

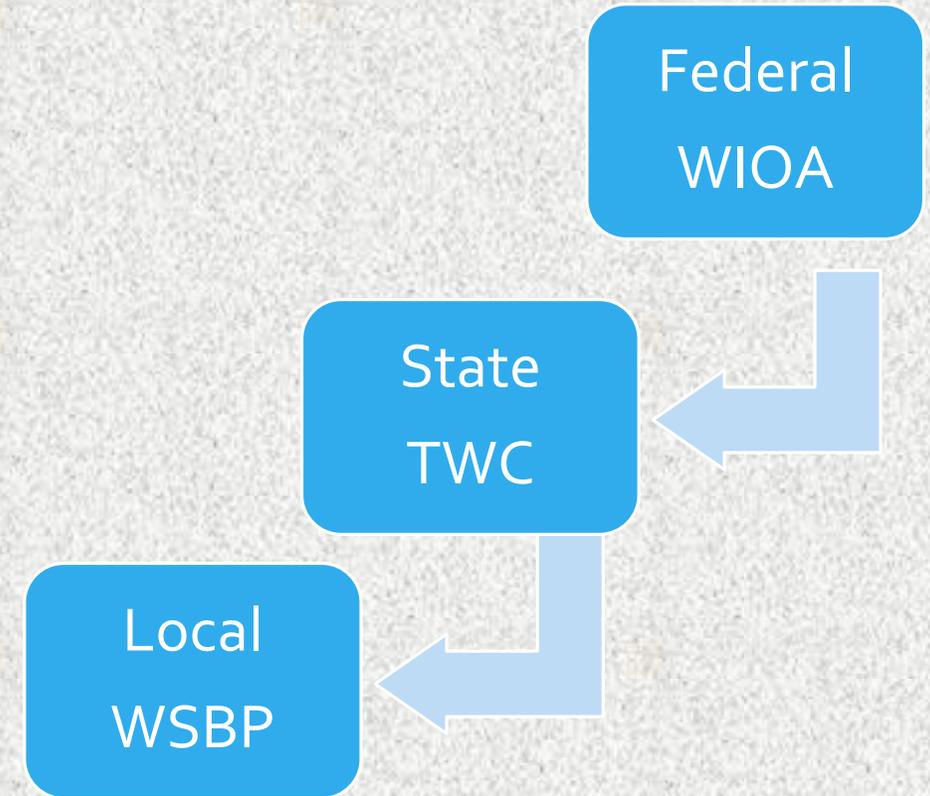


WORKFORCE SOLUTIONS BORDERPLEX

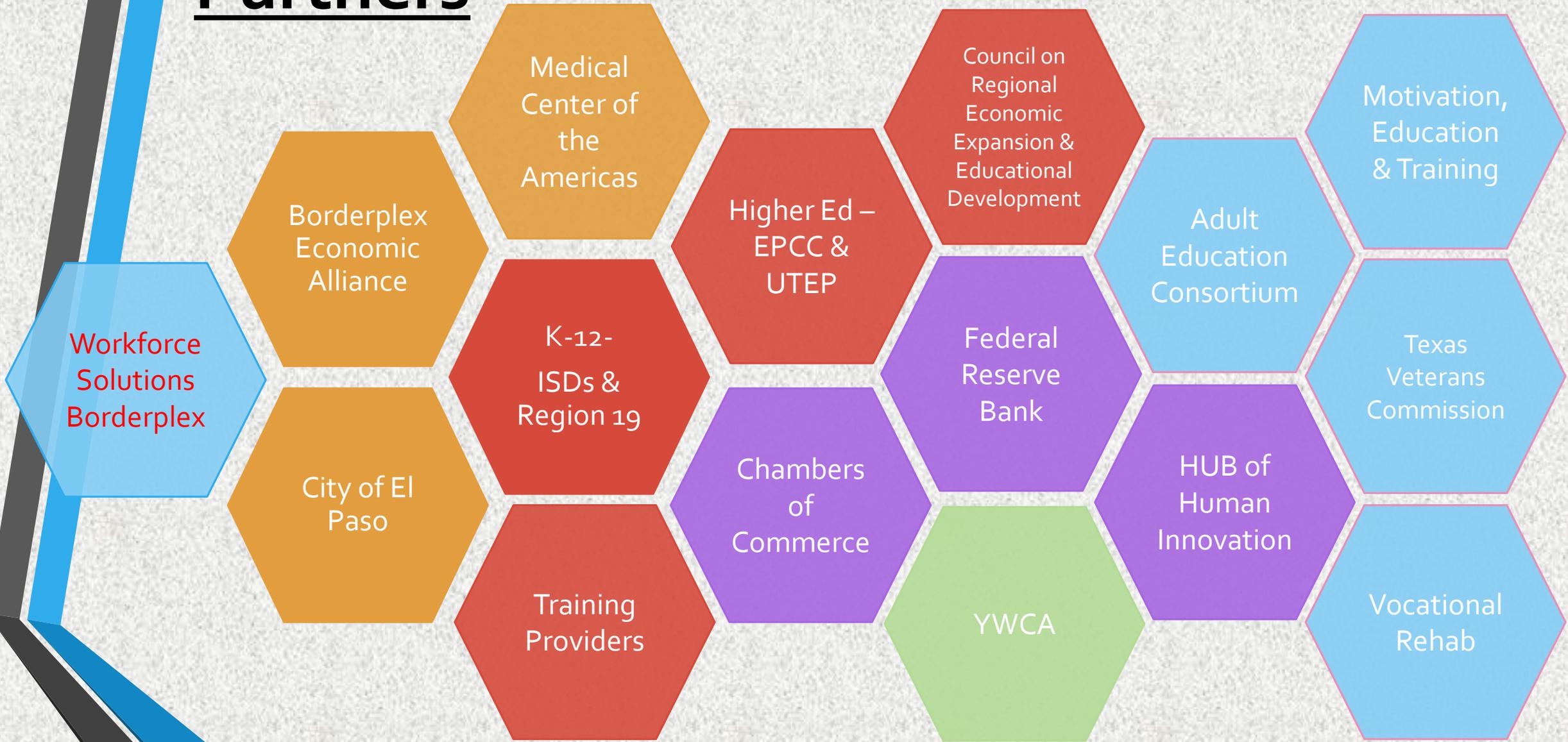
Alma Aranda- Research Specialist

Who We Are

- Local extension of Texas Workforce Commission
- Non-profit organization
- One of 28 Workforce Development Boards in Texas
- Governed by the Workforce Innovation & Opportunity Act
- Not the Unemployment Benefits Office where people register for unemployment benefits, although we assist and refer
- Workforce Solutions is the Job Center



Partners



What are STEM careers?

There are eight STEM disciplines identified on the U.S. Department of Labor's O*NET occupational database website that require a solid educational foundation in science, technology, engineering or mathematics:

- 1) Chemistry
- 2) Computer Science
- 3) Engineering
- 4) Environmental Science
- 5) Geosciences [Earth Sciences]
- 6) Life Sciences
- 7) Mathematics

Business Services

Opportunity:

Data centers, tech support, accounting, insurance

Asset:

Rich fiber infrastructure, non-disruptive weather, UTEP IT graduates

Advanced Logistics

Opportunity:

Cyber Security, Drone Tech

Asset:

Major international crossings, I-10 gateway, excellent rail connectivity

Tourism

Opportunity:

Outdoor recreation / sports

Asset:

Weather & Natural Resources
(mountains, landscape)

Defense & Homeland Security

Opportunity:

Cyber Security, Drone Tech

Asset:

Ft. Bliss, WSMR, Holloman
*(7,100 sq. mi. one of largest
military installations in world)*

Life Sciences

Opportunity:

Discovery, research,
technology

Asset:

Hispanic population, international
borders, military – diabetes,
PTSD, prosthetics

Manufacturing

Opportunity:

Production Sharing

Asset:

Component manufacturing
El Paso, Southern NM;
assembly in Cd. Juarez

The need to build the talent pipeline

Technology has become integral to daily life in the 21st Century and mastering STEM knowledge and skills are critical to every individual's employability and career success. STEM competency also impacts each person's ability to contribute to the economic success of both the national and global economy.

This is a huge task. Many agencies and organizations – in government, education, the non-profit and private sectors – are beginning to collaborate in order to meet the need for a stronger STEM capability in the U.S.

