



Implementation Launch

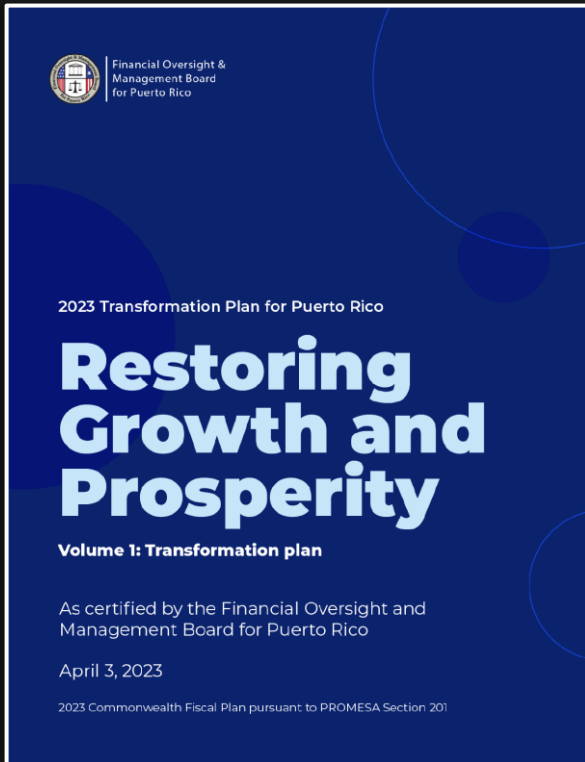
April 25, 2023

Today's Agenda

- I **1** Objective
- II **5** Facts about the current landscape
- III **5** Solutions to implement today
- IV **3** Ways you can get involved



FOMB, DDEC, and the Government of Puerto Rico see talent as cornerstone to our economic transformation strategy



- Diversified Economy with Local & Global Integration
- Enterprising Island
- **Globally Competitive Citizens**
 - Talent with high-quality knowledge, leadership, and management capabilities
 - Private and public workforce integrated with global trends and industry best practices
- Advanced Infrastructure
- Social Wellbeing

1 Objective

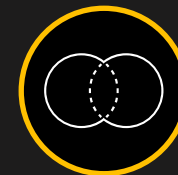
To become a **top 10 state/territory** for **21st century talent** by generating +50K additional skilled workers over the next 10 years



Identifying the **most promising technical skills and solutions** to offer economic mobility for Puerto Ricans and drive critical industry growth

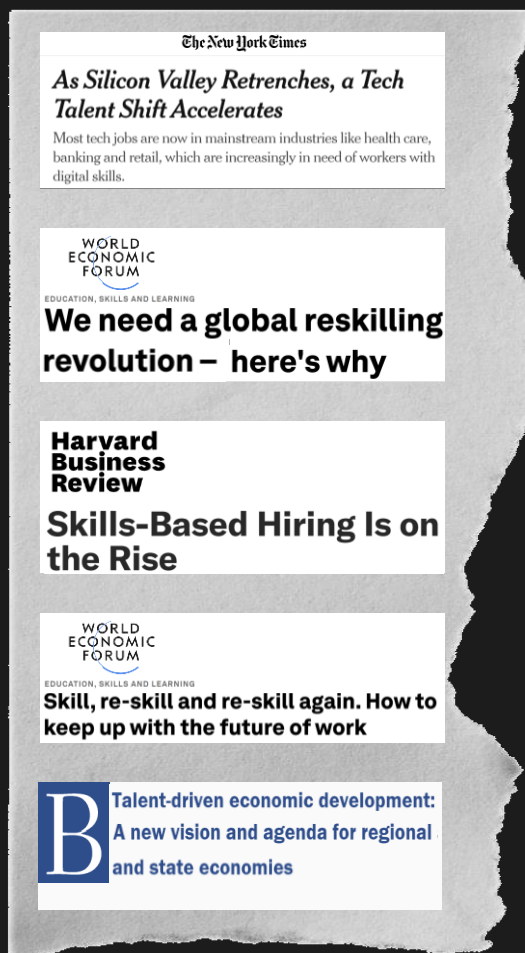


Making strategic investments to **maximize ROI** on every public dollar investment



Doubling graduates in technical fields to ~12,500 per year

FACT 1 | Talent is the #1 issue on CEOs' minds...



