GULF COAST WORKFORCE BOARD

Regional Gap Analysis

January 31, 2024

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Executive Summary

The Gulf Coast Regional Workforce Board has a clear mandate: To create and promote
world-class work-based learning programs and accelerate promising practices in the exploration
of pre-apprenticeship and apprenticeship programs.

We were pleased to receive a grant from the Texas Education Agency to investigate what's
working in our region in pursuit of this mandate, specifically in the fields of education, health
care, and construction, given their high regional growth, and the potential for upwardly-mobile
jobs for our communities. We will call these "focus sectors." We also identified existing gaps and
opportunities for improvement. The following report provides a summary of those findings along

with the implications for where we go from here – with regard to each of the focus sectors and overall.

The following report uses stakeholder interviews, national and regional research, and local data to tailor a framework for exemplary workforce development systems. Building on the Gulf Coast Tri-Agency framework for workforce development, we proposed to measure the selected focus sectors – and the region's workforce development systems in general – against six elements:

1. **Marketing and Recruiting:** *Effective systems are in place to recruit, market, on-board and match diverse job-seekers to upwardly-mobile sectors.*
2. **High-Quality Learning:** J*ob-seekers have access to high-quality, competency-based learning that includes job-embedded training and is aligned to industry-recognized standards and/or certification.*
3. **Gap Closing and Equity:** *Industry stakeholders and educational institutions have explicit approaches to close gaps for job-seekers furthest from job-readiness, including foundational and transferable skills.*
4. **Uptake and Retention:** *Industry stakeholders prioritize helping job-seekers obtain and retain permanent positions after initial training, pre-apprenticeships, and/or apprenticeships.*
5. **Mobility:** *Industry stakeholders offer explicit opportunities for job-seekers to advance within and across sectors and to build wealth.*
6. **Tracking and Course Correcting:** *Industry stakeholders and educational institutions have high quality, shared data systems to measure effectiveness of the entire system aligned to the competencies above.*

As we explain, the Gulf Coast is considered a "resource-rich, systems-poor" region, meaning that despite being well-resourced financially, educationally, and in terms of human resources, the region lacks systems in place to capitalize on these critical assets. Therefore, many of our recommendations involve directing regional resources where they can have the largest impact; developing or formalizing systems along each of the above elements; then scaling those systems to meet the needs of job-seekers, workers, and employers. In general, we find that the lack of systems – rather than the more formidable lack of resources – is both a key gap *and* a key bright spot for regional workforce development.

Then, in what follows, we focus primarily on identifying where systems are lacking, sparse, or unscaled and provide recommendations to use regional resources to build and formalize systematic programs to identify job-seekers, match them with the right career pathways, remove barriers to entry, build skills and provide needed certifications, and grow upwardly mobile pathways throughout workers' careers.

We will delve into more detail on our findings throughout the report. But during our research, several key gaps emerged that, we believe, play outsized roles in holding the Gulf Coast region

back from optimal workforce development:

- **Key partners are not resourced for success in the medium- and long-term.**
  Despite the resource-richness of the Gulf Coast region, resources are not always directed
  in ways that support exemplary workforce development. An effective workforce
  development system requires four key partners to work together to ensure its success:
  Educators and Certifiers (K12/HE); Employers; Government; and, Industry and
  Workforce Advocates and Experts. In general, and across all three systems, there is a
  lack of resources and capacity for partners to see themselves as short, medium, and
  long term developers of talent. Building a healthy workforce system requires time and
  expertise, and more investment is needed across the board.

- **The system lacks incentives to and resources to truly "look around the
  corner" to prepare job-seekers for the future.** Currently in the Gulf Coast region,
  the vast majority of school-based and job-embedded training systems are rooted in
  legacy curricula – which is to say, as far as job preparedness goes, most programs are
  offering what they have always offered. In a landscape dominated by emerging
  technologies and innovations, a legacy approach to curriculum development will not
  produce a workforce with the skills employers demand.

- **There is an overall lack of investment in job-seekers furthest from readiness.**
  In both K12 and HE settings in the Gulf Coast region, perverse incentives exist for
  educators and industry leaders to focus on training and placing job-seekers who are
  already more prepared for the workforce. Such focus necessarily means that resources
  are diverted from job-seekers who are furthest from readiness, who require more time
  and resources to prepare

Ultimately, although we made a multitude of both broad and narrow recommendations in what
follows, we hone in on three overarching recommendations for the Gulf Coast region, each of
which will go far in addressing the gaps outlined above and explained throughout the report:

- Lift up promising practices in each sector and find ways to scale and replicate them in
  the other sectors.
- Build resources and capacity with innovation and vision.
- Address broad, systemic gaps and implement sectoral recommendations.

1) Introduction

The Gulf Coast Regional Workforce Board has a clear mandate: To create and promote
world-class work-based learning programs and accelerate promising practices in the exploration
of pre-apprenticeship and apprenticeship programs. We were pleased to receive a grant from

the Texas Education Agency to investigate what's working in our region in pursuit of this mandate, specifically in the fields of education, health care, and construction, given their high regional growth and given the potential for upwardly-mobile jobs for our communities. We will call these "focus sectors." We also identified where there are gaps and opportunities for improvement. What follows is a summary of those findings along with the implications for where we go from here – with regard to each of the focus sectors and overall.

The Gulf Coast Workforce board serves a population of more than 7 million or 25% of the state's total population within 13 counties. The region has over 88 school districts, and many options for higher education with 10 universities, 4 health science schools, 18 community college campuses, and numerous proprietary training entities. The region is known for being "resource rich but system poor," and there is a strong need to convene a regional strategy to support a pathways network. The GCWB and its operating affiliate, Workforce Solutions, partner with a diverse array of stakeholders including schools, colleges, local city and county governments, non-profits, and social service providers, as well as the business community and philanthropy, to focus on our shared economic, educational, and workforce needs. We collect and organize local economic data to help employers meet their human resource needs and individuals build careers, so that both can compete in the global economy.

We focus on the high-skills and high-growth areas of healthcare, education, and building and construction, where we have multiple existing partnerships with employers, K-12 systems, post-secondary entities, and public and private partners to offer various services, programs, and opportunities from career exploration to apprenticeship programs. Our purpose is to convene the right persons and entities to create a strategic, regional plan to effectively communicate, collaborate, and coordinate efforts to create a seamless transition from K-12 to post-secondary to employment in meaningful careers in these identified industries. Our goal is to augment a student's education with real world job experience in their area of concentration, so they can build social capital and networks with local employers while "earning and learning."

2) Local Data: A Snapshot of the Gulf Coast Workforce and The Selection of "Focus Sectors"

According to the 2020 Census, the Texas Gulf Coast region had a population of about 7.3 million, or 25 percent of the state's total population. About 65 percent of the region's population was concentrated in Harris County. The region's population has grown about 20% (or more than 1.2 million people) since the 2010 Census, compared to 15.9% growth statewide.

The region is home to four of Texas's fastest growing counties between 2010 and 2018: Fort Bend (30%), Montgomery (29%), Waller (22%), and Chambers (20%) Counties.

