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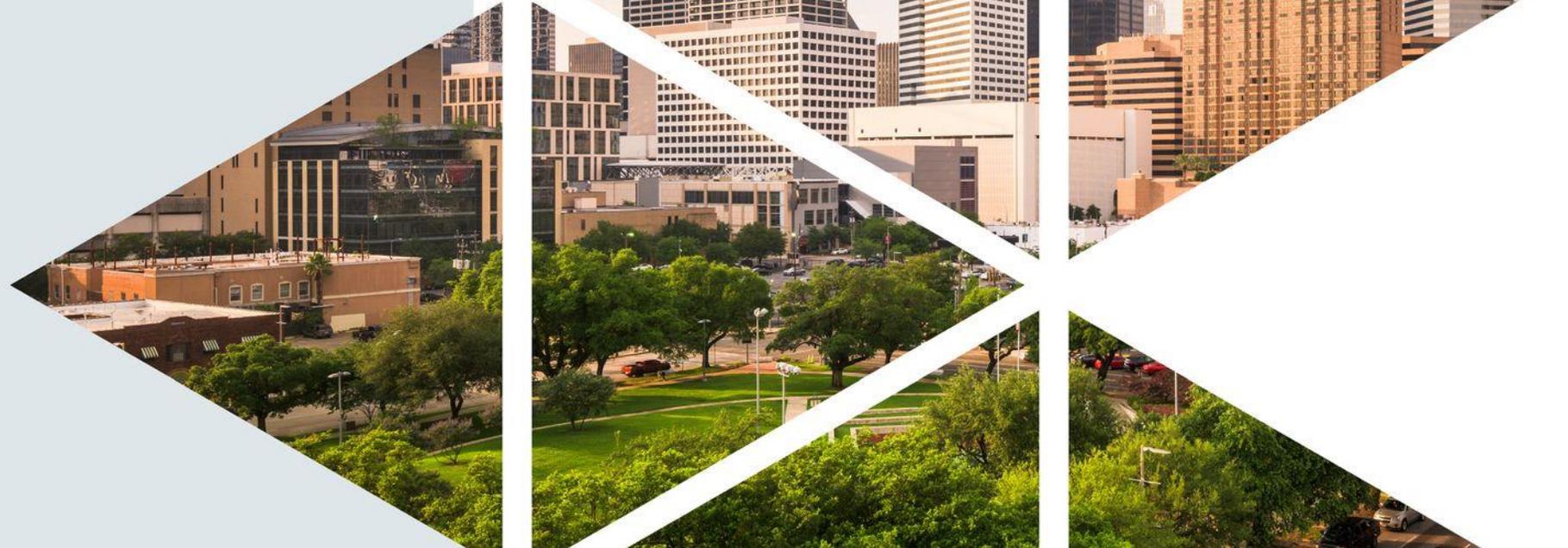
GREATER HOUSTON PARTNERSHIP.

Greater Houston Partnership: Talent and Economic Mobility through Jobs That Mobilize
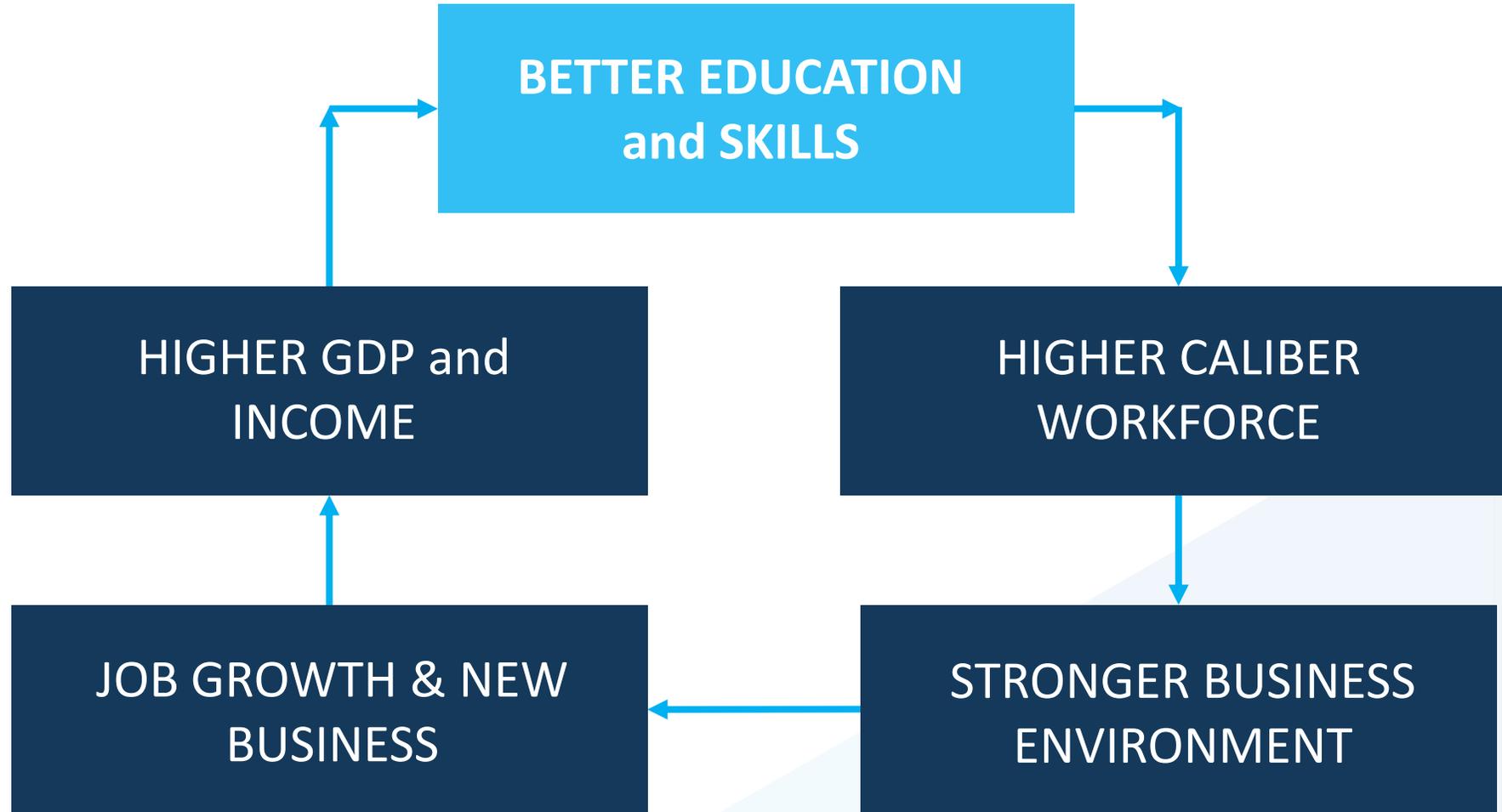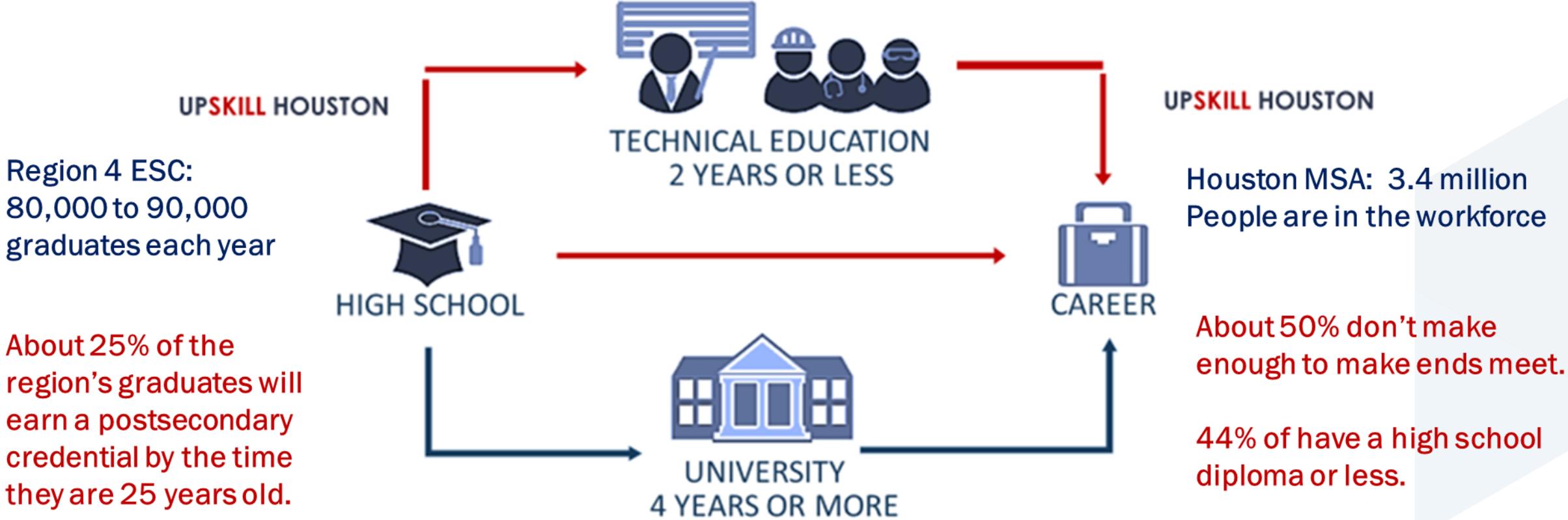
Walmart.org