SB2105 (85th Regular Session)

- Career Exploration Events
 - Help students experience real jobs available in El Paso
 - Invite employers to career days
 - Allow students to visit employer facilities (field trips)
 - Helpful for teachers to understand local business environment
- Youth Employment
 - Provide part-time, summer and/or year-round work experience
Ex: DECA, BPA
- Research & Guidance for CTE – “Where the Jobs Will Be”
 - Information on the future of our local economy

Industry Feedback Request for Industry-based Certifications and Certificates

Industry Feedback Request for Industry-based Certifications and Certificates House Bill 2804 (84th Texas Legislature, 2015) requires the state to include the percentage of students who earn an industry certification in Domain IV (College and Career Readiness) of the state accountability system. Thus, the Texas Education Agency (TEA) has compiled a proposed list of third-party industry-based certifications and certificates currently offered by local education agencies. While there are hundreds of certifications offered throughout the public school system, it is critical to ensure that the state recognize those that are aligned with workforce needs. Certifications that provide opportunities for employment or continued study in fields offering middle and higher wage jobs are important in preparing students for the workforce.

The statute requires the criterion for inclusion in the accountability system to include recognition by industry groups, as defined by the certification being:

1. Nationally- or internationally-recognized: Certifications that are nationally or internationally recognized through a national or international business, industry, or professional organization.

OR

2. State-recognized: Texas-certified industry certifications are those that are recognized and valued by either a state agency or government entity, or a state-based industry association.

In addition to the base criterion, the TEA has included additional criteria that is representative of extensive conversations with stakeholders, other agency partners, and best practices found in other states who have done similar work in identifying industry-based certifications of value.

- 3.** End of Program
- 4.** Stackable / Direct Transference
- 5.** Industry Valued

Education Level is Related to Employment and Earnings

Unemployment Rate

Median Weekly Earnings



Less Than High School Diploma



High School Diploma



Some College/Assoc Degree

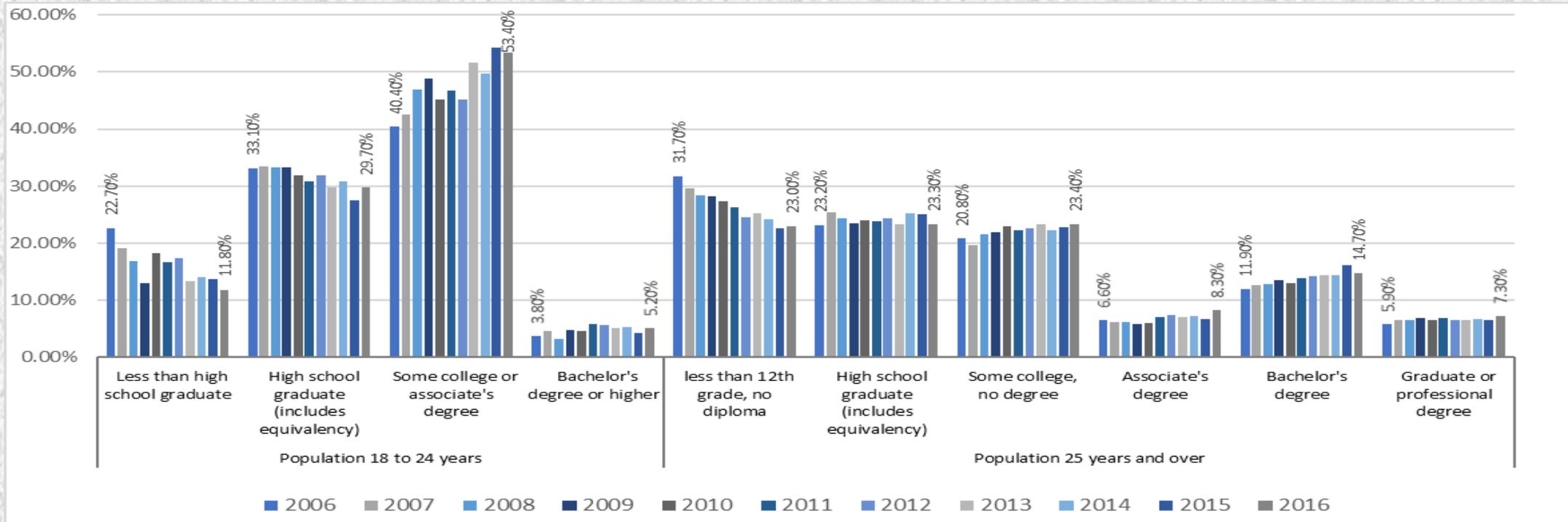


Bachelor's Degree or Higher



Source: US Department of Labor, Bureau of Labor Statistics

El Paso County- Educational Attainment



Data Points based on Census Data:

From 2006-2016, for our population 18 -24

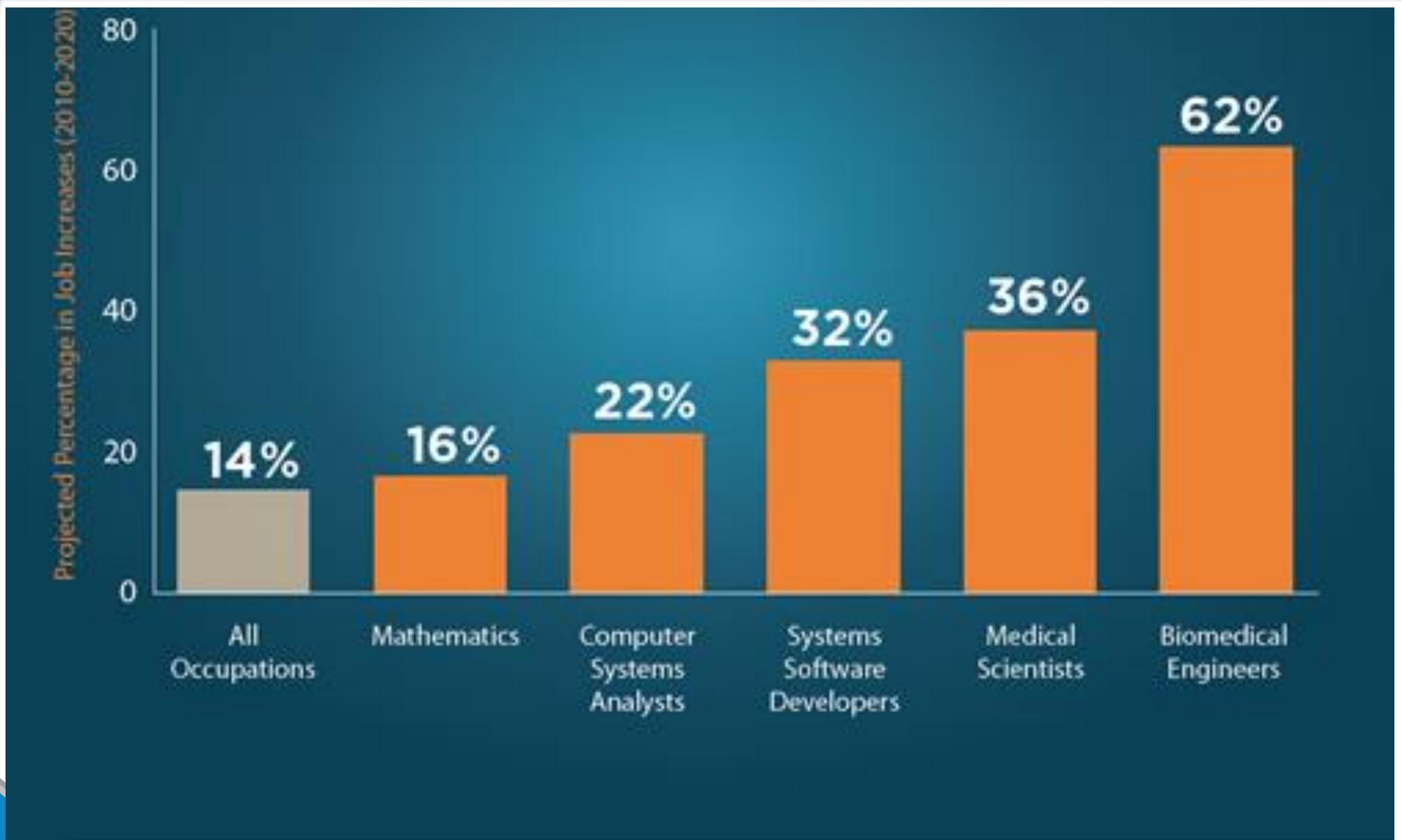
- Less than high school rate has dropped by 11%
- Our HS graduate rate decreased slightly by 3%
- Our Some college or Associates Degree showed the most improvement, an increase of 13%
- Our Bachelor's Degree or Higher increased 1%

From 2006-2016, for our population 25 and over

- Less than high school rate has dropped showed a decrease of 9%
- Our HS graduate rate showed no significant change
- Our Some college has an increase of 3%
- Post-Secondary degrees shows an improvement of 6%

A study published by the Georgetown University Center on Education and the Workforce suggests newly created jobs since the recession have been filled almost entirely by educated Americans.