As a result of growth in the Gulf Coast region, the regional workforce is also growing quickly, with strong growth in healthcare, education, and construction – all sectors that grow or constrict in ways that mirror broader population changes.

The Gulf Coast region is expected to generate jobs at a 22.4% growth rate, compared to a national rate of 6.5%, with an estimated 145,000 job openings annually between 2014 and 2024. In that time, the region is expected to add at least 700,000 jobs ("Regional Economy").

This strong rate of job growth, particularly in the sectors reported upon here, highlights the urgency of building a large, qualified job force. By the same token, strong job growth should encourage job seekers that, when they are given access to and support within solid workforce development pathways, they will benefit from a promising job market in their career sectors.

Gulf Coast Regional Demographics

Age

The median age in the Gulf Coast region was 34.5 years in 2019, similar to the state median age of 34.6 years. The Houston-The Woodlands-Sugar Land MSA's median age (34.3 years) was also close to the state median. Waller (28.9 years) was the youngest county in the region and Colorado (42.9 years) was the oldest "Regional Report, Education, 2022).

An area's age distribution can reveal specific challenges, particularly with regard to planning and workforce development. A young county, like Waller County, will experience increased urgency with regard to education and workforce development. An older county, like Colorado, may face different workforce issues, like retirement and higher health care costs.

Income Distribution

The Gulf Coast region had a median household income of $68,140 in 2019, up from $55,602 in 2010, a 22.5 percent increase. Median household income in Texas, by comparison, was $61,874 in 2019, up 24.6 percent from 2010. The region's income distribution finds proportionally more households in the top quintile (33%) when compared to Texas as a whole (29%) (Regional Report, Economics, 2022).

Education

More than 2 million Gulf Coast regional workers did not have a post-secondary degree in 2021, constituting 59.6% of the total workforce. This mirrors national trends showing that at least 62% of Americans over 25 years of age do not have a post-secondary degree. That number rises to 72% for Black adults and 79% for Hispanic adults.

The rate of Hispanic adults without a post-secondary degree is of special significance to the Gulf Coast region, where the share of Hispanic or Latino population rose from 29% in 2000, to 34% in 2010, to 36% in 2017. These figures are particularly relevant for stakeholders deciding how best to conduct outreach to job-seekers and improve access to existing training and workforce development programs – two objectives named in interviews with industry stakeholders.

In the Gulf Coast region and nationally, post-secondary attainment remains strongly correlated with higher earnings. Regional data from 2021 indicate that occupations in the Gulf Coast region requiring at least an associate degree or certificate earned an average of $5,100 more annually than those requiring less than a postsecondary education. Occupations requiring at least a bachelor's degree earned an average of $50,400 more.

Table 1: Occupational Levels and Average Annual Wages by Educational Attainment Requirements, Gulf Coast Region and Texas, 2021

Educational Attainment	Number Employed, Region	Percent of Region	Average Annual Earnings, Region	Number Employed, Texas	Percent of Texas	Average Annual Earnings, Texas
No Post-Secondary Award	2,236,505	59.6%	$43,600	9,051,532	61.8%	$44,733
Associate Degree or Certificate	279,792	7.4%	$48,700	1,120,514	7.6%	$47,600
Bachelor's Degree	801,149	21.3%	$94,000	2,987,310	20.4%	$88,800
Postgraduate Degree	441,196	11.7%	$114,100	1,509,671	10.3%	$110,300

Data from the Texas Comptroller, 2022 Regional Report.

This overview of educational attainment data –particularly as correlated to earnings – is not intended to argue for disproportionate investment in traditional education attainment (i.e. degree-seeking). While closing racial and socioeconomic gaps in educational attainment remains an important pathway to equity, it is increasingly important that we look to more innovative workforce development solutions outside of traditional educational institutions.

Particularly with post-secondary degree-seekers on the decline, the existing correlation between educational attainment and earning should highlight the importance of developing workforce training pathways with ample and continuous training, opportunities for advancement, and high earnings ceilings especially for non-postsecondary degree holders.

Gulf Coast Area Workforce Training Participation

The following tables paint a picture of current CTE programs and participation in the Gulf Coast region. Statewide and within H-GAC, Economically Disadvantaged students *and* LEP (Limited English Proficient) students are more concentrated in the CTE Explorer category and among students who take no CTE courses. This may point to gaps in existing workforce development systems into which poor and LEP students are falling, and an associated need to invest additional resources in these demographic segments – particularly given the high numbers of Hispanic job seekers in the region.

Table 2: CTE Student Participation

2016-2022 9th Grade Cohorts	No CTE Courses	CTE Explorer	CTE Concentrator	IBC Concentrator	CTE Completer	IBC Completer	Total
Statewide	11%	8%	43%	<1%	37%	1%	2,880,399
	13%	8%	44%	<1%	35%	1%	663,537

Data from University of Houston Education Research Center, 2019-2022

Table 3: CTE Student Participation Among Economically Disadvantaged Students

2016-2022 9th Grade Cohorts	No CTE Courses	CTE Explorer	CTE Concentrator	IBC Concentrator	CTE Completer	IBC Completer	Total
Statewide	61%	66%	56%	54%	54%	54%	2,880,399
GWB	61%	68%	56%	47%	55%	51%	663,537

Data from University of Houston Education Research Center, 2019-2022

Table 4: CTE Student Participation of Limited English Proficient Students

2016-2022 9th Grade Cohorts	No CTE Courses	CTE Explorer	CTE Concentrator	IBC Concentrator	CTE Completer	IBC Completer	Total
Statewide	27%	27%	21%	24%	16%	19%	2,880,399
GWB	32%	30%	24%	20%	17%	16%	663,537

Data from University of Houston Education Research Center, 2019-2022

Table 5: CTE Student Participation by Race/Ethnicity

	No CTE Courses		CTE Explorer		CTE Concentrator		IBC Concentrator		CTE Completer		IBC Completer	
	State	HGAC	State	HGAC	State	HGAC	State	HGAC	State	HGAC	State	HGAC
Asian	4%	7%	4%	5%	4%	7%	6%	9%	5%	8%	6%	9%
Black/African American	14%	18%	16%	22%	13%	19%	9%	12%	11%	18%	9%	12%
Hispanic	56%	53%	56%	54%	51%	49%	53%	46%	52%	50%	54%	50%
American Indian	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%
Pacific Islander	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%
Two or More	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
White	23%	19%	22%	16%	29%	23%	29%	31%	30%	23%	29%	27%

Data from University of Houston Education Research Center, 2019-2022

Table 6: Higher Education Enrollment and CTE Participation as of 2023

2016-2019 9th Grade Cohorts	No CTE Courses	CTE Explorer	CTE Concentrator	IBC Concentrator	CTE Completer	IBC Completer	Total
Statewide	23%	25%	43%	56%	58%	62%	1,609,579
GWB	23%	27%	43%	60%	56%	59%	370,927

Data from University of Houston Education Research Center, 2019-2022

Additionally, CTE completion rates provide useful information when read across other academic achievement data. Among the 2016-2019 9th grade cohorts statewide, 49% had enrolled in a higher education institution as of 2023. Perhaps unsurprisingly, the highest higher education enrollment rates exist among CTE Completers and IBC Completers. While CTE and IBC Completers programs draw higher rates of white job-seekers than any other CTE program, the table above shows that Black and Hispanic students are over-represented in CTE Explorer programs, which enroll less than half as many student participants in higher education.