Bentonville, AR

October 22, 2024

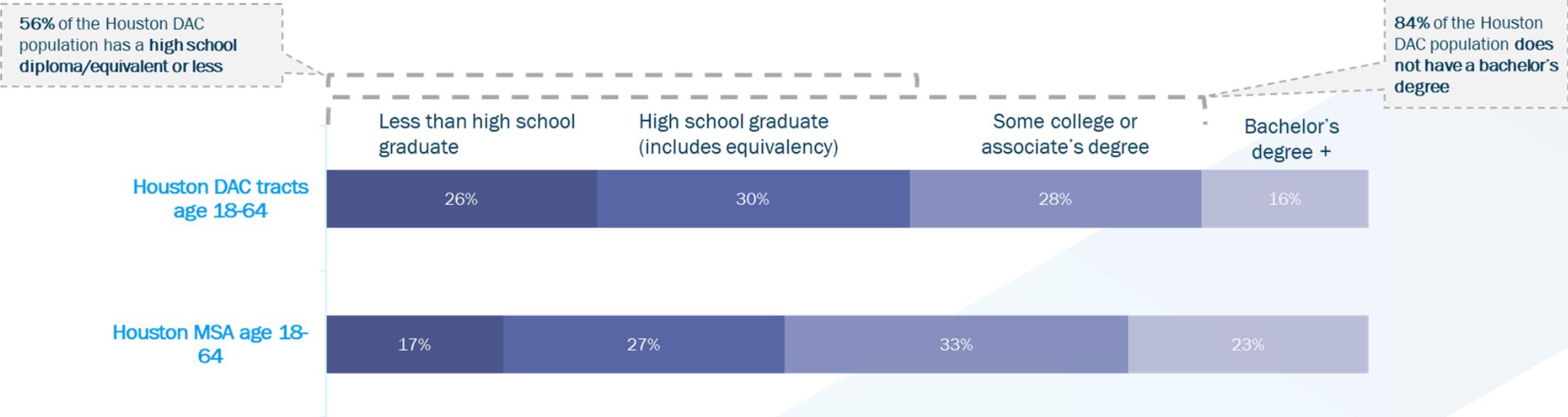# Virtuous Cycle of Education and Opportunity

Background: Talent and Human Capital

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TECHNICAL EDUCATION 2 YEARS OR LESS

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Region 4 ESC: 80,000 to 90,000 graduates each year

HIGH SCHOOL

Houston MSA: 3.4 million People are in the workforce

About 25% of the region's graduates will earn a postsecondary credential by the time they are 25 years old.

UNIVERSITY 4 YEARS OR MORE

CAREER

About 50% don't make enough to make ends meet.

44% of have a high school diploma or less.

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Background (cont.)

- **Educational Attainment:** Houston MSA vs. Disadvantaged/Underserved communities in Houston.

