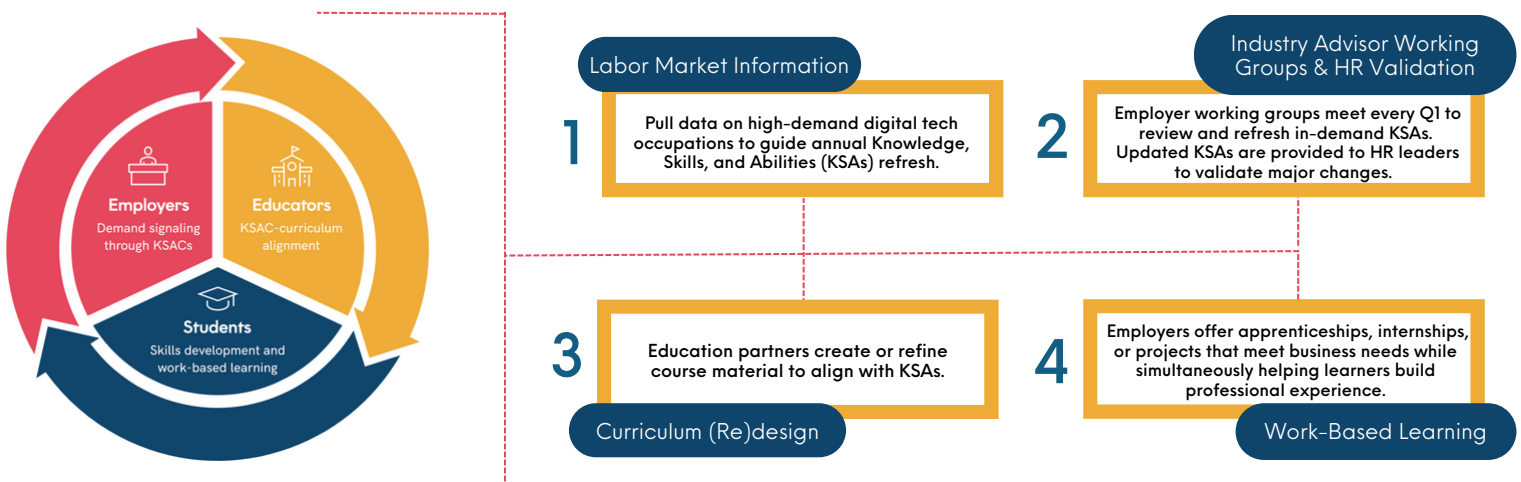# Employer Signaling System Overview

Greater Washington Partnership

Greater Washington Partnership is the first-of-its-kind nonprofit alliance of the region's most influential and leading employers across industry sectors in Maryland, Virginia and Washington, DC – all committed to championing the region's economic growth and vibrancy. Our vision is to ensure the entire region, from Baltimore to Richmond, remains vibrant, economically competitive, prosperous for all – ultimately uplifting it as the best place to live, work and build a business. Together, we leverage our collective experiences, resources and assets to identify shared challenges and offer real solutions to the region's most critical issues including skills and talent, regional mobility, infrastructure and inclusive growth.

To support the Greater Washington Partnership's skills and talent initiatives, the Collaborative of Leaders in Academia and Business (CoLAB) brings together the region's leading businesses and academic institutions to cultivate a talent pipeline for the jobs of today and tomorrow.

Employer Signaling System

- The CoLAB's Employer Signaling System (ESS) combines labor market information with employer insights and educator feedback to develop and refresh the knowledge, skills, abilities, and credentials (KSACs) needed for entry level roles in the region.

- Employers take a proactive role in communicating their needs to regional stakeholders.

- The strength of the ESS emerges in its ability to directly influence the educational pathways as well as structurally shift regional thinking about foundational education for the next generation of workers.

Employers Demand signaling through KSACs

Educators KSAC-curriculum alignment

Students Skills development and work-based learning

Labor Market Information

1 Pull data on high-demand digital tech occupations to guide annual Knowledge, Skills, and Abilities (KSAs) refresh.

Industry Advisor Working Groups & HR Validation

2 Employer working groups meet every Q1 to review and refresh in-demand KSAs. Updated KSAs are provided to HR leaders to validate major changes.

3 Education partners create or refine course material to align with KSAs.

Curriculum (Re)design

4 Employers offer apprenticeships, internships, or projects that meet business needs while simultaneously helping learners build professional experience.

Work-Based Learning

An Ecosystem Approach

60K Unfilled entry-level tech and tech adjacent jobs annually through 2025.

Saturated education-to-workforce ecosystem built on 1:1 partnerships with employers.

A regional employer signaling group to influence education-to-workforce pathways at scale.

Knowledge, Skills, and Abilities (KSA) 2023 Refresh

CoLAB partnered with McKinsey in 2020 to create a talent market diagnostic of the region. This research projects that employers risk 60,000 tech and tech adjacent jobs going unfilled annually in the region through 2025. To meet this significant demand, CoLAB created eight pathways through the Employer Signaling System: Generalist, Networking, Software Development, Data Management, Data Analytics, Machine Learning, Cybersecurity Technologist, and Cybersecurity Specialist. To keep up with current workforce trends, CoLAB uses the Employer Signaling System (ESS) to identify regional in-demand occupations, convenes education and industry subject matter experts to create new or refresh existing pathways, and ensure alignment with current hiring trends and priorities in the region. This process includes experts from local employers to ensure regional specificity.

	KSA Areas	Sample Job Titles	Annual Entry Level Wage	Median Salary
	Cyber Technologist/Specialist	Cyber Forensics Analyst Security Engineer	$82,900	$119,600
	Data Management/Analytics	Database Architects Computer Research Scientists	$79,900	$121,800
	Generalist	Project Manager Financial Analyst	$59,614	$90,843
	Machine Learning	Data Scientist Business Intelligence Analyst	$79,200	$115,900
	Networking	Systems Analysts Network Engineers	$74,833	$110,333
	Software Development	Software Engineer Java Developer	$76,000	$118,700

Key Takeaways

Cloud fundamentals are required in all pathways.
Regional employers have identified that basic cloud knowledge, skills, and abilities are fundamental to all tech and tech adjacent occupations.

Cybersecurity KSAs are too in depth for entry-level roles.
Previously, cybersecurity KSAs were split into two distinct lists. Specialist was focused on "offense" and Technologist on "protect and defend." Industry Advisors shared that they expect to upskill junior workers with specialized skills and domain knowledge once hired and that we should combine lists to encompass fundamental KSAs required for all occupations and roles.

Certifications are a proxy for motivation.
Industry Advisors shared that certifications are nice to have, but not required for entry-level. They are often seen as a proxy for "hard work" or a way to assess motivation.

35 Industry Advisors

Including representatives from:
Consulting firms, banks, nonprofits, government contractors, tech companies, educational institutions

12 Observers

Including representatives from:
Universities, K-12, workforce development organizations, nonprofits

6 Post Secondary Facilitators

Institutions represented:
American University, Bowie State University, George Mason University, University of Maryland–Global Campus, Marymount University