Growth in the Construction, Education, and Healthcare Sectors

In examining projected workforce growth in the Gulf Coast region through 2026, the sectors of construction, education, and healthcare stand out as high-growth industries with opportunities for high-skill employment.

All three sectors – healthcare, construction, and education – have grown significantly since 2016 and are projected to continue growing through 2026. **Healthcare and Social Assistance**

(27.6%) and Construction (19.2%) outstrip the average growth rate of all other industries (17.4%), with Education (16.1%) lagging only slightly behind.[1]

Table 7: Gulf Coast Area Industry Projections 2016-2026, Careers in the Construction Sector

Industry/Occupation	Projected Annual Employment, 2026	Projected Change 2016-2026 (%)
Construction	255,140	19.2
Construction of Buildings	61,423	10.7
Residential Building Construction	16,310	31.4
Nonresidential Building Construction	45,113	4.7
Heavy and Civil Engineering Construction	60,564	26.5
Utility System Construction	39,550	30.3
Land Subdivision	1,308	7.3
Highway, Street, and Bridge Construction	11,235	22.4
Other Heavy and Civil Engineering Construction	8,471	19.2
Specialty Trade Contractors	133,153	20.3
Foundation, Structure, and Building Exterior Contractors	29,172	21.7
Building Equipment Contractors	57,524	19.3
Building Finishing Contractors	23,220	18.9

[1] Other top growing sectors include Professional, Scientific, and Technical Services (18.8%); Management of Companies and Enterprises (34.9%); and Accommodation and Food Services (27.9%).

Other Specialty Trade Contractors	23,237	22.3

Data from Gulf Coast Workforce Board, Industries Targeted by the Gulf Coast Workforce Board (2019).

Table 8: Gulf Coast Area Industry Projections 2016-2026, Careers in the Education Sector

Industry/Occupation	Projected Annual Employment, 2026	Projected Change 2016-2026 (%)
Educational Services	357,452	16.1
Elementary and Secondary Schools	242,528	20.2
Junior Colleges	24,047	12.5
Colleges, Universities, and Professional Schools	72,033	4.0
Business Schools and Computer and Management Training	1,685	11.4
Technical and Trade Schools	2,729	-6.8
Other Schools and Instruction	11,469	28.1
Educational Support Services	2,961	43.0

Data from Gulf Coast Workforce Board, Industries Targeted by the Gulf Coast Workforce Board (2019).

Table 9: Gulf Coast Area Industry Projections 2016-2026, Careers in the Healthcare Sector

Industry/Occupation		Projected Change 2016-2026 (%)
Health Care & Social Assistance	453,586	27.6
Ambulatory Health Care Services	209,289	36.2
Offices of Physicians	67,311	35.8

Offices of Dentists	20,995	21.5
Offices of Other Health Practitioners	16,203	27.8
Outpatient Care Centers	20,292	48.4
Medical and Diagnostic Laboratories	7,594	30.5
Home Health Care Services	71,495	42.8
Other Ambulatory Health Care Services	5,399	16.7
Hospitals	137,380	19.7
General Medical and Surgical Hospitals	102,902	17.2
Psychiatric and Substance Abuse Hospitals	4,224	18.0
Specialty (except Psychiatric and Substance Abuse) Hospitals	30,254	29.6
Nursing and Residential Care Facilities	40,960	23.5
Nursing Care Facilities (Skilled Nursing Facilities)	20,315	22.6
Residential Intellectual and Developmental Disability, Mental Health, and Substance Abuse Facilities	5,216	11.9
Continuing Care Retirement Communities and Assisted Living Facilities for the Elderly	14,385	32.8
Other Residential Care Facilities	1,044	-5.3

Data from Gulf Coast Workforce Board, "Industries Targeted by the Gulf Coast Workforce Board" (2019).

3) National Research: What We Learned From Existing Frameworks for Workforce Development

We began by grounding our inquiry with national research. In 2016, The U.S. Department of Labor's Employment and Training Administration (ETA) published a framework for successful sectoral workforce development programs based on decades of research. The ETA defines a sector strategy as "a partnership of multiple employers within a critical industry bringing together education, economic development, workforce systems, and community organizations to identify and collaboratively meet workforce needs within a regional labor market" (Sector Strategies Implementation Framework, 2018).

The ETA's Strategy Implementation Framework draws on recent research to advance "five key capabilities" that state and regional workforce partnerships should master in implementing a sector approach. They include:

- **Data-Informed Decision Making.** The organization/partnership uses rigorous data to make decisions about target industries and education and training investments.

- **Industry Engagement.** There is meaningful and continuous involvement of targeted industry sector employers in designing and delivering programs and services.

- **Sector-Based Service Delivery.** All partners are facilitating the delivery of workforce solutions to be responsive to the needs of workers and the targeted industry sector(s).

- **Sustainability and Continuous Improvement.** The organization/partnership is able to measure sector strategy outcomes and has an effective and realistic plan to financially sustain sector work over time.

- **Organizational Capacity and Alignment.** The program has the personnel, policies, vision, and resources in place to continually support sector strategy outcomes.

The Manpower Demonstration Research Corporation (MDRC), a nonprofit and social policy research organization promoting programs and policies that benefit people living in poverty, recently made additional recommendations for employers and local governments attempting to implement effective sector strategies for workforce development (Sector Strategies for Workforce Development, 2023).

The authors of the 2023 MDRC study argue that, in order to most effectively close gaps between job-seekers, sectoral employment programs should:

- **Target sectors and job types.** Successful sector programs help place participants in target-sector jobs. However, helping people obtain any job in the targeted sector is not enough. Programs must focus on specific sub-sectors and occupations that offer quality jobs with high wages and benefits and that are attainable with the training and credentials that they can provide.

- **Provide nonoccupational support services.** While direct occupational skills training in an appropriate field is perhaps the most important component of a successful sector strategy, another important component is providing additional support participants may need to stay in and benefit from a training program. Programs provide support in a range of forms, including gas or bus cards, tutoring, and referrals to organizations that can provide financial, mental health, or substance use support.

- **Ensure equitable access.** All these forms of support serve the overall goal of filling labor market needs while also promoting equity. Labor market opportunities are not evenly distributed. Many people who could be successful in a given field do not have access to it. Addressing occupational segregation—that is, helping people enter their preferred fields when they might have historically been locked out of them due to race, gender, income of their family of origin, or some other factor—may improve economic development and equity alike.

- **Support 21st-century skills acquisition.** General work habits and competencies– such as communication and problem-solving skills—can be as beneficial to participants as job training. Such skills are transportable, are valued by all employers, and can help with career advancement. They also provide a disproportionate benefit to people entering new fields for the first time, such as people from families with low incomes who have never had white-collar job experience.