DACs vs Houston MSA Educational Attainment

56% of the Houston DAC population has a **high school diploma/equivalent or less**

84% of the Houston DAC population **does not have a bachelor's degree**

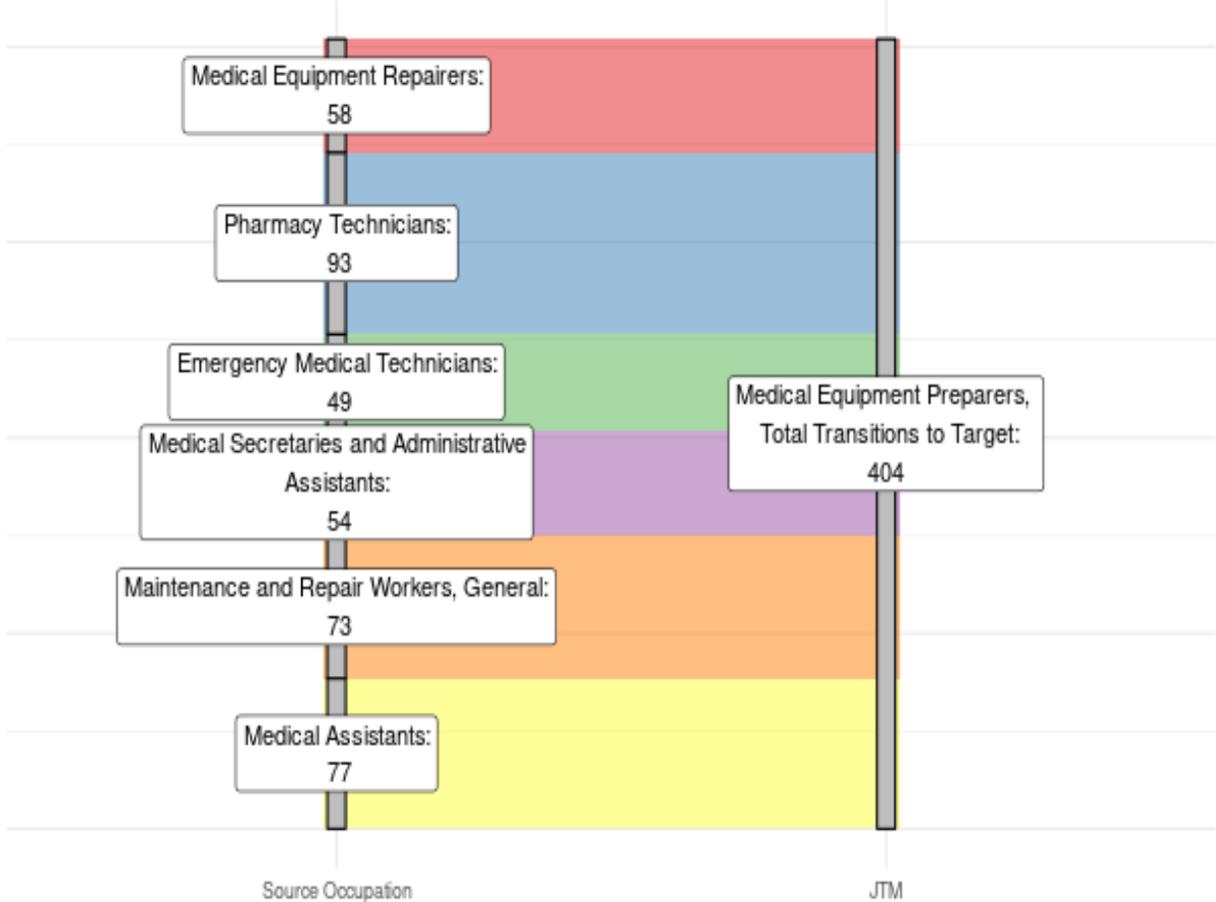|	Less than high school graduate	High school graduate (includes equivalency)	Some college or associate's degree	Bachelor's degree +
Houston DAC tracts age 18-64	26%	30%	28%	16%
Houston MSA age 18-64	17%	27%	33%	23%

Strategy Overview

- **Mobilize the collective action of employers, educators and community-based leaders to strengthen the long-term pipeline of skilled workers in the energy and healthcare/life sciences sectors, with a focus on good jobs that require education and skills beyond a high school diploma but less than a four-year college degree.**

  - Partner with employers, community colleges, and community-based to develop and support talent pipelines in energy and healthcare/life sciences for low-wage workers into Jobs That Mobilize with short-term **"credentials of value."**

    - Objective: Increase the completion of nondegree post-secondary credentials of value that provide jobs with better income.

    - Objective: Increase the use of apprenticeships to provide low-barrier pathways to good jobs.

  - Partner with school districts, community colleges, and employers to **build aligned career technical education and dual credit pathways** into advanced middle-skill employment in the energy and healthcare/life sciences sectors.

    - Objective: Increase high school graduation rate with the completion of post-secondary credentials of value into employment that pays above the median income.
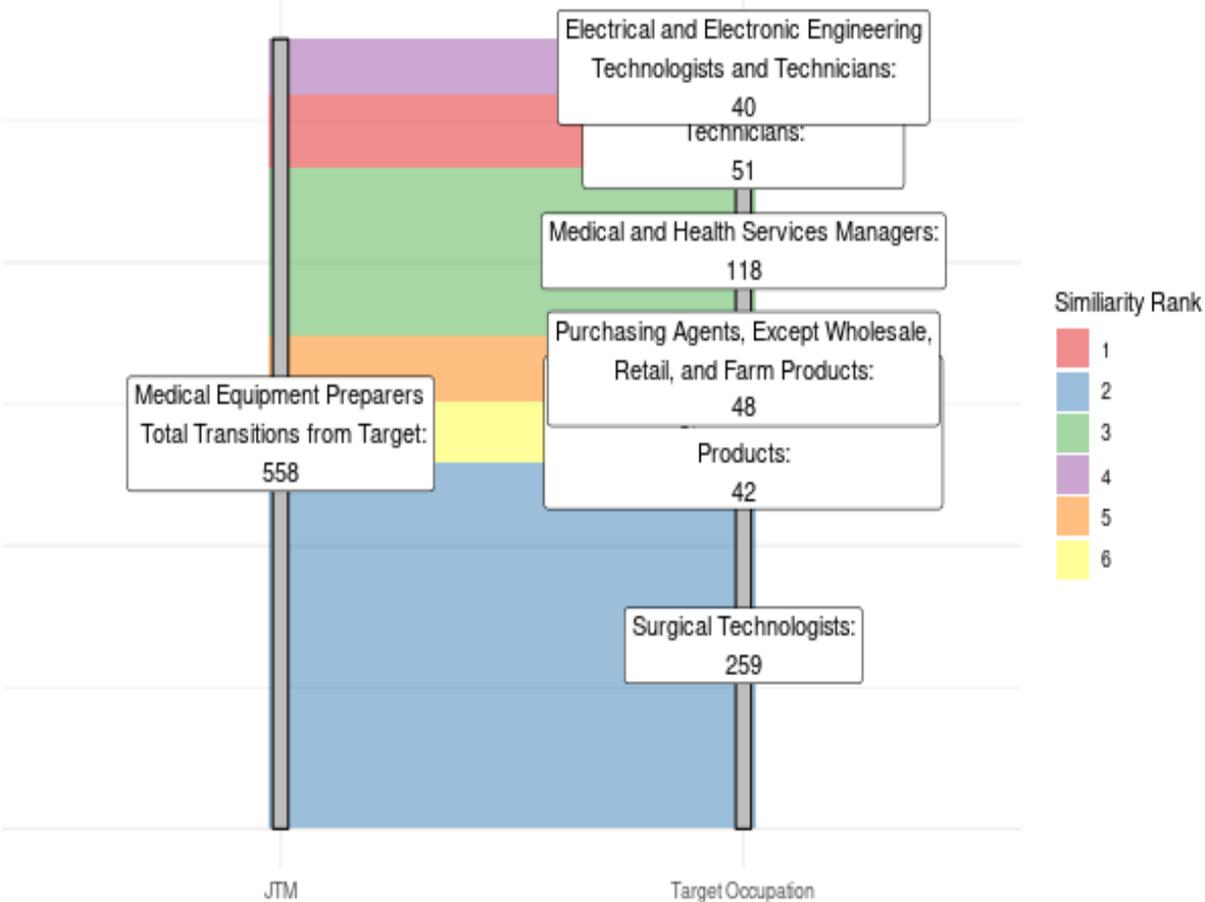
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BGI Skilled Pathway Widget: Sterile Processing