95% of execs rate availability of skilled labor as critical in site selection

...causing many states to make large-scale investments in talent



NORTH DAKOTA

~\$400M for workforce initiatives through Accelerate ND



VIRGINIA

\$2B+ in Tech Talent Investment Program

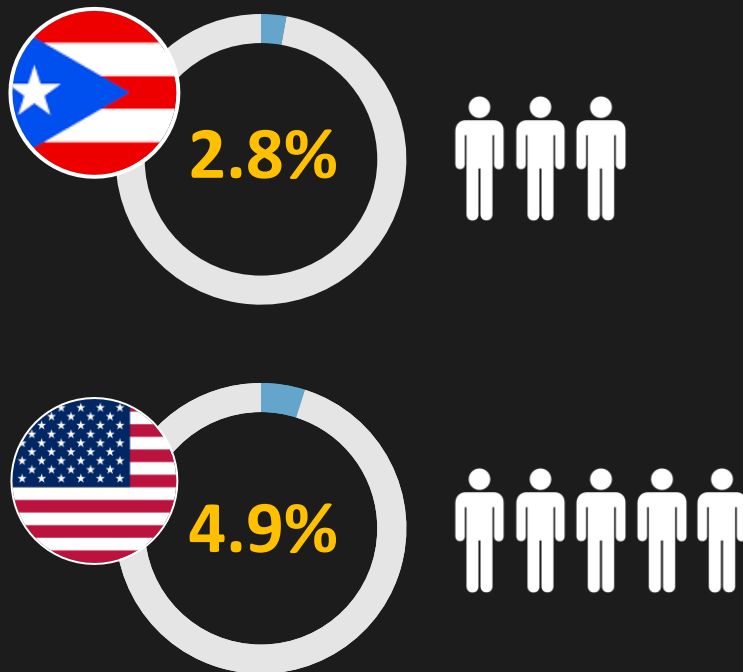


ILLINOIS

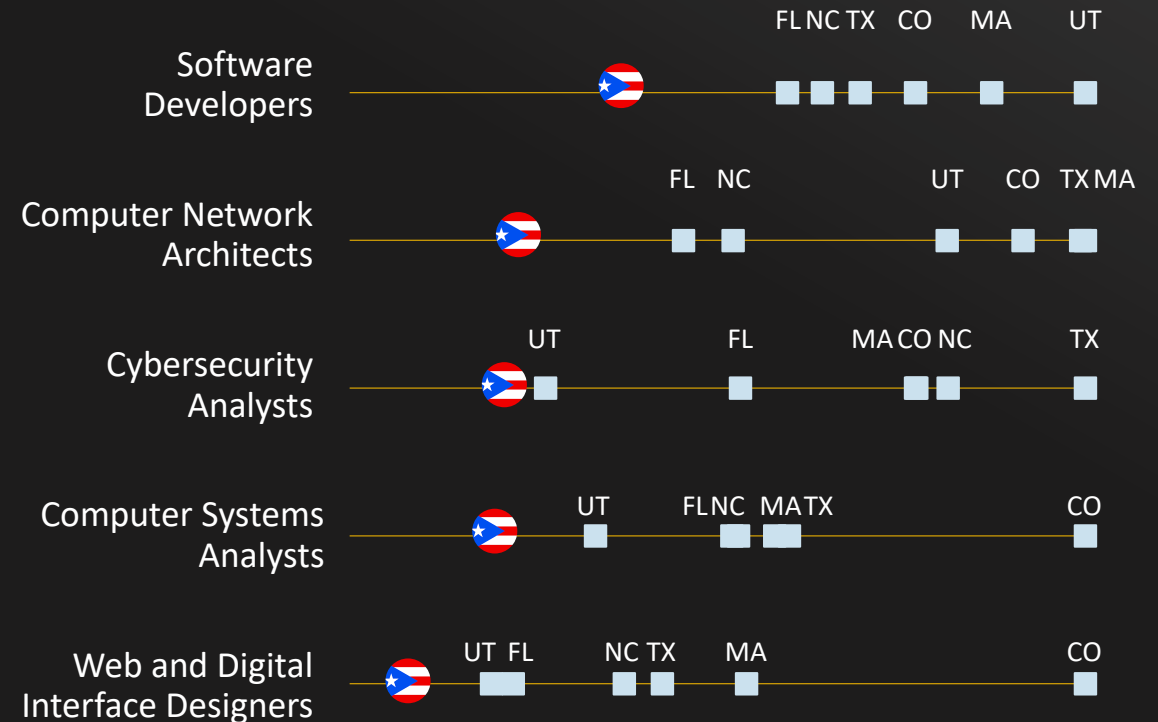
\$1B to build tech talent pipeline + \$44M for job training and youth career pathways