- **Commit to continual improvement.** Finally, and most importantly, sector programs must cultivate and maintain close ties with employers in the area and engage in some form of continual improvement to ensure their programs are meeting their goals. Any continual improvement efforts should involve programs, municipalities, and employers collaborating to mutually reinforce the goals of training and job placement.

Finally, experts and practitioners agree that, to produce large changes and impacts on existing career pathways, more substantial investments are necessary.

For example, a 2023 study by the American Enterprise Institute, the Brookings Institution, and the Harvard Kennedy School's Project on Workforce found that modest benefits associated with low funding levels –may discourage more substantial investments in workforce development. But the authors emphasize that, especially when it comes to "disadvantaged worker outcomes,"

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only a greater investment in these systems will produce the necessary scope of change (Brent Orrell et al., 2023).

4) A Blueprint for the Gulf Coast: Tailoring an Exemplary Workforce System for Local Application

We analyzed the above data in each of the three focus sectors and identified trends. We also conducted over 23 interviews with experts and leaders in workforce development in education, health care, and construction as well as key partners and advocates at community colleges and in K12 systems.

Throughout our inquiry, we looked for existing bright spots and identified opportunities for change aligned to our mandate: to create and promote world-class work-based learning programs and accelerate promising practices in the exploration of pre-apprenticeship and apprenticeship programs.

We focused on six elements of an exemplary work force system:

1. **Marketing and Recruiting:** *Effective systems are in place to recruit, market, on-board and match diverse job-seekers to upwardly-mobile sectors.*

   In an effective workforce development system, job-seekers should have access to clear, concise and motivating information about entry into the job market most aligned with their skills and interest. An exemplary system has formalized, systematic ways to expose K12 students to various sectors and provide information on the educational achievement necessary for entry and advancement. Non-K12 students should have one-stop access to similar information tailored to their needs, along with access to people who can bring that information to life. Industry leaders should weigh in on these educational materials and actively engage potential job seekers directly. Particularly for non-K12 students, the materials, recruiters, and case managers must be particularly skilled at addressing stigmas and/or barriers to entry into specific sectors.

2. **High-Quality Learning:** Job-seekers have access to high-quality, competency-based learning that includes job-embedded training and is aligned to industry-recognized standards and/or certification.

   Once job-seekers decide to pursue a career in one of the focus sectors, they must have access to on-the-job training that allows for theoretical skill and competency development, practice of those skills in real-life situations, and exposure to others performing jobs to which they can aspire. Exemplary workforce development systems have a mix of all three elements: coursework, reading, scenarios, and frameworks; apprenticeships and practicums where they can perform the work under the supervision

of someone skilled; and explicit opportunities to learn about pathways for advancement and see where their path could lead. In these systems, job seekers get high-quality and motivating feedback aligned to the competencies needed for work. Employers and partners prioritize making schedules and financial packages that allow job-seekers to prioritize work *and* learning, without having to sacrifice either.

3. **<u>Gap Closing and Equity:</u>** Industry stakeholders and educational institutions have explicit approaches to close gaps for job-seekers furthest from job-readiness, including foundational and transferable skills.

   Job-seekers who didn't graduate from high school, or who graduated without basic soft and hard skills, need access to high-quality, longer-tail programs that help backfill basic skills while also engaging them both in long term workforce training *and* immediate paid work. To effectively close gaps, these programs must offer soft-skills including coaching, mentoring, and other wrap-around services that help those furthest from work readiness overcome barriers to work and navigate early career pathways. These programs must address basic academic skills and help students learn technical skills related to entry and upwardly-mobile roles. Given the data about the disproportionate percentage of recent immigrants who fall into this category, programs should also include English language support and immigration services. For example, studies have shown that paying job-seekers to return to school or receive technical training is more successful than many other approaches, because it doesn't force those furthest from economic stability to choose between basic needs and investing in their future.

4. **<u>Uptake and Retention:</u>** Industry stakeholders prioritize helping job-seekers obtain and retain permanent positions after initial training, pre-apprenticeships, and/or apprenticeships.

   In exemplary workforce development systems, employers and industrial sectors develop strategies to obtain, and then retain, workers after their initial training. Within these exemplary systems, job seekers experience a seamless transition from training to entry into the role for which they are training. Pre-apprenticeships and apprenticeships are particularly critical for this objective. Exemplary systems have these programs embedded into on-the-job work, and employers have a systematic way to transition a trainee into a permanent slot upon completion of their requirements.

5. **<u>Mobility:</u>** Industry stakeholders offer explicit opportunities for job-seekers to advance within and across sectors and to build wealth.

   Exemplary workforce development systems should help job seekers understand how to progress from an entry-level position to the next level, and then to the next level. Paths to advancement should be made clear to job seekers, and those pathways should be

rational: in other words, within a mobility pathway, skills should be stackable and job know-how, training, and advancement requirements should be well aligned.

6. **Tracking and Course Correcting:** Industry stakeholders, government entities, and educational institutions have high quality, shared data systems to measure effectiveness of the entire system aligned to the competencies above.

   Exemplary workforce systems have high-quality, user-friendly, commonly-used, and accessible data on:

   - High-mobility, high-growth jobs and the associated requirements are for entry.
   - Job-seekers, including a way of evaluating the size of the gap between where they are and where they must be for job entry.
   - Workforce training quality, with data on pre-apprenticeship, apprenticeship, and other workforce training initiatives including their enrollment, retention, completion, uptake, and mobility aggregated by subgroups.
   - Workforce development programs achieving breakthrough results, especially with those furthest from readiness and those in new, emerging fields.

   Great workforce development systems formalize and enforce protocols to track workforce development quality from interest, to uptake, to mobility and retention. Data is shared across partners and used by all stakeholders – employers, learning institutions (K12 and HE), recruiters, and/or certifiers – to build programs and course-correct where results show a need to improve. Workforce data systems should also encourage and enable leaders to "look around the corner" at trends indicating what is coming, not just what is happening in their sectors right now. This requires looking at national data trends and emerging markets, in addition to more commonly used annual data.

This framework aligns with, and also expands upon, the Gulf Coast tri-agency work-based learning framework, supplementing that existing matrix with national research, promising practices from our interviews, and data analysis. The table below provides a side-by-side view of these workforce development matrices.