Occupation Transitions by Similarity Score:

First Transition:

Medical Equipment Repairers: 58
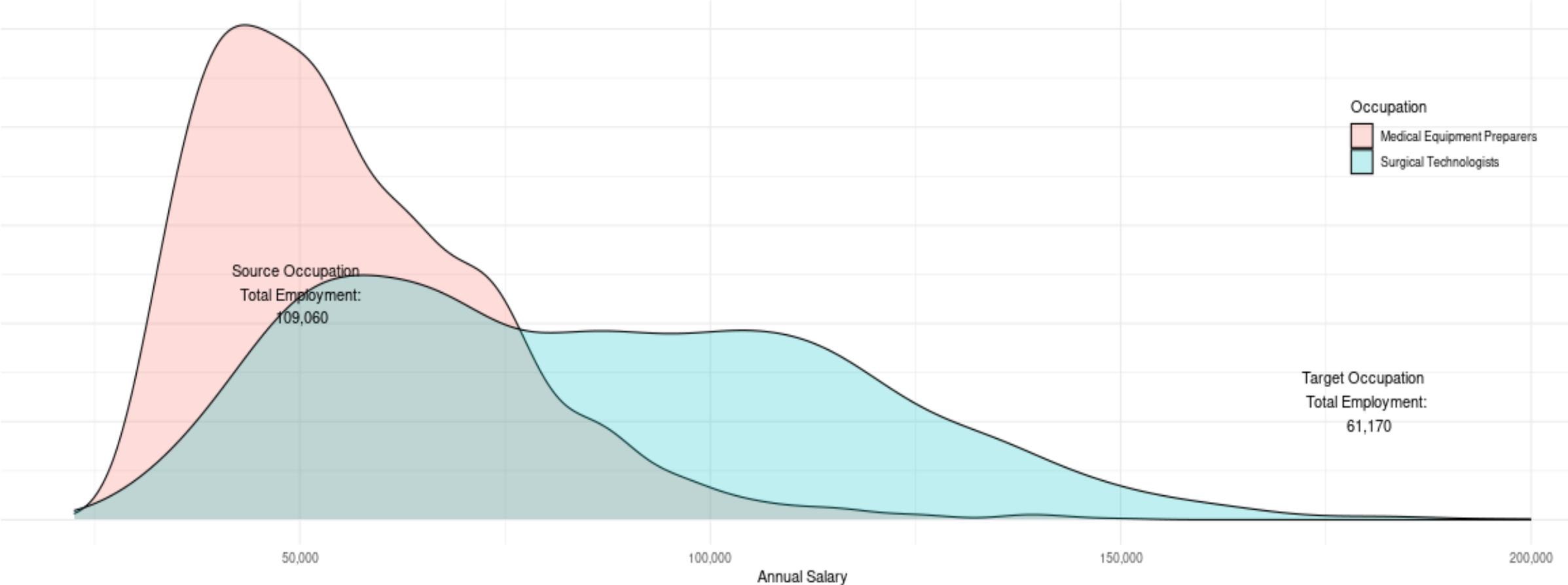Pharmacy Technicians: 93
Emergency Medical Technicians: 49
Medical Secretaries and Administrative Assistants: 54
Maintenance and Repair Workers, General: 73
Medical Assistants: 77
Medical Equipment Preparers, Total Transitions to Target: 404

Source Occupation — JTM

Second Transition:

Electrical and Electronic Engineering Technologists and Technicians: 40
Technicians: 51
Medical and Health Services Managers: 118
Purchasing Agents, Except Wholesale, Retail, and Farm Products: 48
Products: 42
Surgical Technologists: 259
Medical Equipment Preparers Total Transitions from Target: 558

JTM — Target Occupation

Similarity Rank
1
2
3
4
5
6

BGI Skilled Pathway Widget: Surgical Technicians

Why switch?