FACT 2 | Less than 3% of Puerto Rico's workforce occupies 21st Century Jobs resulting in a lag in most technical roles compared to other US states

Technology and Engineering as % of total workforce



Employees per capita by career type index (2021)



Peer states benchmarked

UT: Utah NC: North Carolina MA: Massachusetts FL: Florida TX: Texas CO: Colorado

FACT 3 | K–12 system lacks strong integration and exposure to technical skills

K-12 performance has opportunity for improvement

30%

Of students achieving math proficiency in PR, ~20% below US average for public school students¹

↓8%

Decline in graduation rates from 2017–22 at Occupational and Technical schools

↓80%

Decline in the number of operational technical schools over the last 20 years

Creating a weak pipeline for technical degree programs

“ If you don’t get comprehensive understanding of what compsci is in HS, **you're not going to study it in college** ”

“ **Transfer and drop-out rates** for CompSci majors are extremely high because students don't know what they were getting themselves into ”

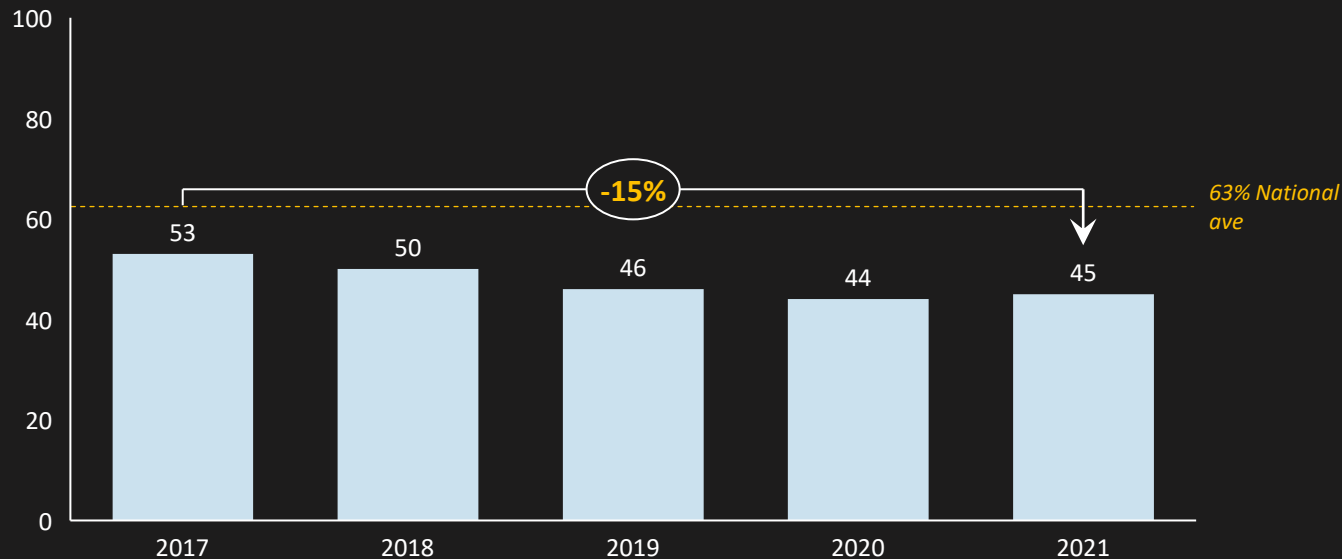
1. Percentage of students that scored at or above proficiency levels on state-administered standardized tests. States implement these tests differently and use different metrics for "proficient." Many metrics for mainland US show K-12 students at similar levels of academic proficiency compared to Puerto Rico, however the standards for proficient are much higher in the mainland US
Sources: Stakeholder interviews; PRDE, NCES, [Public School Review](#), [Nations Report Card](#)

FACT 4 | High university drop out rates and outmigration are leaving Puerto Rico with few graduates that can fill 21st Century jobs



Graduation rates for technical and engineering-classified schools have declined **15%** since 2017...