Table 10: Side-By-Side Comparison of Tailored Framework and the Gulf Coast Tri-Agency Framework

Tailored Framework	Gulf Coast Tri-Agency Framework
Marketing and Recruiting	**Identify and validate skills.** *Assessments and other tools are available to help job seekers align their skills with high-quality career pathways.*

Effective systems are in place to recruit, market, on-board and match diverse job-seekers to upwardly-mobile sectors.	**Integrate Opportunities to Develop Professional Networks** Strong mentoring networks and programs are in place for workers and job seekers, including opportunities for job seekers to explore multiple career paths.
High-Quality Learning *Job-seekers have access to high-quality, competency-based learning that includes job-embedded training and is aligned to industry-recognized standards and/or certification.*	**Incorporate Meaningful Tasks** *Job pathways incorporate meaningful tasks including opportunities for supervision and learning.*
Uptake and Retention *Industry stakeholders prioritize helping job-seekers obtain and retain permanent positions after initial training, pre-apprenticeships, and/or apprenticeships.*	**Reward skill gain** *Career ladders are tied to compensation, ensuring that workers are rewarded for developing competencies.*
Gap Closing and Equity *Industry stakeholders and educational institutions have explicit approaches to close gaps for job-seekers furthest from job-readiness, including foundational and transferable skills.*	**Support Academic Growth** *Create increased opportunities for college credit and support strong academic outcomes for workers and job seekers.*
Mobility *Industry stakeholders offer explicit opportunities for job-seekers to advance within and across sectors and to build wealth.*	**Align to High-Quality Pathways** *High quality pathways present job-seekers with high mobility opportunities.*
Tracking and Course Correcting *Industry stakeholders, government entities, and educational institutions have high quality, shared data systems to measure effectiveness of the entire system aligned to the competencies above.*	**Measure Shared Progress** *Develop data protocols that allow stakeholders from industry, community, and academia to share information and standardize practices and curricula.*

5) Putting it into Practice: Promising Practices, Gaps, and Next Steps for Workforce Development in the Focus Sectors

This section provides more detail about existing promising practices in the Gulf Coast region and will lay out a summary of where the Gulf Coast can make strides toward the above metrics.

Before looking more closely at how focus sectors measure up to each of the 6 elements, we will draw attention to several general assets, gaps, and recommendations. The below table will help stakeholders establish a birds eye view of workforce development in the region and provide a high-level roadmap to building an exemplary system in the Gulf Coast and in the focus sectors.

Table 11:
Overview of Promising Practices, Gaps, and Recommendations for Focus Sectors

	Education	Health Care	Construction
Assets & Promising Practices	High-demand and high-growth industry with upwardly-mobile opportunities.	High demand, high-growth industry.	High demand, high-growth industry
	Trainer and employer work within the same industry, removing barriers to curricular alignment and data-sharing between stakeholders.	Rational market with plentiful opportunity for upwardly mobile advancement.	Rational market with plentiful and clear opportunities for upwardly mobile advancement.
	Workforce preparedness is an inherent interest of the education industry, and there is a large number of innovative pockets, pilots, and partners engaging in initiatives.	Careers in a range of areas requiring different skills, training, and aptitudes.	A large number of high-quality learning opportunities, including ample job-embedded training.
General Gaps	Stigma results in low interest, despite opportunity.	Very small pilots despite massive institutions, and barriers to scaling promising programs.	Stigma associated with physical labor and lower wages.
	Siloed innovation, not	Lack of dedicated	Incentive for lots of

	a "system" embodying competencies.	people, time, and money capacity to scale and launch programs.	"low skill" positions and certifications, and fewer incentives to train "high skill" workers in the field.
	Employers lack capacity to envision and implement new systems.	Lack of coordination between pilots and partners.	
General Recommendations	Increase collaboration among districts in the region.	Identify and address barriers to scaling promising practices.	Work towards changing societal perceptions about careers in the construction industry.
	Recognize financial constraints in school districts and explore innovative funding models that secure the necessary resources for CTE sustainability and growth.	Build financial and human resources capacity necessary to scale promising programs and provide high-quality training to job-seekers.	Continue efforts to streamline connections between educators and employers.
	Promote inclusivity and equity by identifying and addressing potential biases in program implementation and access.	Formalize practices for sharing data between partners, including shared curricula for training programs.	Develop a comprehensive communication and outreach strategy to promote the company's programs and initiatives.
			Showcase positive outcomes and career paths available within the construction sector.
			Diversify training programs.

In general, the focus sectors are well-positioned to develop and expand workforce training opportunities for Gulf Coast job seekers. However, there are a number of opportunities to capitalize on existing assets by developing and formalizing practices, sharing data, and scaling promising programs. This means that more work must be done to identify and lift up promising practices. This should include aggregating effective tools, building the capacity of employers, and mapping the outside partners who can help close gaps.

Below, we dive deeper into each of the six elements, and evaluate promising practices, gaps, and recommendations for each focus sector across the elements:

1. Marketing and Recruiting

Effective systems are in place to recruit, market, on-board and match diverse job-seekers to upwardly-mobile sectors.

In the education sector, there is high demand for entry into the field and for upwardly-mobile roles in schools and central offices. However, interest from job seekers is low because of the stigmas associated with working in education: for example, many see education as an inherently "female" endeavor and one that lacks excitement or opportunities for advancement. In addition, many employers – from early childhood centers to K12 systems and charter operators – lack systematic commitment and skill in the area of recruiting. Some promising practices and emerging partnerships currently exist to address the need for better marketing, overall education, and high touch recruitment. However, more needs to be done to make education an attractive pathway for all job seekers. Most importantly, employers in the education sector should embrace their role as recruiters and not rely on outside groups to fill this role.

In the construction sector, the demand for employment is equally high, especially for entry level work. Like in education, industry leaders we interviewed expressed challenges in overcoming barriers to recruitment. In particular, job seekers may be dissuaded because much entry work in construction does not immediately build wealth, and work is often physically demanding. Here again, employers and industry leaders have an opportunity to demystify the process of entry work in construction and to help job seekers understand pathways for advancement. Employers and experts in the Gulf Coast construction sector suggested that differentiating sub-strands of construction where specialization can help with advancement may be the key to future recruitment measures.

In health care, the individual pathways for certification and advancement are the most clear and "rational" of all three focus sectors, alleviating tension on the recruiting process that exists in other sectors. Put another way, the healthcare field makes clear pathways for advancement overall and in specialty areas, which helps job seekers easily access information about advancement and opportunities to build wealth. The opportunity in the healthcare sector is to

support employers in stepping into their role as recruiters. Unlike education and construction, the healthcare industry has high demand, opportunities, and interest.

Building healthcare employers and outside partners' capacity to recruit would help the sector take better advantage of its existing assets and promising practices.

Table 12: At a Glance: Evaluating Focus Sectors on Marketing & Recruiting

	Education	Healthcare	Construction
Assets & Promising Practices	High demand for entry and for upwardly-mobile roles.	High demand sector with clear and "rational" pathways for advancement.	High demand for entry-level work.
Gaps	Low number of students participating in CTE programs.	Lack of a robust supply of qualified candidates for apprenticeship programs.	Insufficient career exploration opportunities to counter barriers.
	Insufficient career exploration opportunities.	Employers not experienced as recruiters, and often lack resources to build capacity.	Lack of marketing and promotion.
	Many employers lack systematic commitment and skill in the area of recruiting.		
Recommendations	Embrace employers' and practitioners' role as recruiters, rather than relying on outside groups to fill this role.	Build employers and outside partners' capacity to recruit.	Work towards increasing industry representatives' presence in schools and colleges and create more information-sharing opportunities with students.
	Expand career exploration	Create opportunities to share information	Develop a comprehensive

	opportunities, perhaps by exploring virtual options or collaborating with more local institutions to host events.	about and recruit job-seekers into a wider range of careers within the hospital/healthcare field.	communication and outreach strategy to promote the industry's programs and initiatives.