Occupation
- Medical Equipment Preparers
- Surgical Technologists

Source Occupation
Total Employment:
109,060

Target Occupation
Total Employment:
61,170

Annual Salary

50,000 — 100,000 — 150,000 — 200,000

Work Ready Skills Matrix

Skills \ Occupation	Definition	Level 1: Basic	Level 2: Intermediate	Level 3: Advanced
Collaboration & Teamwork	This skill involves contributing one's strengths and expertise, while also respecting and supporting the contributions of others, to achieve collective success in completing tasks or projects. It entails sharing ideas, expertise, and resources, as well as effectively communicating and coordinating efforts to enhance productivity and innovation within the workplace	Demonstrates a willingness to work with others towards a common goal. Shares ideas and opinions when prompted but may not actively seek out opportunities to contribute. Demonstrates a willingness to cooperate with colleagues but may not fully engage in collaborative efforts. Follows instructions and completes assigned tasks without actively seeking opportunities to collaborate or support others.	Actively participates in team discussions and activities. Contributes ideas and suggestions to the team, based on individual strengths and expertise. Shows respect for the contributions of others and offers support when needed. Collaborates effectively with team members but may need guidance in navigating conflicts or disagreements.	Proactively seeks opportunities to collaborate with colleagues to achieve common objectives. Demonstrates strong collaboration skills, fostering a positive and supportive team environment. Takes a leadership role in coordinating efforts and facilitating communication within the team. Consistently contributes to improving productivity and fostering innovation through collaborative efforts.
Communications	The ability to convey information effectively through various channels, such as verbal, written, or non-verbal communication, to ensure understanding and clarity among individuals or groups.	Conveys information using simple language and basic communication tools. Demonstrates a basic understanding of verbal and non-verbal cues. May struggle with articulating thoughts clearly and effectively. Relies on straightforward communication methods and may lack sophistication in conveying complex ideas.	Communicates ideas and information clearly using a variety of channels, including verbal, written, and non-verbal methods. Demonstrates improved proficiency in articulating thoughts and ideas. Uses appropriate language and tone depending on the audience and context. Shows the ability to actively listen and respond appropriately to others' communication.	Communicates with precision and clarity across different channels. Demonstrates advanced verbal and written communication skills, including the ability to convey complex ideas concisely. Effectively utilizes non-verbal cues to enhance understanding and convey emotions or intentions. Adapts communication style to suit diverse audiences and situations, demonstrating empathy and cultural sensitivity. This involves not only expressing ideas clearly but also actively listening to others to ensure mutual understanding.
Critical Thinking & Problem Solving	The ability to identify, analyze, and resolve issues or challenges efficiently by employing logical and analytical thinking, creativity, and relevant expertise or knowledge.	Demonstrates a basic ability to identify and communicate common problems or challenges. Relies on established procedures or guidelines to resolve simple issues. May struggle to analyze problems comprehensively or consider alternative solutions. Requires guidance and supervision to address challenges effectively.	Capable of analyzing and understanding moderately complex problems or challenges. Uses logical and analytical thinking to identify root causes and potential solutions. Seeks assistance or input from others when facing unfamiliar or difficult problems. Able to implement solutions from leadership.	Possesses strong problem-solving skills, capable of tackling complex and multifaceted issues. Applies logical reasoning and critical thinking to analyze problems thoroughly and systematically. Demonstrates some creativity in generating and evaluating alternative approaches. Proactively identifies and addresses potential obstacles or risks, anticipating and mitigating potential challenges.
Self-Motivation	The inner drive and initiative to pursue goals, overcome obstacles, and achieve personal or professional success without external pressure or supervision.	Demonstrates some level of initiative and drive to pursue goals. Requires external factors or rewards to maintain motivation. May struggle to overcome minor obstacles or setbacks without external support or encouragement. Relies on external pressure or supervision to stay focused on tasks or objectives.	Shows a growing ability to set and pursue goals independently. Can maintain motivation with occasional external encouragement or recognition. Demonstrates persistence in overcoming obstacles and challenges, though may require occasional support or guidance. Begins to develop intrinsic motivation, finding personal satisfaction in achieving goals.	Possesses a high level of internal drive and initiative to pursue goals. Maintains motivation consistently, even in the absence of external incentives or supervision. Demonstrates resilience in overcoming obstacles and setbacks, relying on personal determination and perseverance. Takes ownership of personal and professional development, setting ambitious goals and actively working towards their achievement.

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Workforce for Transition to Low Carbon Energy and Hydrogen