Graduation Rates of Institutions Classified as Technical or Engineering, 2017–2021 (%)



...and **56% of Puerto Ricans** with post-secondary education leave



Puerto Rico is not the first option for students when they graduate, especially engineers. Big reason is pay



Puerto Rico has significant brain drain We cannot compete with the mainland U.S. salaries or quality of life. We see many of our graduates leave



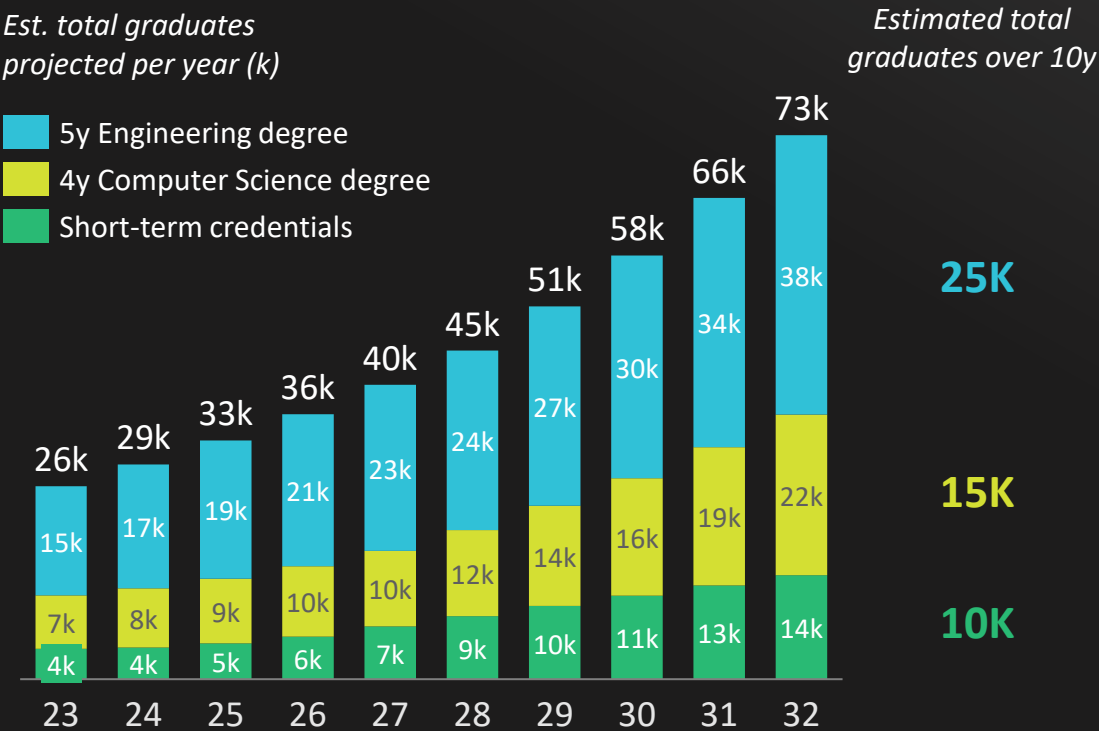
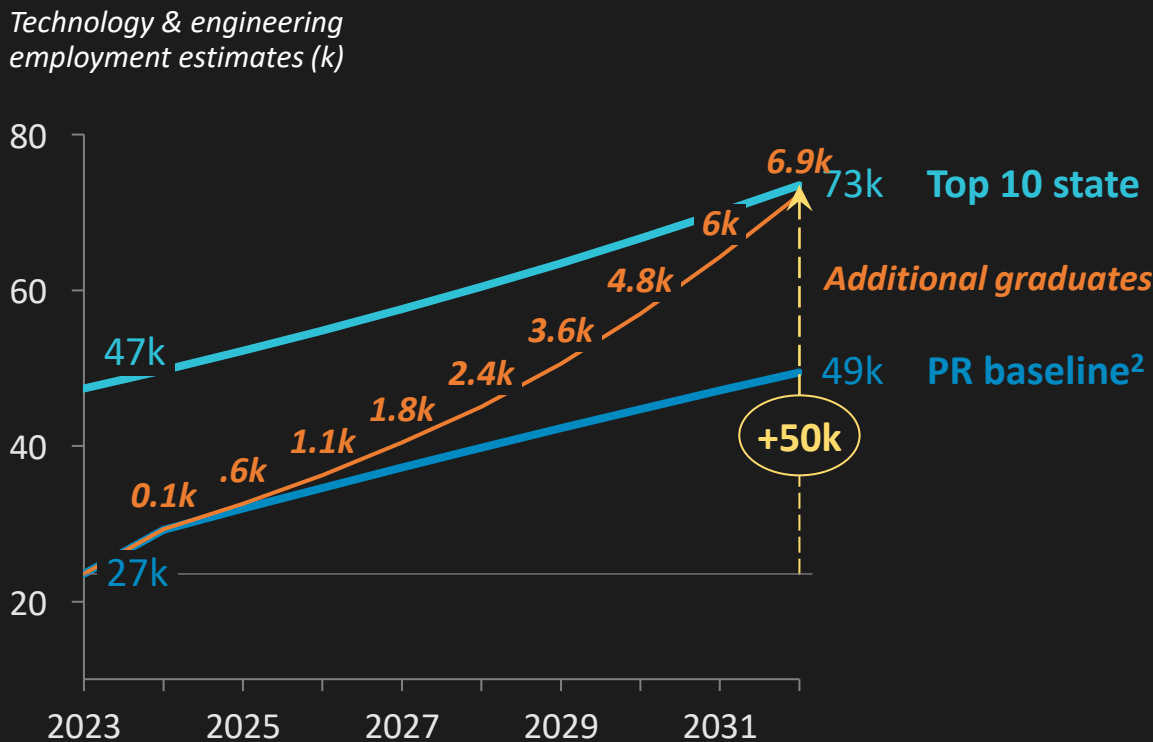
Puerto Rican companies largely do not offer internships to students before they graduate, so, they get offers elsewhere and leave – or don't come back if studying in the mainland

