

# Workforce Demands In the Educational Services Industry

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## Workforce Solutions

October 2015

*\*Workforce Solutions is an affiliate of the Gulf Coast Workforce Board, which manages a regional workforce system that helps employers solve their workforce problems and residents build careers so both can compete in the global economy. The workforce system serves the City of Houston and the surrounding 13 Texas Gulf Coast counties including: Austin, Brazoria, Chambers, Colorado, Fort Bend, Galveston, Harris Liberty, Matagorda, Montgomery, Walker, Waller, and Wharton*

## **OVERVIEW OF EDUCATIONAL SERVICES**

As an institution, education provides the basis for knowledge and skill acquisition designed to prepare individuals for a lifetime of gainful employment. It is typically divided into three or four distinct stages based on the approximate age of the student and often begins with preschool. This is followed by primary school, secondary school, and postsecondary education, the last of which is increasingly recognized as important to securing higher paying jobs. Accordingly, the services component of education, i.e. the provision of instruction and other support services, follows these same divisions as part of either public or private institutions.

This report examines the educational services industry in the Gulf Coast region with an emphasis on trends among primary and secondary public school teachers including student-teacher ratios, shortages, wages, turnover, and years of experience over the past two decades in addition to standard labor market information regarding the outlook for the industry and its occupations.

Below are key figures on education in the Gulf Coast from the supply-side (schools and instructors) and the demand-side (students). See Appendix A. for institution-specific enrollment levels as of 2013.

### **Primary and Secondary Public Schools<sup>i</sup>** (as of fall 2013)

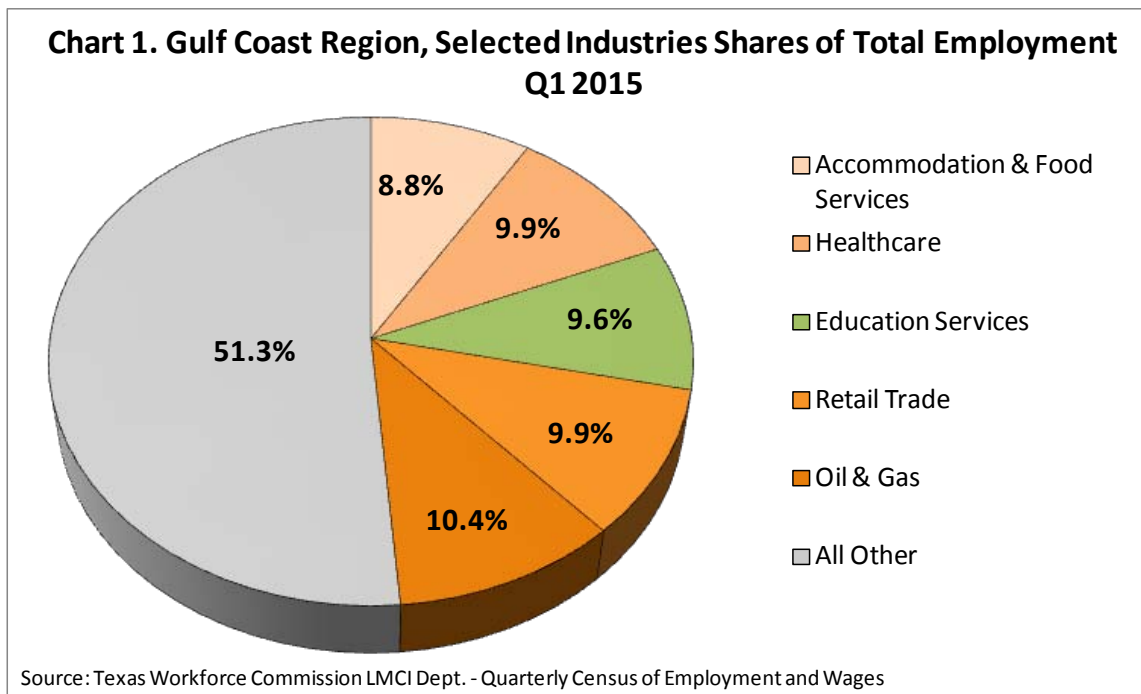
- 1,223,785 students
- 1,487 schools across 77 Independent School Districts (ISDs)
- 74,703 Fulltime Equivalent (FTE) teachers
- 149,355 FTE total staff
- Teacher turnover rate of 16.4%<sup>ii</sup>