- **HyVelocity Hydrogen Hub:** Disadvantaged/Underserved communities.
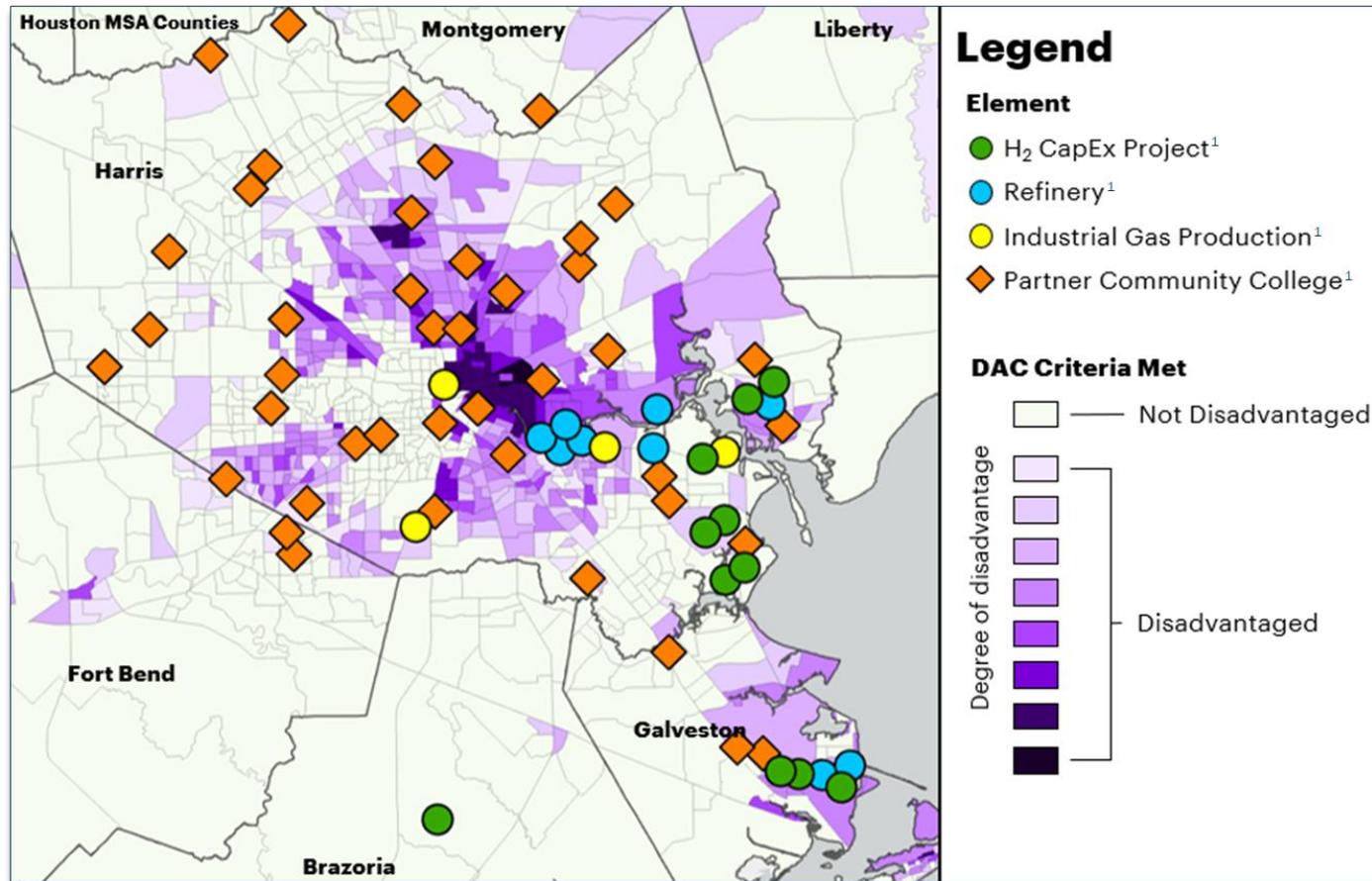
Electricians: Aligning Skills and Learning Objectives
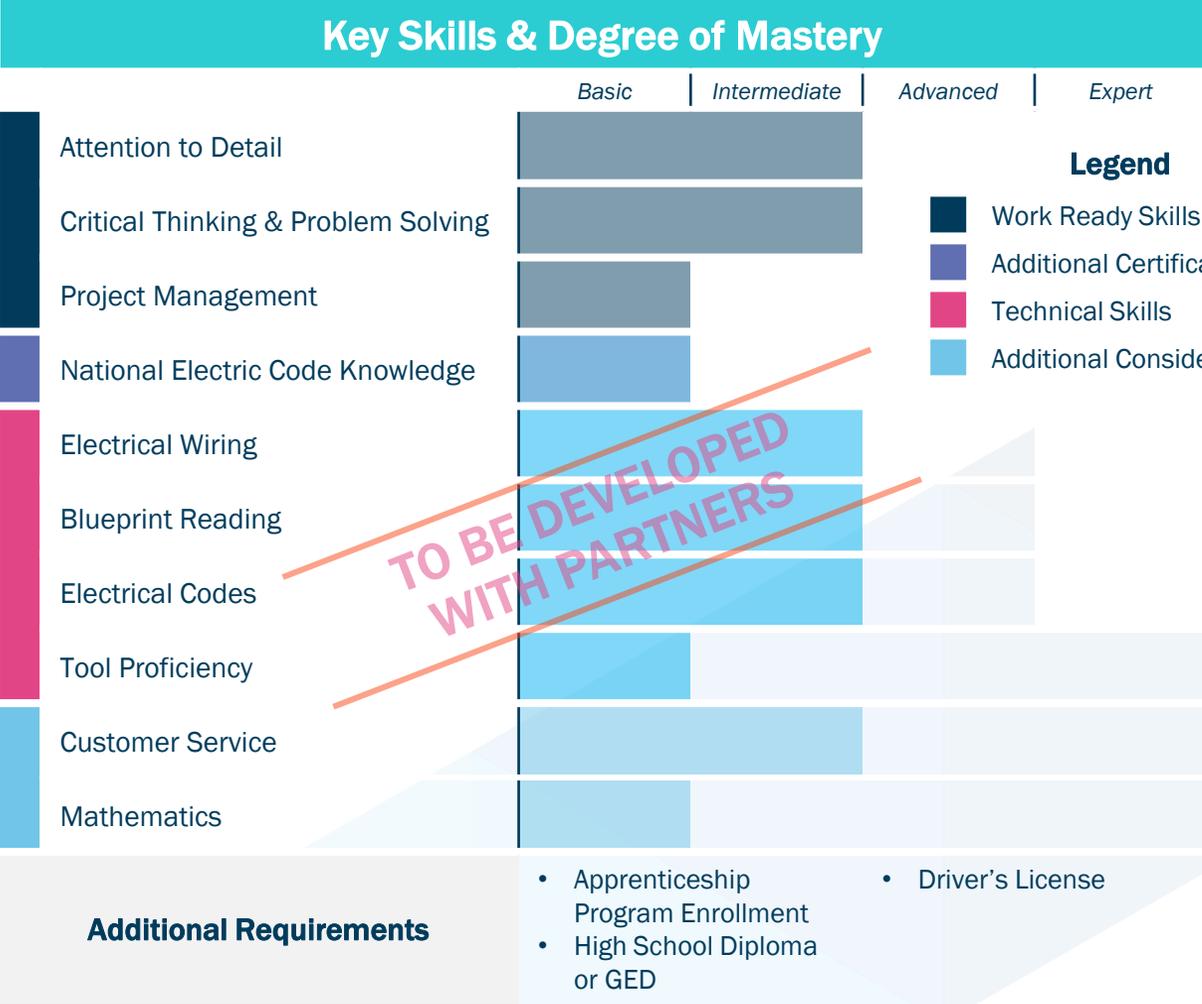
Entry-Level Electrician Role

Job Description

Install and maintain electrical systems in residential, commercial, and industrial settings.

Job Overview

Skilling Pathway(s)	Apprenticeship
Average Annual Salary	$53,000
Current # of Jobs	12,810
Potential Job Growth (2018 – 2028)	+18%
Potential Future Roles (Yearly Salary)	• First-Line Supervisors of Mechanics, Installers, and Repairers ($75,000) • Instrumentation & Electrical Technician ($80,000)

Key Skills & Degree of Mastery

	Basic	Intermediate	Advanced	Expert

Work Ready Skills
- Attention to Detail
- Critical Thinking & Problem Solving
- Project Management

Additional Certifications
- National Electric Code Knowledge

Technical Skills
- Electrical Wiring
- Blueprint Reading
- Electrical Codes
- Tool Proficiency

Additional Considerations
- Customer Service
- Mathematics

TO BE DEVELOPED WITH PARTNERS

Legend
- Work Ready Skills
- Additional Certifications
- Technical Skills
- Additional Considerations

Additional Requirements
- Apprenticeship Program Enrollment
- High School Diploma or GED
- Driver's License

Source: Bureau of Labor Statistics (BLS), Lightcast

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Building an H2 Electrician Talent Pipeline

BACKGROUND

In late 2024, John Cockerill Hydrogen completed the development of a new $500M electrolyzer manufacturing facility in Baytown, Texas. This state-of-the-art plant will produce advanced electrolyzers for clean hydrogen production. The facility aims to boost hydrogen production capabilities regionally, accelerating Houston's energy transition and promoting sustainable industrial practices.

THE PARTNERSHIP

John Cockerill has partnered with the Greater Houston Partnership and a consortium of 11 members from Houston's industry, non-profit, and educational institutions. Together, this group is developing a strategic workforce pipeline, which will support close to 300 hydrogen jobs at John Cockerill's facility by the end of 2025. Key labor needs will include electricians, welders, maintenance technicians, and more.