- Of the **11.6** million jobs created between January 2010 and January 2016, **11.5** million went to folks with at least some form of college education.
- Of the **7.2** million jobs lost in the recession, **5.6** million were jobs for workers with a high school diploma or less.



LMI- Artificial Intelligence and the Future of Education

Artificial intelligence is a rapidly emerging technology that has the potential to change our everyday lives with a scope and speed that humankind has never experienced before.

AI and related technologies are reshaping the economy. Some jobs are being eliminated, many others are being changed, and entirely new fields of work are opening up. Those changes are likely to have big implications for the job market in 2030, when today's 6th graders are set to hit their prime working years.

How Will Automation Affect Different U.S. Cities?

<https://insight.kellogg.northwestern.edu/article/how-will-automation-affect-different-united-states-cities>

The knowledge that certain places will lose more jobs could allow workers and industries to better prepare for the change and could help city leaders ensure their local economies are poised to rebound.

STEM Careers – Resource

<http://stemcareer.com/teachers/>

21st Century Skills Needed

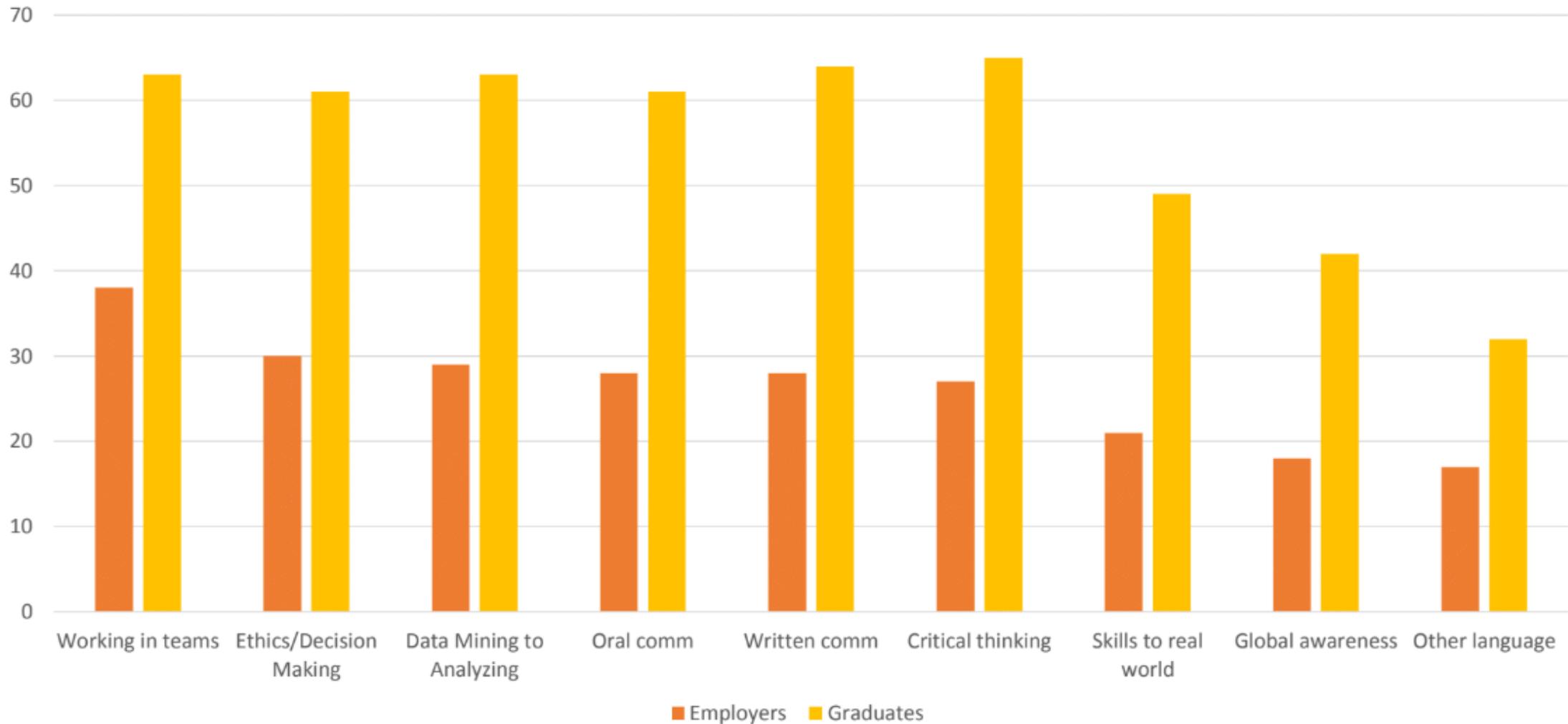
- **Collaboration:** the ability to work with others, to have social-emotional control, and to form communities.
- **Communication:** the ability to develop strong reading, writing, listening and language skills.
- **Content:** competencies in subject areas, but also in learning to learn.
- **Critical thinking:** the ability to gather information intelligently and to weigh evidence.
- **Creative innovation:** the ability to use information in new ways and to solve problems.
- **Confidence:** the ability to learn from failure and to persist in a problem.