### **Higher Education<sup>iii</sup>** (as of fall 2013)

- 330,499 students enrolled in public postsecondary education (in or out of region)<sup>iv</sup>
- 137,168 students enrolled in 4-year universities (in or out of region)
- 193,331 students enrolled in public community colleges and technical schools (in or out of region)
- 8,550 students enrolled in 4-year private institutions (in region)
- 10 public community college systems
- 6 public 4-year universities
- 3 private 4-year universities

### Educational Services Contribution to Job Market

In terms of contribution to total employment, educational services in the Gulf Coast region is on par with other major industries such as accommodation and food services, healthcare, retail, and energy. As of the first quarter of 2015, education comprised 9.6% of total employment, or 280,455 jobs. (See Chart 1.)

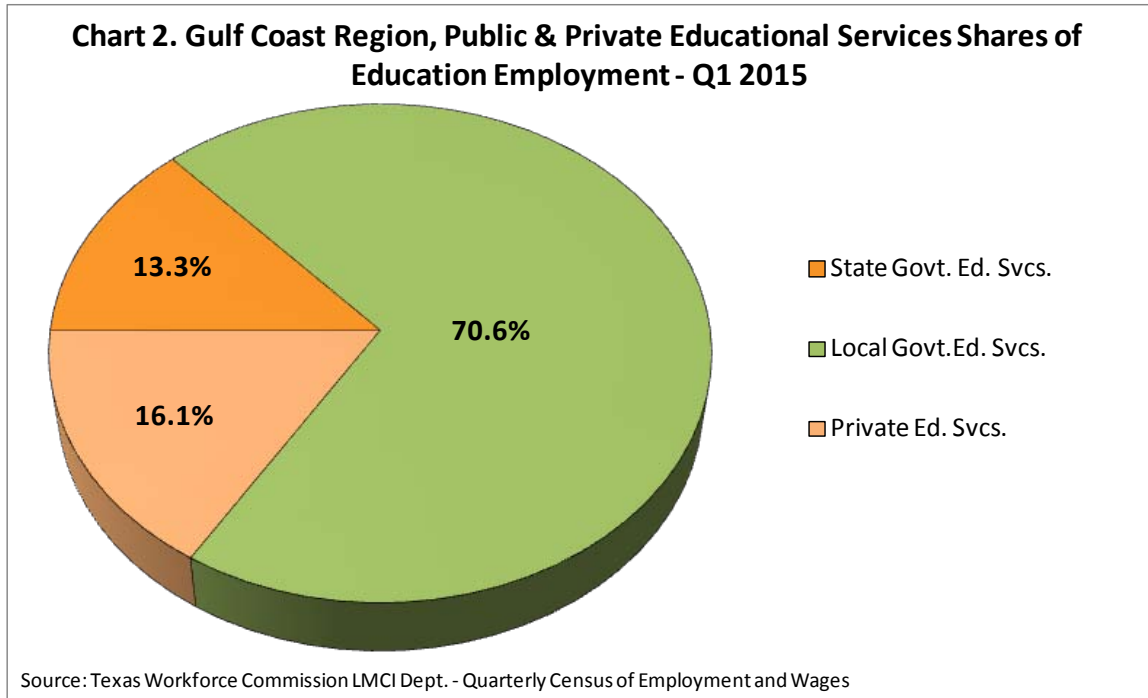


### Major Types of Educational Services

Educational services can be divided into three major types based on government level of affiliation or private ownership of the entities providing services:

- **Local government educational services**
- **State government educational services**
- **Private educational services**

Of these, **local government educational services** is the largest at 70.6% of education-related employment as of Q1 2015. Within this subset of education, 92% of jobs are found in primary and secondary public schools with the remainder found in junior colleges. All of the 38,713 jobs in **state government educational services** are located within public colleges and universities. Employment in **private educational services** is spread across all levels of education from primary and secondary schools to colleges and universities to educational support services. Of the total 44,162 jobs in private education, the largest concentrations of employment are found in colleges and universities (16,605) and primary and secondary schools (13,341). (See Chart 2.)