FACT 5 | We need at least 2x larger graduating cohorts across all technical training and degree programs

+50k students to be trained in engineering and computer science in the next 10 years

Graduates to be trained across three priority areas

Directional estimates



1. Top state given tech and engineering roles as a % total workforce; estimating a 5% YoY growth in demand for tech and engineering roles
2. Assuming 5,684 technical graduates per year, 40% outmigration rate, and 2.2% annual exits

5 Facts about the current landscape

1

Talent is the #1 issue on CEOs' minds, causing many states to make large-scale investments in talent

2

<3% of Puerto Rico's workforce occupies 21st Century Jobs resulting in a lag in most technical roles compared to US states

3

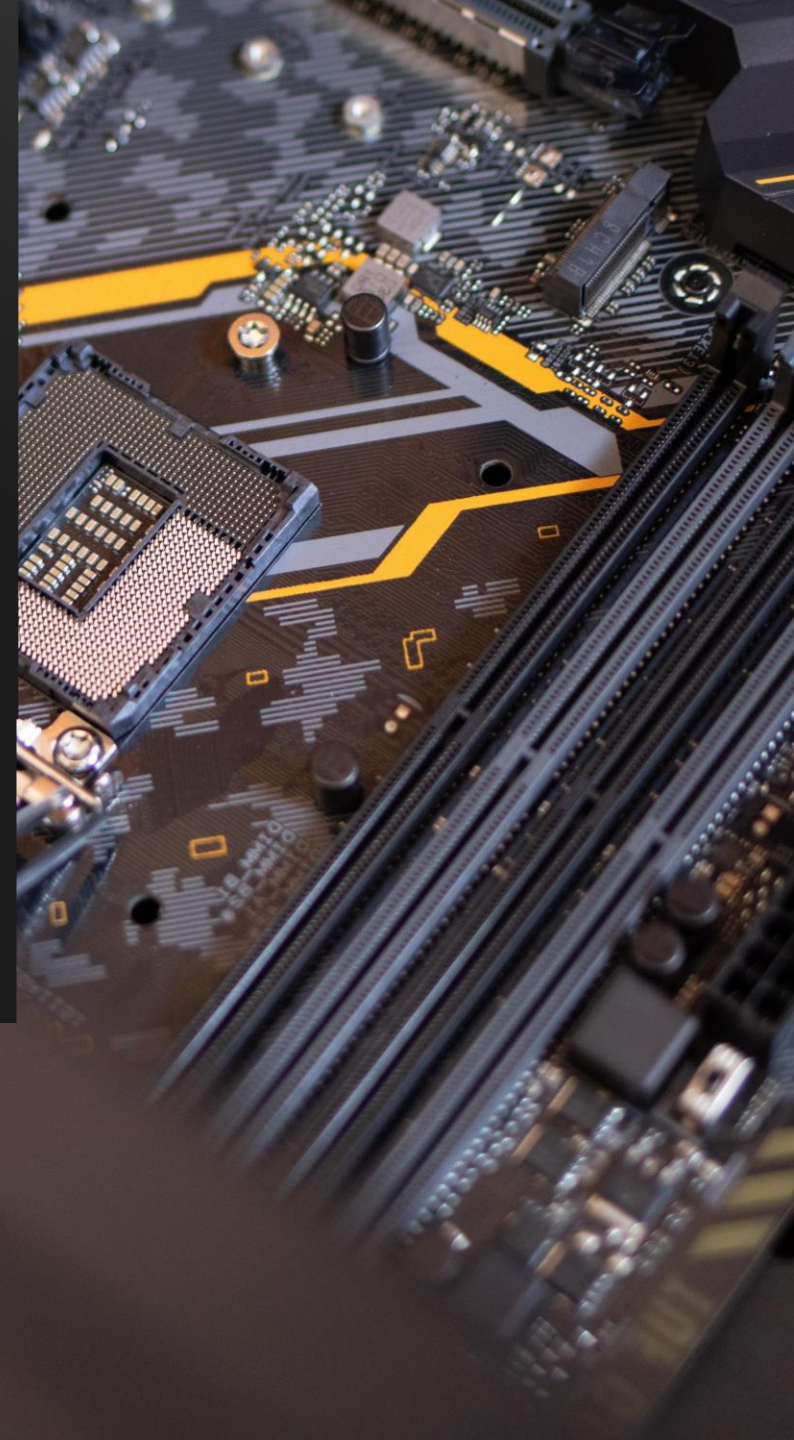
K–12 system lacks strong integration and **exposure to technical skills**