2. High-Quality Learning

Job-seekers have access to high-quality, competency-based learning that includes job-embedded training and is aligned to industry-recognized standards and/or certification.

Overall, many small-scale promising practices exist with respect to high-quality learning, with the additional bright spot that many of these practices could, and should, be scaled.

In education, we learned of several partners who are helping school systems create career ladders from instructional assistants or assistant teachers through a "grow your own approach." Some K12 systems host summer programs where students can receive training to become "camp counselors," and systems then use lists of students who participate to recruit job seekers into the grow-your-own pipeline and/or to connect to local teacher education programs. These efforts appear new, innovative, and promising, and could be more systematically implemented within and across systems. It is critical for stakeholders in this sector to develop new approaches outside of traditional education certification programs because, as a sector, many programs tend to lack rigor and high-quality real-life learning connected to theory.

In construction, we learned of an employer who runs a competency-based learning academy with clear learning outcomes and that includes traditional learning and work-based learning. Participants know precisely the skills and knowledge they must develop to be eligible for entry roles, and the next few rungs on the ladder. They also receive all required certifications to be connected to each role for which the company employs job-seekers. This exemplar program could be scaled to other employers and the approach could be systematized across employers. The most substantial challenge in the construction sector will be to convince employers and partners to make the financial and human resource investments necessary to scale promising programs to meet the needs of regional employers.

In health care, we met several employers who have high-quality apprenticeship programs that combine coursework with practicums and required certifications. Some of the programs have also taken care to remove scheduling and financial barriers that can prevent job-seekers' progress, thereby partially closing the gap between job-seekers closest and furthest to job readiness (see below). Some have taken care to place apprentices with managers who have a

developmental lens. The programs are quite small and are not yet part of the overall talent approach of the employers we talked to, but they could, and should be, over time.

More inquiry needs to be pursued on the barriers to scaling these promising but small programs. Inquiry should focus on solving for a lack of internal capacity and fragmented funding systems (e.g., pre-apprenticeships are funded differently than apprenticeships, and both have onerous compliance pieces). Once these barriers are identified and addressed, these practices provide a blueprint for exemplary systems in the area of high-quality learning.

Table 13: At a Glance: Evaluating Focus Sectors on High-Quality Learning

	Education	Healthcare	Construction
Promising Practices	Partners helping school systems create career ladders from instructional assistants or assistant teachers.	Small, high-quality apprenticeship programs that combine coursework with practicums and required certifications.	Small, competency-based programs with clear learning outcomes and both traditional learning and work-based learning.
Gaps	Challenges with recruiting and retaining teachers in CTE programs.	Lack of access to apprenticeships for high school students and few clear pathways from education to apprenticeship.	Lack of qualified instructors to support workforce preparation courses..
	Lack of curriculum alignment.	Apprenticeships not existing or readily available in all areas of the hospital and healthcare field.	Apprenticeship programs have not been widely adopted across the industry
	Lack of alignment between available certifications and the certifications preferred by employers.	Lack of systematic approach to scaling and info sharing between small programs and employers.	Lack of qualified job-seekers for niche areas within the industry.
	Lack of buy-in from schools and districts.		

Recommendations	Develop strategies to recruit and retain teachers in CTE programs.	Structure apprenticeships and pre-apprenticeships to increase access to high school students/programs and build the pipeline from education to apprenticeship.	Identify qualified instructors, sometimes from outside the school's faculty, to teach workforce preparation courses.
	Develop new approaches to train job-seekers outside of traditional certification programs.	Establish apprenticeships in more areas of the hospital/healthcare field.	Advocate for the wider adoption of apprenticeship programs across the industry.
	Ensure teachers have access to a database of curriculum and that certifications offered align with industry needs and are recognized as meaningful by employers.	Codify what is working in existing apprenticeship programs, and develop protocols for sharing that information with educators and employers.	Introduce specialized courses or certifications that cater to specific niche areas within the construction industry
	Create buy-in from schools and districts to adopt workforce preparation programs, especially by assisting schools with securing resources and locating and hiring qualified instructors.		Create buy-in with employers and partners to make the financial and human resource investments necessary to scale promising programs.

3. Gap-Closing and Equity

Industry stakeholders and educational institutions have explicit approaches to close gaps for job-seekers furthest from job-readiness, including foundational and transferable skills.

In order for the Gulf Coast to have a truly best-in-class workforce development program, K12, higher education, employers, and other partners need systematic and supportive pathways designed for job-seekers furthest from job-readiness. Along this metric, all three focus sectors face the same problems, rooted in a set of "perverse incentives" that guide CTE programs.

Many stakeholders we interviewed in higher education and K12 environments pointed out the struggle educators face in supporting those job-seekers facing the longest odds, particularly as it relates to funding and other accountability metrics that create unintended barriers. In K12, for example, Career and Technical Education (aka CTE) programs are evaluated, in large part, by both the federal government and the local district by enrollment numbers, retention rates, and the number of certifications obtained (given lag time in public policy, even some certifications that are relatively obsolete and/or connected to low-mobility, low-wage jobs).

While this seems like a good idea on paper, in reality it incentivizes districts to recruit students for CTE programs who are the closest to job readiness, and therefore need the least investment to achieve their certification. These perverse incentives lead districts to place those struggling and in need of the most intensive academic interventions in certification pathways that are easiest to obtain without basic academic skills, like welding or car mechanical programs – paths that often provide the least economic mobility. While this can provide some short term gains for some, it does not ultimately fill the "gap-closing" needed to ensure these individuals are on a pathway to lifelong, economic stability.

While we recognize gap-closing approaches are critical to advance equity, our initial gap analysis did not reveal many promising practices here. We attribute this primarily to the powerful incentives outlined above, and the close tie between these incentives and the funding and survival of CTE programs. Further analysis is needed to find existing bright spots and identify incentives that can make gap-closing a feature of all workforce apprenticeships.

Table 14: At a Glance: Evaluating Focus Sectors on Gap Closing & Equity

	Education, Construction, Healthcare Sectors
Gaps	Educators incentivized to prioritize students closest to job readiness.
	Lack of equitable access to industry partnerships and experiences, especially for students in different geographic locations within the district.

Recommendations	Improve access to industry partnerships and experiences, especially for students in different geographic locations within the district.
	Build capacities needed to address challenges related to summer programs and transportation.
	Build capacity to support CTE programs that challenge built-in funding incentives to focus on more prepared students.

4. Uptake and Retention

Industry stakeholders prioritize helping job-seekers obtain and retain permanent positions after initial training, pre-apprenticeships, and/or apprenticeships.

Throughout our interviews, we saw multiple small-scale promising practices in health care and construction with respect to uptake and retention. In all the employer-run, higher education certified programs we found, the vast majority of participants in apprenticeships were completing their training and transitioning to permanent roles. It is clear that this successful uptake is due to employers' great pride in their high placement rates, and due to these programs' effectiveness in filling vacancy roles.