### **The Seasonal Nature of Education Jobs**

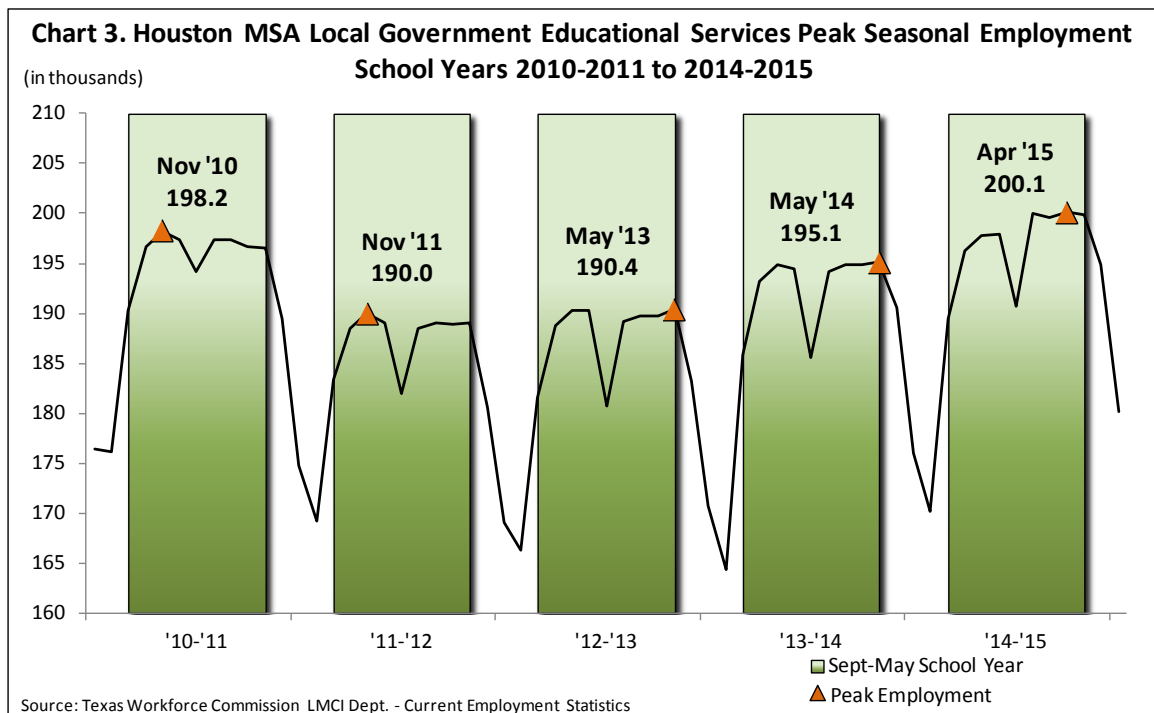
Educational services is one of handful of unique industries that displays a highly regular seasonal pattern of employment each year. Employment begins to fall in June with the official end of the school year, experiences its steepest declines in July, and reaches its lowest levels in August as any remaining staff fall off of payrolls.<sup>1</sup> Fortunately, the majority of these losses are largely temporary. In the following month of September, the bulk of employment is regained coinciding with the start of the new school year. Job numbers increase throughout October and historically have peaked in November although mid to late spring has become the norm in recent years. Therefore, in order to identify long-term changes in education employment, the following section analyzes the industry based on peak job levels for individual school years.

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<sup>1</sup> Prior to 2008, declines in educational services employment were limited to June and July only. Since that time Texas public schools are prohibited from opening before the fourth Monday in August. As a result, seasonal job losses now extend into the month of August.

**Recent Trends in Local Government Educational Services Employment**

As mentioned, local government educational services is the largest subset of education-related employment and includes teachers, administrators, and support staff. In 2011 Texas lawmakers cut education spending by roughly \$5.4 billion prior to the start of the 2011-2012 school year. The impact of these budget cuts was immediately felt at the local level as evidenced by an 8,200-job decline from November of the previous school year. This was followed in 2012-2013 by small rebound of 400 jobs over the previous year’s peak. In May 2013 the Texas Legislature restored \$3.4 billion in education spending over the upcoming two-year budget cycle. As a result the 2013-2014 and 2014-2015 school years saw payrolls rise by 4,700 and 5,000, respectively. These job gains boosted total local education staffing levels to a new all-time high of 200,100 in April 2015, slightly surpassing the previous high of 198,200 seen back in November 2010.<sup>2</sup> (See Chart 3.)