Middle Skills Gap Analysis

- Private Sector Survey Results
 - Over 75% - **Moderate to Significant Challenge** in finding qualified candidates
 - **Lowest Reported Skills**
 - Technical Writing
 - Critical Thinking/Problem Solving

Reality Check – Fundamental Skills Gap

Employers vs College Graduates



Source: Insidehired.com/2015

2017 H1B Visa Report- Occupations

<http://www.myvisajobs.com/Reports/2017-H1B-Visa-Category.aspx?T=JT>

Rank	Job Title	Number of LCA *	Average Salary
1	Programmer Analyst	53,738	\$67,421
2	Software Engineer	30,666	\$95,081
3	Software Developer	14,038	\$76,698
4	Systems Analyst	12,311	\$70,809
5	Computer Programmer	11,668	\$67,063
6	Business Analyst	9,167	\$70,240
7	Computer Systems Analyst	6,899	\$71,858
8	Senior Software Engineer	6,437	\$117,634
9	Developer	6,084	\$76,416
10	Technology Lead - Us	5,410	\$81,570
11	Technology Analyst - Us	4,996	\$70,188
12	Assistant Professor	4,970	\$107,241
13	Consultant	4,877	\$89,281
14	Project Manager	4,606	\$86,253
15	Senior Consultant	4,317	\$112,825
16	Database Administrator	3,807	\$71,600
17	Developer User Interface	3,220	\$74,427
18	Physical Therapist	3,012	\$72,672
19	Software Engineer 2	2,864	\$107,022
20	Lead Engineer	2,848	\$72,862
21	Analyst	2,767	\$77,966
22	Associate	2,758	\$106,762
23	Computer Programmer Analyst	2,737	\$70,758
24	Senior Software Developer	2,602	\$98,175
25	Java Developer	2,341	\$76,546