While there is much good news and quite a few emerging promising practices in this element, there is also need for further examination. Stakeholders need to codify promising practices, because the small pilots we investigated may not easily scale. We also need to figure out what incentives should be in place to induce employers to cast a wider net when filling apprenticeship roles. In many cases, employers were looking to fill apprenticeships for fewer than 10 people, so it may be that successful uptake is a function of the programs being highly selective, and not necessarily because the system design is effective.

Table 15: At a Glance: Evaluating Focus Sectors on Uptake & Retention

	Education	Healthcare	Construction
Promising Practices	Most participants in education apprenticeships complete training and transition to permanent roles.	Small-scale practices exist to move trainees into permanent positions.	

Gaps	Promising programs are small and not easily scaled, and they lack codification of promising practices.
	In healthcare, especially, but across all focus sectors, there is high practitioner turnover due to stigma, burnout.
Recommendations	Codify promising practices, because the small pilots we investigated may not easily scale.
	Induce employers to cast a wider net when filling apprenticeship roles.

5. Mobility

Industry stakeholders offer explicit opportunities for job-seekers to advance within and across sectors and to build wealth.

Our vision for the Gulf Coast workforce system is a system that not only focuses on job placement, but also prioritizes the ability of job-seekers to build wealth throughout their lives. Too often, workforce systems become focused on short-term outcomes like placement, certifications, etc. And while these are critical short-term metrics to measure the effectiveness of many programs, the real role of a healthy workforce system is to ensure all residents in the Gulf Coast region experience economic stability and ultimately build wealth for themselves, their families, and future generations.

In both construction and health care, we found program exemplars that are excelling in creating upwardly mobile pathways for job-seekers. Several construction companies have mapped explicitly how job-seekers must get from entry level to the next level and to mid level. These rungs on the ladder are clear, and job-seekers understand the investment of time and training required to step up to the next rung. The greatest opportunity for growth in construction seems to be in helping entry workers break through to the management level. While we heard several anecdotes pointing to this promising practice, the part of the mobility ladder leading to management seems to rely on individuals with extraordinary credentials and access, and does not appear to be a consistent feature of the workforce development system.

Additionally, in health care, there are clear ladders associated with training and certifications, making the upwardly mobile path clear to job-seekers. Similar to construction, we did not identify any program exemplars that provide training to workers specifically aiming to break into the management ranks.

Table 16: At a Glance: Evaluating Focus Sectors on Mobility

	Education	Healthcare	Construction
Promising Practices	Grow Your Own Programs	Clear ladders associated with training and certifications, making the upwardly mobile path clear to job-seekers.	Some programs are explicitly mapping pathways from entry-level positions to advancement.
Gaps	Lack of well-defined, stacked pathways to advancement.	Field experiences a high rate of practitioner turnover, suggesting a possible gap in pathways to advancement.	Structured, formalized pathways do not consistently provide access to management positions.
	Many time-intensive, costly credentials are required before educators can transition from a teaching role to a higher-paying role in school and district leadership.		Lack of formalized pathways into management create disproportionate barriers to students without exceptional credentials and access.
Recommendations	Smooth pathways from the classroom to school and district leadership by supporting educators wishing to update or gain additional credentials.	Make clear to entry-level workers the steps, and the investment required, to reach the management level.	Make clear to entry-level workers the steps, and the investment required, to reach the management level.
		Improve recruitment and retention strategies to address high practitioner turnover.	

6. Tracking & Course Correcting

Industry stakeholders and educational institutions have high quality, shared data systems to measure effectiveness of the entire system aligned to the competencies above.

Overall, we see some bright spots and some room for improvement based on our interviews with Gulf Coast stakeholders. Industry stakeholders and educators share a desire to develop more robust data tracking and sharing systems. As just some examples, our interviewees expressed home that future data-sharing systems would:

- Help educators measure the effectiveness of programs and initiatives, including via long-term data on students' career paths and outcomes,
- Improve information-sharing and collaboration among stakeholders, and
- Monitor and adjust programs' infrastructure and curricula to respond to data trends.

In the focus sectors, particularly in education and construction, some practices and channels exist to share information between trainers and employers. In both sectors, these channels exist largely because, in a number of instances, the trainer and employer work within the same industry – and sometimes within the same institutions. While this practice cannot be replicated across sectors, it does point to the benefits of workforce training programs that help job-seekers transition seamlessly between job-embedded training and employment.

In general and across sectors, there is a lack of systematic processes and channels for sharing data and information between educators, employers, and job-seekers. The absence of these opportunities represents a barrier to a number of desirable outcomes: It hampers the tracking of programmatic effectiveness; it prevents educators and employers from communicating about emerging trends and workforce needs; and it prevents job-seekers from accessing information that might help match them with high-demand, high-mobility career pathways.

Table 17: At a Glance: Evaluating Focus Sectors on Tracking & Mobility

	Education	Healthcare	Construction
Promising Practices	Trainer and employer work within the same industry, removing barriers to curricular alignment and data-sharing between stakeholders.		Job-embedded training programs may reduce reliance on data sharing between trainers and employers.
Gaps	Lack of systematic process for tracking data related to the effectiveness of programs, especially students' career paths and outcomes.		

	Lack of systematic process to share information about emerging trends, and related workforce skills, between educators and employers.		
Recommendations	Scale or refine promising practices, including by smoothing information-sharing processes between trainers and employers.	Establish channels and practices of information sharing between trainers and employers, especially for students receiving training via CTE programs.	Scale or refine promising practices, including by scaling and replicating job-embedded programs where job-seekers transition seamlessly from training to employment.
	Develop systematic processes to track data related to the effectiveness of programs and share information about emerging trends and workforce needs between educators and employers.		

6) Systemic Barriers and Gaps Across Sectors

Above we detailed the challenges and opportunities we identified in our three focus sectors. It's worth noting that we found three key challenges that cut across all of the sectors. They are are follows:

Key partners in regional workforce development are not resourced for success in the medium-term and long-term.

An effective workforce development system requires four key partners working together effectively to ensure its success: Educators and Certifiers (K12/HE); Employers; Government; and, Industry and Workforce Advocates and Experts. In the Gulf Coast, each of these partners struggles individually and collectively to build an ecosystem able to "look around the corner" and be equipped for both the present and the future.

Government funding for workforce development programs is tied to immediate certifications and participation rates, similar to K12 and higher education. Further, employers need to fill jobs now and lack the resources to invest in systems-building. Taken together, these factors create an immediate imperative and prevent employers from "looking around the corner" and doing the work to develop efficient systems that might help later. As a result, focus sectors rely on outside partners to do the work of building systems. While we identified several partners doing effective work, specifically in the education and construction sectors, they lack resources and capacity to operate as short, medium, and long term developers of talent. Building a healthy workforce system requires time and expertise, and more investment is needed across the board.

The system lacks incentives to and resources to truly "look around the corner" to prepare job-seekers for the future.

A thriving workforce system prepares job-seekers for openings now, but is also designed to help citizens develop medium-term wealth. In order to do that well, systems and leaders have to focus on high-growth industries *and* design workforce programs that are able to transform big, disruptive trends into opportunities for growth.