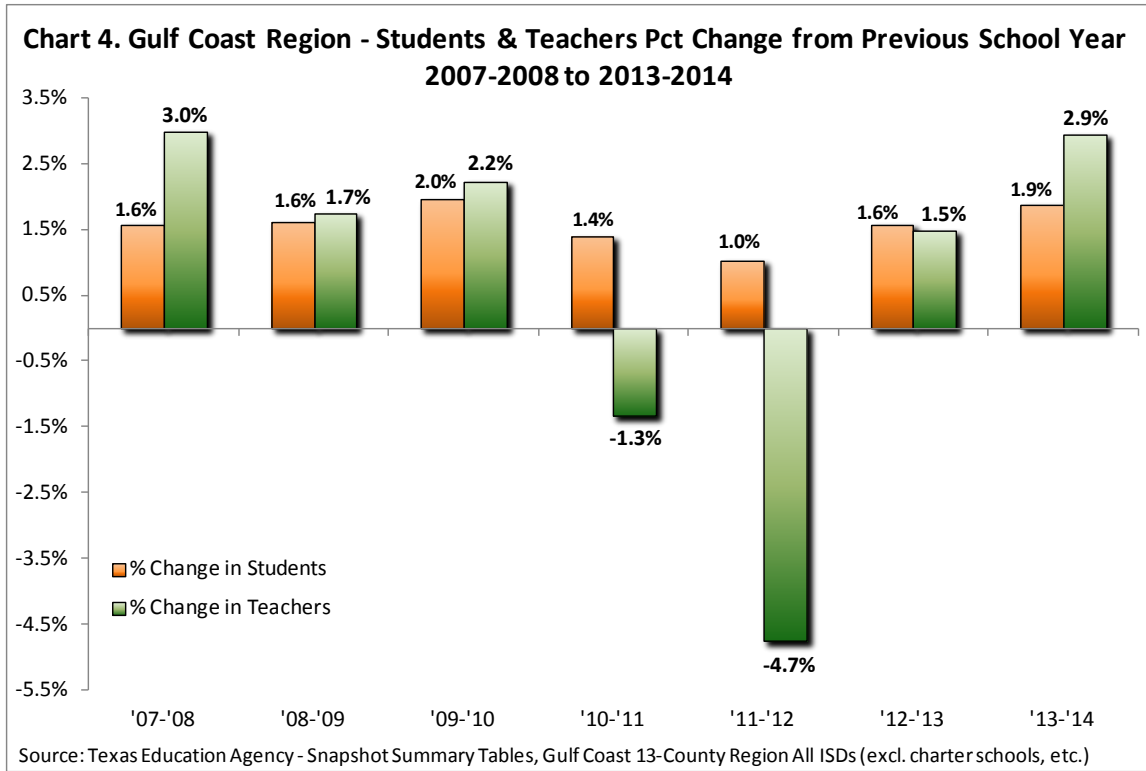
School Year	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Net Change from Previous Peak
2010-2011	190,300	196,600	198,200	197,300	194,200	197,300	197,300	196,700	196,500	-
2011-2012	183,400	188,500	190,000	189,000	182,000	188,500	189,100	188,900	189,100	-8,200
2012-2013	181,600	188,700	190,300	190,300	180,700	189,200	189,800	189,800	190,400	400
2013-2014	185,900	193,200	194,900	194,500	185,600	194,200	194,900	194,900	195,100	4,700
2014-2015	189,500	196,200	197,800	197,900	190,700	200,000	199,600	200,100	199,900	5,000

NOTE: Gray shaded figures indicate peak employment for a given school year.

<sup>2</sup> Similar patterns of employment were observed among state government as well as private educational services over this same timeframe hence analysis of these industries was omitted in the interest of brevity.

**Teacher Shortages Post Recession & Budget Cuts**

The period from 2007 to present is significant in that it includes the Great Recession, which impacted the Gulf Coast later than the U.S., and its after-effects on local education, particularly with regard to teachers. Over the 2007-2008 to 2013-2014 school years, the number of teachers in the Gulf Coast region rose by 1,558, or 2.1%. At the same time the student population increased by 109,278 for a faster rate of growth of 9.8%. Throughout this seven-year period students saw uninterrupted growth year-over-year and have likely never experienced declines. In contrast, teachers in the Gulf Coast experienced their first-ever recorded job losses in 2010-2011 followed by a more dramatic loss in 2011-2012 for cumulative decline of 4,565 jobs, or 6%. Despite a partially restored budget in 2013, increased hiring, and pay raises for existing teachers, back-to-back years of job losses were largely responsible for a shortfall in the number of teachers needed to keep pace with student population growth. In fact, an additional 5,614 teachers on top of the 3,192 hired over the 2012-2013 and 2013-2014 school years would have been needed in order for the seven-year growth rate of teachers to match that of students. (See Chart 4.)