4

High university **drop out rates and outmigration** are leaving Puerto Rico with few graduates that can fill 21st Century jobs

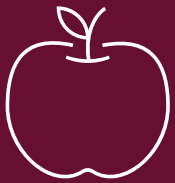
5

We need at least **2x larger graduating cohorts** across all technical training and degree programs



Strategic priorities to shape our path forward and enable our vision

Prioritized initiatives



Better **prepare K-12 students for 21st century jobs** by increasing technical career-focused prog. and upskilling teachers



Increase availability and quality of **short-form technical credentials**



Expand **high-quality engineering and computer science programs** at universities, and better retain graduates



Create more robust provider landscape for **skilled trade/middle skill certifications**



Invest in **recruitment and upskilling of relevant instructors/faculty** across the education spectrum



Launch a **"Quick Start" program as one-stop-shop** for employers seeking custom recruitment and training support



Enable **incumbent workers to transition** into 21st century roles

Target population

K-12 students

Post-high school

Undergraduates

Post-high school

K-12 and university teachers

Employers

Employers and incumbent workers

5 Solutions to implement today

K-12 Career Connection Lighthouses

Evolving the K-12 education pipeline for the 21st Century

VISION | Expose all K-12 students to technical career paths and skills

Challenge awarding diverse set of middle/high schools to fund innovative and sustainable solutions to better connect students with **pathways to a 21st century job**

Benchmarks and best practices



Georgia STEM/STEAM initiative

Dedicated to preparing students for 21st century workplace careers by providing integrated curriculum driven by project-based learning, and STEM school certification

Grants provide \$10–25k per school, per year



DPI Teacher Training Programs

University of Illinois' public-private partnership to develop hundreds of K-12 and community college educators in computing / tech-related courses



P-TECH School Model

Students earn HS diploma, industry-recognized associates degree, and work experience (K-12, community college, industry initiative)



5 Solutions to implement today

Talent Accelerator

21st Century skilling platform in partnership with key employers

VISION | Develop world-class platform to train people in any short-form course employers need

Skilling platform with **immersive short-form programs** featuring real-world project-based learning and placement integration with employers

Benchmarks and best practices



RISE In Singapore

Rapid skilling platform (10-18 weeks) focused on core business and digital foundational courses, with application-based approach to learning

To be scaled to 5,000+ trainees in next 3–4 years



5 Solutions to implement today

Stackable credentials

Grants to universities to centralize a stackable credentials program

VISION | Revolutionize the 4-year university learning journey

Enabling **multiple short-form credentials** that build on or supplement each other, and other foundational initiatives to support universities