Industry	Nonprofits	Educators
John Cockerill	ACAM Alliance of Community Assistance Ministries	San Jacinto College
S&B Engineers and Constructors	East Harris County Empowerment Council	Goose Creek
Bechtel	The Competency Alliance	Lee College
	goodwill	La Porte Independent School District
		Brazosport College The College of Choice

PHASE 2 GOALS

1 Collaboration across Houston **corporations, nonprofits, and educators** to design and operationalize a **talent pipeline by mid-2025**

2 Work with **Houston-local partners** to engage with the community, create new curricula, and coordinate wrap-around service for DAC students and workers
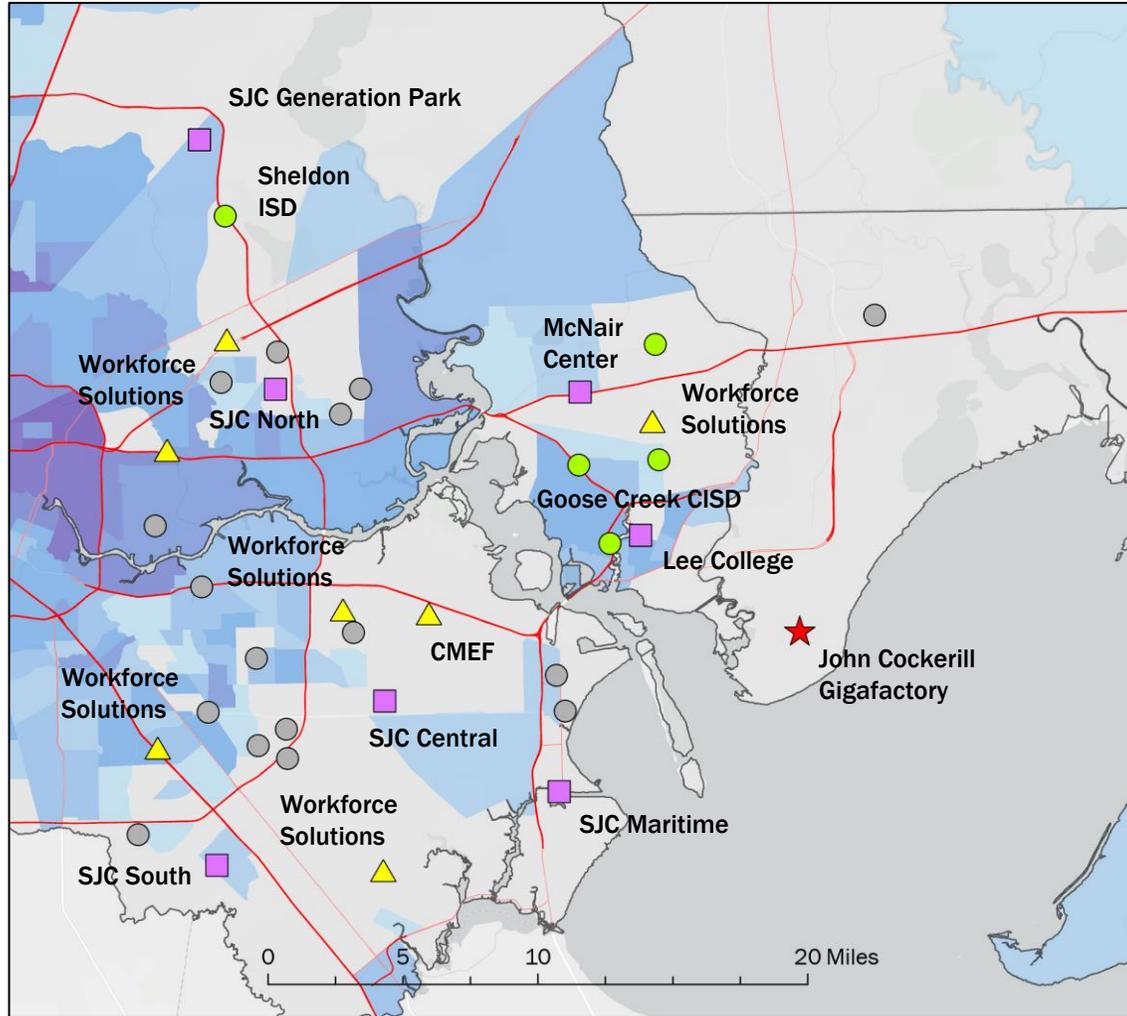
3 Ensure that the talent pipeline meets the needs of employers starting with the **nearly 300 skilled jobs** projected by John Cockerill
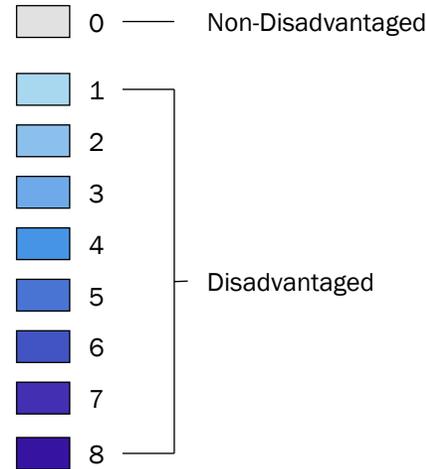
4 Scale pilot to **develop talent pipelines for additional H$_2$ roles** using a **scalable, industry-wide framework** for implementation

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Transition to Low Carbon Energy and Hydrogen

DAC Criteria Met

0	Non-Disadvantaged
1	
2	
3	
4	Disadvantaged
5	
6	
7	
8	

Institution Type & Commitment

- 🟢 Committed High School
- ⚪ Uncommitted High School
- 🟪 Committed Community College
- 🔺 Committed Non-Profit

Map labels: SJC Generation Park, Sheldon ISD, Workforce Solutions, SJC North, McNair Center, Workforce Solutions, Goose Creek CISD, Lee College, Workforce Solutions, CMEF, John Cockerill Gigafactory, Workforce Solutions, SJC Central, Workforce Solutions, SJC Maritime, SJC South

Scale: 0 – 5 – 10 – 20 Miles

13
Skilling Partner Locations
- 5 High Schools (GCC & Sheldon)
- 7 Community Colleges (Lee & SJC)
- 1 Non-Profit (CMEF)

7
Non-Profit Service Partners

200+
Short-Term H$_2$ Job Openings

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Successes, Challenges, Barriers

- **Challenges to Confront**
  - Addressing career awareness, exploration, and navigation in a dynamic labor market where skills are changing at an accelerating rate.

  - Connecting people to programs and supports across systems.

  - Engaging the corporate community to support the transition to "Skills-First Hiring," and lower barriers to entry through apprenticeships and other talent strategies, as well as increase professional growth through reskilling and upskilling internally.