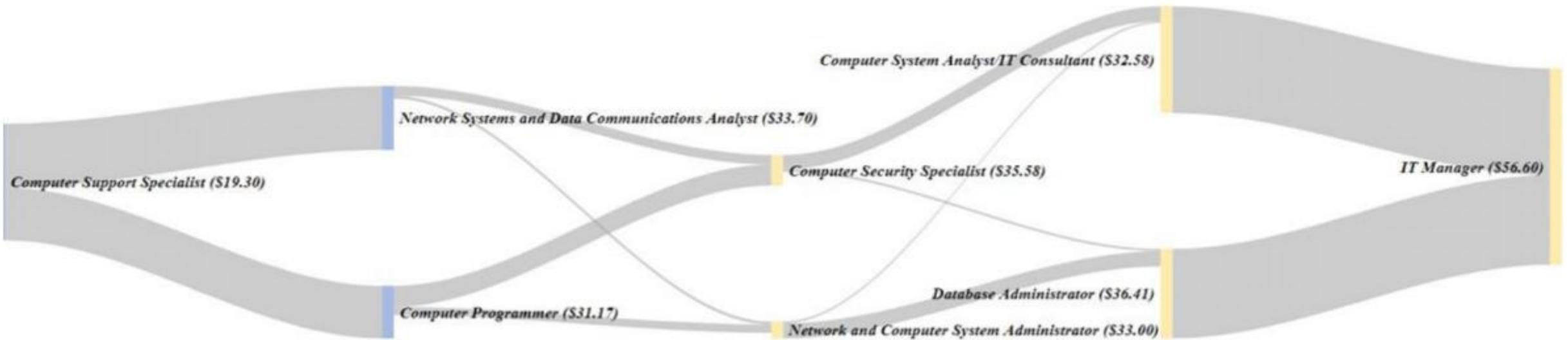
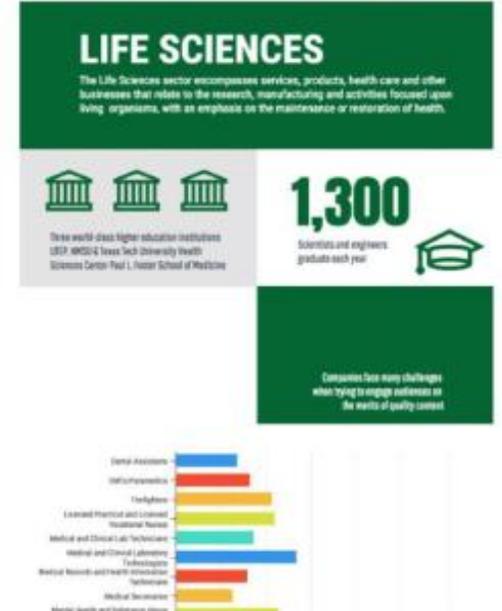
2017 H1B Visa Report- Industries

<http://www.myvisajobs.com/Reports/2017-H1B-Visa-Category.aspx?T=JT>

Rank	NAICS Industry	Number of LCA *	Average Salary
1	Computer Systems Design and Related Services	336,513	\$78,876
2	Management, Scientific, and Technical Consulting Services	53,647	\$94,320
3	Colleges, Universities, and Professional Schools	27,641	\$74,997
4	Architectural, Engineering, and Related Services	17,682	\$76,937
5	Software Publishers	12,993	\$114,081
6	Accounting, Tax Preparation, Bookkeeping, and Payroll Services	12,640	\$83,704
7	Scientific Research and Development Services	9,912	\$86,594
8	Semiconductor and Other Electronic Component Manufacturing	8,370	\$106,665
9	General Medical and Surgical Hospitals	8,102	\$128,365
10	Securities and Commodity Contracts Intermediation and Brokerage	7,861	\$118,711
11	Electronic Shopping and Mail-Order Houses	5,898	\$119,604
12	Other Financial Investment Activities	5,534	\$108,283
13	Offices of Physicians	5,178	\$206,799
14	Other Professional, Scientific, and Technical Services	4,714	\$86,749
15	Employment Services	4,709	\$78,892
16	Computer and Peripheral Equipment Manufacturing	4,398	\$124,342
17	Elementary and Secondary Schools	4,150	\$51,196
18	Insurance Carriers	4,140	\$100,333
19	Communications Equipment Manufacturing	3,466	\$108,187
20	Depository Credit Intermediation	3,444	\$104,608
21	Other Information Services	3,109	\$110,612
22	Advertising, Public Relations, and Related Services	3,048	\$93,724
23	Nondepository Credit Intermediation	2,976	\$101,652
24	Offices of Other Health Practitioners	2,954	\$76,225
25	Pharmaceutical and Medicine Manufacturing	2,888	\$95,866

Coming Soon

- Virtual Reality Job Videos
- Hot Jobs of the Year
- Industry Snap Shots
- Local career pathways