Benchmarks and best practices



Virginia's Community Colleges

One-year certificate programs designed to meet regional demand for multiple jobs, including IT / technical fields

Aimed at post-high school students who are looking to upskill, reskill, or make career changes, typically while employed full-time

Credits are transferable to all Virginia Community Colleges when students seek Associate's degrees over two years



5 Solutions to implement today

Short-form credentials

Grants to empower and grow short-form credential providers

VISION | Scale (and enable) providers to increase PR's skilled workforce

Flexible, quick way to **upskill individuals** with 21st century skills without the time commitment of a university degree

Benchmarks and best practices

Grow with **Google**

Grow with Google

Industry-focused, flexible online certificate courses and stackable credentials designed and taught by Google experts. Career support and 1-on-1 coaching offered

Higher education partnerships (e.g., Columbia Eng, UVA) to provide certificates as credit or non-credit offerings (up to 15 credits via ACE¹)

Offering free, project-based resources / lessons to help K-12 teachers apply practical digital skills

100,000 certificate program graduates and +8,000 local and national partnerships

1. American Council on Education



5 Solutions to implement today

Quick Start

Best-in-class talent pipeline for custom recruitment and training

VISION | Provide a one-stop-shop for employers to address 21st century needs

- Assess **talent needs** with priority employers
- Develop **curriculum tailored** to skill needs
- **Recruit talent** pipeline for employers

Benchmarks and best practices

QUICKSTART[®]

Georgia Quick Start

Analyzes company needs, designs and delivers training plans, engages in ongoing evaluation and continuous improvement

\$10.2M in annual funding dedicated to Quick Start (est. 90 staff); embedded within GA Technical College system

+\$100M added to the technical college system budget in 2023 to develop job training centers for two EV plants



We established a
**21st Century
Techforce
Advisory Board**
comprised experts
to support our
progress every step
of the way



**Education
Leaders**

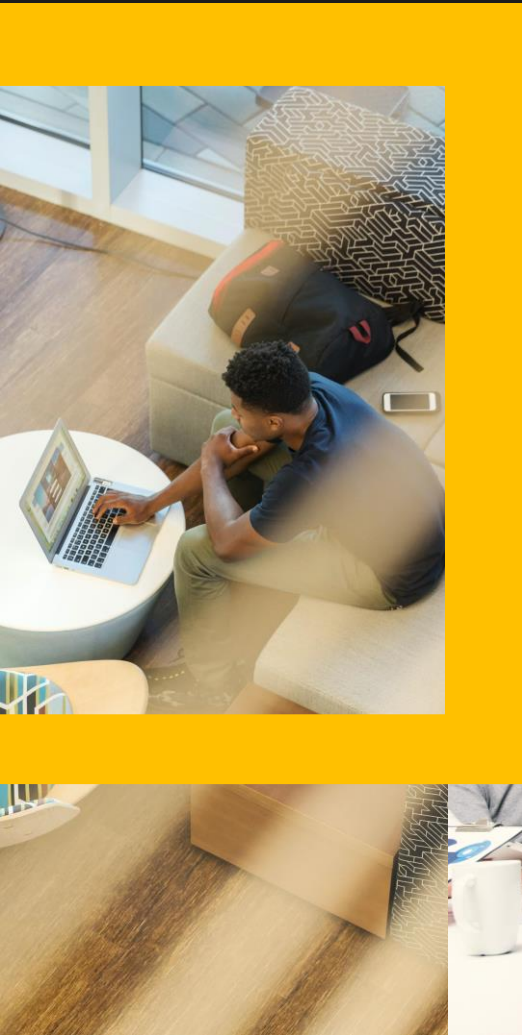


**Business
Leaders**



**Public Sector
Experts**

3 Ways you can get involved



- I **Respond to our open RFPs** or encourage colleagues and partners to do so
- II **Join our quarterly updates** where we will share project updates and progress reports
- III **Spread the word** to help build momentum and generate support by raising awareness of the project and promoting its objectives

 @DDECPR

 @DDECPR

 @desarrollopr

Next steps

- RFPs **live as of today** (April 25)
- **Early May:** FAQs published on landing page and Q&A webinars held
- **Mid-May:** Deadline to express interest and request technical assistance on your proposal
- **Through May:** Work with dedicated team to develop proposals
- **June 5:** Proposal due
- **Mid-June:** Notification of final grantees



THANK YOU