As one obvious example: Many in workforce development believe artificial intelligence (AI) will have a tremendous influence on a number of industries and career pathways. There's some exciting work happening in the Gulf Coast on technology-based workforce development (which is outside the scope of our particular inquiry), but the work of preparing job-seekers for the impact of AI has implications for all pathways and all sectors. It is critical for educators and industry stakeholders to exercise vision to anticipate the skills necessary to support emerging markets and creativity in developing curricula and creating institutional buy-in.

Currently in the region, most school-based and job-embedded training systems are rooted in legacy curricula – which is to say, as far as job preparedness goes, most programs are offering what they have always offered. In a landscape dominated by emerging technologies, a legacy approach to curriculum development will not produce a workforce with skills employers need.

Finally, it's crucial that educators, employers and partners view this as an equity issue. Unless emerging skills become part of widely adopted curricula, access to high-quality learning in those areas will be restricted to students and job-seekers with educational privilege, and job-seekers furthest from readiness will continue to lag behind.

There's an overall lack of investment in job-seekers furthest from readiness.

In both K12 and HE settings in the Gulf Coast region, perverse incentives exist for educators and industry leaders to focus on training and placing job-seekers who are already more prepared for the workforce. Such focus necessarily means that resources are diverted from job-seekers who are furthest from readiness, who require more time and resources to prepare:

- In K12 environments, traditional accountability systems promote recruiting academically prepared students and/or filling seats in yesterday's sequences.

- On the other hand, in higher education environments, there is an imperative to simply to "get people certified," which creates a false urgency and an incentive to push the most prepared job-seekers into the most quickly attainable certifications.

Similarly, because resources are scarce, employers have few incentives to invest additional time and resources training job-seekers further from readiness – especially when more prepared candidates are available. Additional barriers exist for job-seekers living in rural counties; who lack transportation; who have limited connections to employers; or who face other barriers to accessing training opportunities.

6) Conclusion and Recommendations

Many of our conclusions and recommendations for next steps are sector-specific and embedded in the tables above. However, there are several recommendations that span all focus sectors and should be generally adopted into workforce development systems across the region.

Lift up promising practices in each sector and find ways to scale and replicate them in the other sectors.

In the analysis above, it's clear there are promising practices in each of the three focus sectors, and along each of the six metrics. As has been previously mentioned, wherever small programs are showing promising results, there is an opportunity to two things:

1. Invest the resources necessary to scale small programs to serve a larger number of students and job-seekers.
2. Codify promising practices and use that information to replicate effective programs.

The issue of codification speaks directly to another key recommendation: to develop systems and channels to share information between educators, employers, and job-seekers. Effective replication of promising small programs depends upon an ability to share the codified protocols with other stakeholders. These systems must be in place before the promises of existing programs can be fully realized.

Some other promising practices that might be replicated or scaled are below. In addition to these recommendations, we consistently heard industry stakeholders lament a lack of resources to scale promising programs targeting rural students, low-income students, and other students and job-seekers furthest from career readiness. Where barrier-breaking programs have been implemented, they have been successful in reducing disparities in, for example, CTE enrollment. As in most areas below, more investment from state and outside partners is needed to extend these opportunities to more students and job-seekers in the region.

Table 18: Promising and Scalable/Replicable Practices in Each Sector

Promising and Scalable/Replicable Practices in Each Sector

Education	Healthcare	Construction
Technical assistance partners are available to help employers think about how to develop effective pipelines.	Careers in a variety of pathways requiring varying skills, aptitudes, and attainment – and, in some small programs, training programs associated with those pathways.	Conveners are working to rationalize the market for job seekers.
Outside providers assist employers with recruiting and matching job-seekers to available positions.	Learning is aligned with meaningful certifications, and certifications are tied to explicit and upwardly-mobile pathways to advancement.	Employers creating explicit maps from entry-level positions up a defined career ladder.
New approaches to certification outside of higher education are being developed and piloted.	Small, high-quality apprenticeship programs that combine coursework with practicums and required certifications.	Small, competency-based programs with clear learning outcomes and both traditional learning and work-based learning.
Trainers and employers work within the same industry, and have lower barriers to sharing data and information.		Job-embedded training opportunities reduce barriers to sharing information between trainers and employers.

Build Resources and Capacity with Vision and Innovation

The barriers and challenges that cut across sectors will, by nature, require systemic, innovative solutions. This is particularly true because many of the cross-cutting barriers involve identifying and securing additional resources, including financial, human resources, and systems-building.

In terms of funding challenges, unnecessary barriers exist because of the fragmentation of money into pre-apprenticeship and apprenticeship dollars from DOJ; career and technical education dollars from the U.S. Department of Education; and other earmars like summer youth employment and internship dollars from the U.S. Department of Labor. Local conveners must be more creative in aligning funding across these fragments to implement a cohesive vision. They might advocate for alignment of funds in the form of things like regional block grants, or even braid the funding and play a compliance role backstage, while partners in the workforce are free to create innovative and aligned programming.

Additionally, the Gulf Coast has many innovative partners in higher education, and those partnerships should be leveraged where they are working. They should also be deepened where additional engagement could pay additional dividends – particularly in a landscape where employers, educators, and industry stakeholders need to innovate for emerging markets. We saw some evidence of this type of engagement in the education sector, specifically.

Finally, industry stakeholders and educators we interviewed were nearly univocal in acknowledging the need for more robust data-sharing systems. Gulf Coast employers might consider creating a universal data system and dashboard that tracks basic data like labor supply and demand trends, but also tracks (internally or externally) the success of job seekers from one end of the process to the other. While creating a data system of that kind, it would be important to think about how the system might leverage data – and especially public data – to incentivize employers and educators to serve those furthest from job-readiness.

Address broad, systemic gaps *and* implement sectoral recommendations.

In Tables 11-17, we laid out recommendations specific to each focus sector designed to address gaps we observed in data and heard about in interviews. As previous sections make clear, in many cases sector-specific recommendations are blocked by broad systemic gaps. There is therefore a need for stakeholders to take a dual approach: address broad cross-cutting gaps while implementing sector-specific recommendations.

Educators and employers should not, therefore, simply identify "low-hanging" and low-resource recommendations while neglecting the cross-cutting lack of systems in place across the region.

Because scaling and replication of promising practices is key, perhaps the most critical cross-cutting gap to address is the lack of information-sharing practices and channels connecting educators, employers, and job-seekers. These systems are necessary to establish before codified practices can be widely shared and adopted in each sector; before educators and employers can communicate about emerging workforce trends; and before program effectiveness data can be shared among stakeholders.

While identifying cross-cutting gaps, it's important that stakeholders attend to gap-closing an equity. Like systems-building, equity can be easily overlooked in favor of work that may be more visible or rewarding in the short term. However, disparities throughout workforce development systems resonate throughout the region in the form of education, income, and other disparities that negatively impact the lives of Gulf Coast individuals and families. On the other hand, small investments in existing promising programs – for example, assisting with transportation for low-income students and students living in geographically remote locations – make large, long-term differences both in the workforce and in the community.

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