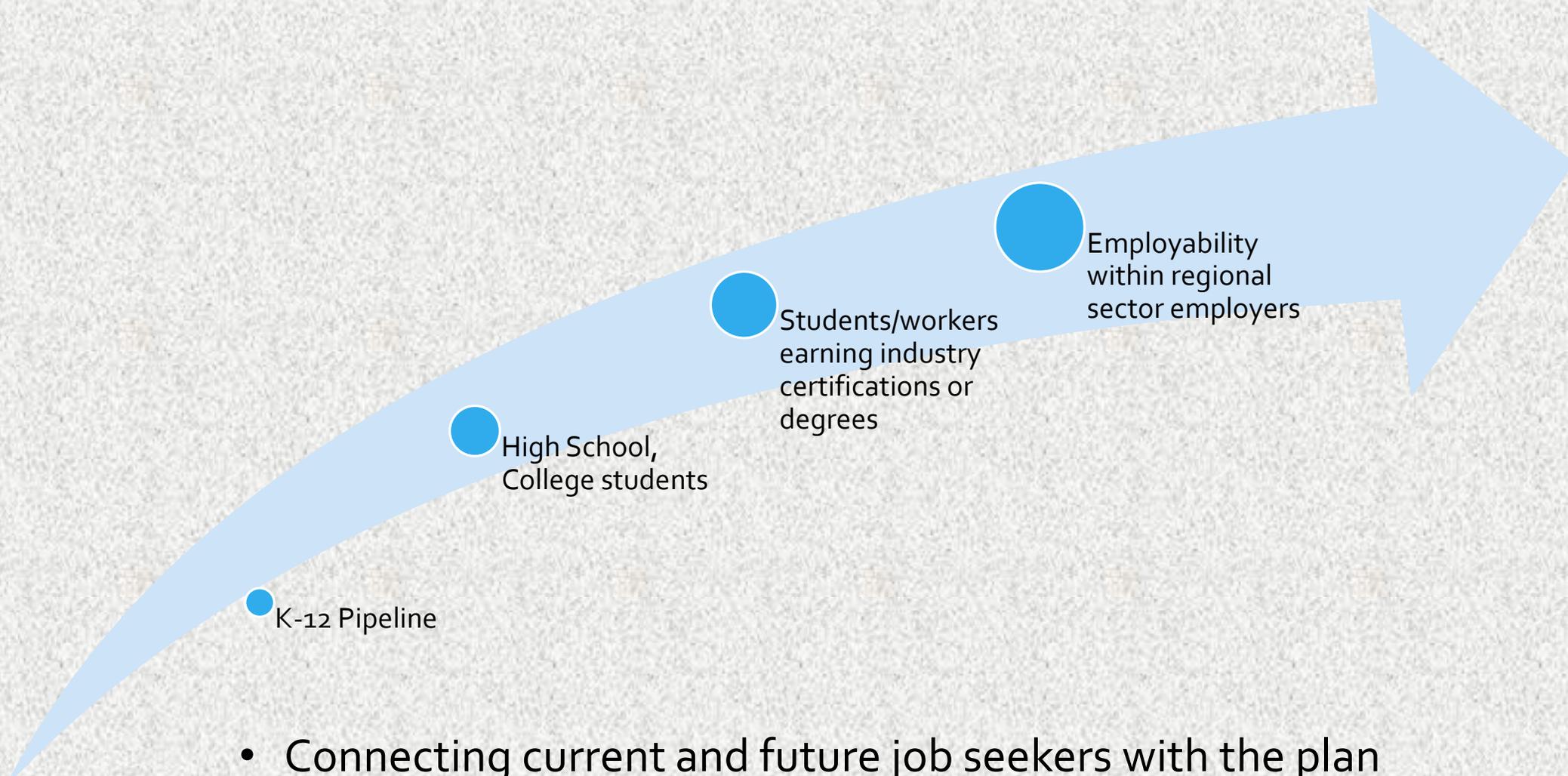
■ Associate Degree ■ Bachelor's Degree

We Encourage El Paso Businesses to...

- Increase wages – we're competing globally now
- Provide part-time work experience opportunities for students to work while they go to school
- Form consortiums to take advantage of training grants



Where We Need Your Help



- Connecting current and future job seekers with the plan
- What can we do to develop a pipeline into our target industries?



THANK YOU!

A proud partner of the



A PROUD PARTNER OF THE AMERICAN JOB CENTER NETWORK

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IGUALDAD DE OPORTUNIDADES DE EMPLEO/PROGRAMAS. EQUIPO AUXILIAR Y SERVICIOS DE APOYO ESTÁN DISPONIBLES PARA PERSONAS CON DISCAPACIDAD AL SER REQUERIDOS. RELAY TEXAS: 711 (VOZ) O 1-800-735-2989 (TTY)