  - Working to align and scale across institutions in the region:
    - 50+ school districts
    - 9 community college systems
    - 30 community-based, social service organizations

Thank You

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Immigrant Career Assessment and Navigation

Challenge:

- There is no standard assessment tool in use for career navigation services; especially one that has been designed and/or shown effective in meeting the needs of the nearly 1 in 5 US workers who are immigrants
- There is a need for more evidence on what component(s) of career navigation services are most impactful, especially for diverse populations

Approach:

- Develop and test career assessment tool (CCAT)
- Evaluation of service delivery component(s) within career navigation as relates to achievement of key outcomes

Goal:

- Strong career assessment tool with potential for scaling
- Workforce system have additional data about what career navigation service delivery components to prioritize

Progress So Far:

- CCAT created, multi-partner feedback, testing underway in three regions
- Service delivery data capture within career navigation services in three regions

Person-Centered: The Why

- Diverse populations often have <u>knowledge, skills, and experiences that are neither acquired nor manifested in ways that map to our traditional way</u> of capturing and using this information to support careers

- Our workforce system and employers often <u>over-index to a singular component of a job seekers profile</u> which is limiting to both people and employers

- Career <u>pathways need to be built in unique, nuanced ways</u> in partnership with people

Operationalizing a Person-Centered Approach

- Assessment: What, Who, and How?

- Striking the Right Balance: Robustness

- Striking the Right Balance: Validation

- Thinking Ahead to Scale
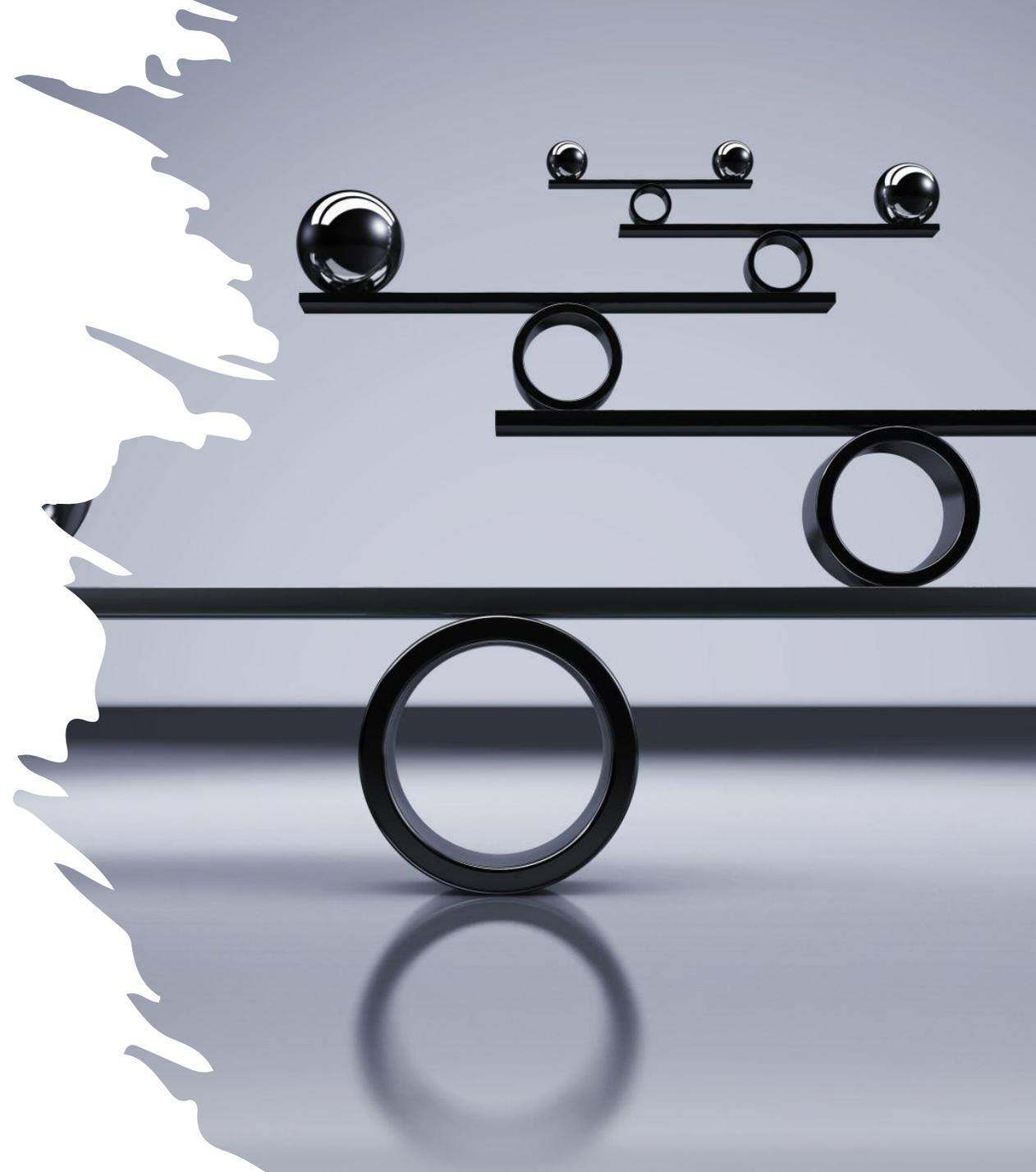
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SkillsFWD is a bold new initiative on a mission to catalyze a more equitable skills-based hiring ecosystem leveraging learning and employment records.
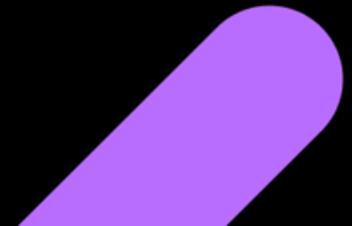
Launch interoperable LER lifecycle infrastructure that connects learners and workers to education and workforce opportunities

Define and demonstrate clear value propositions for stakeholders in the LER lifecycle

Generate insights, outputs and outcomes to scale the use of LER infrastructure

Identify outstanding needs for additional research, technical assistance and coordination to enable mass-adoption of LER tools

Inform state and national policy changes needed to overcome barriers to equitable LER infrastructure adoption

Our Objectives

Principles

Guidelines focused on governance, management, and philosophies of the SkillsFWD initiative.

- Collaborative
- Designed for all users
- Equity focused
- Interoperable
- Modeled for change management
- Privacy protected and maximally secure
- Scalable
- Skills-centered
- Survivable

Rights & Responsibilities

Expectations each demonstrations should meet to ensure functional and/or technical components are in place to demonstrate full LER lifecycle for all users.

Holders	• Individual Agency • Human Readable • Self-Soverign Management • Control Over Credential Sharing • Portable
Issuers	• Identity, Authentication and Authorization • Meaningful Credentials and Skills • Credential Updates, Revocation and Expiration
Requesting & Relying Parties	• Identity, Authentication and Authorization • Skills Application • Credential Verification and Validation