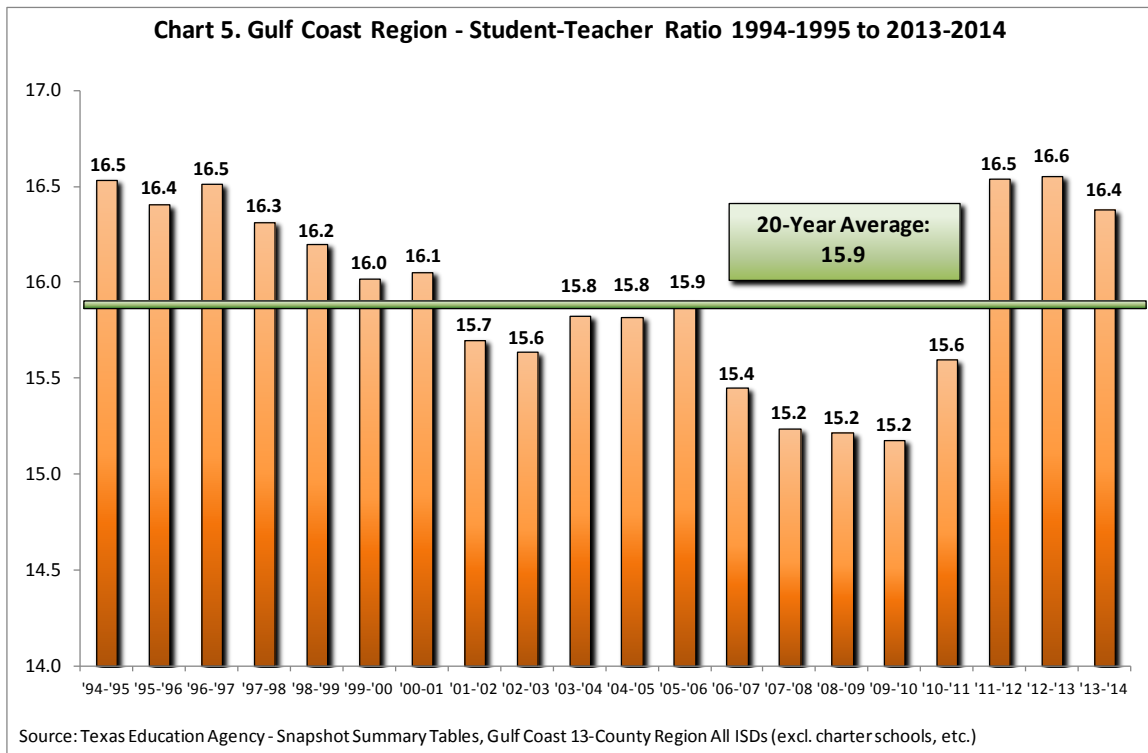


School Year	Total Students	Total Teacher FTEs	Y-O-Y Net Change in Students	Y-O-Y Net Change in Teacher FTEs	Y-O-Y Pct Change in Students	Y-O-Y Pct Change in Teacher FTEs
<b>2007-2008</b>	1,114,507	73,145	17,192	2,120	1.6%	3.0%
<b>2008-2009</b>	1,132,584	74,423	18,077	1,278	1.6%	1.7%
<b>2009-2010</b>	1,154,788	76,076	22,204	1,653	2.0%	2.2%
<b>2010-2011</b>	1,170,930	75,067	16,142	-1,009	1.4%	-1.3%
<b>2011-2012</b>	1,182,900	71,511	11,970	-3,556	1.0%	-4.7%
<b>2012-2013</b>	1,201,343	72,569	18,443	1,057	1.6%	1.5%
<b>2013-2014</b>	1,223,785	74,703	22,442	2,134	1.9%	2.9%

### Student-Teacher Ratios: A Historical Perspective

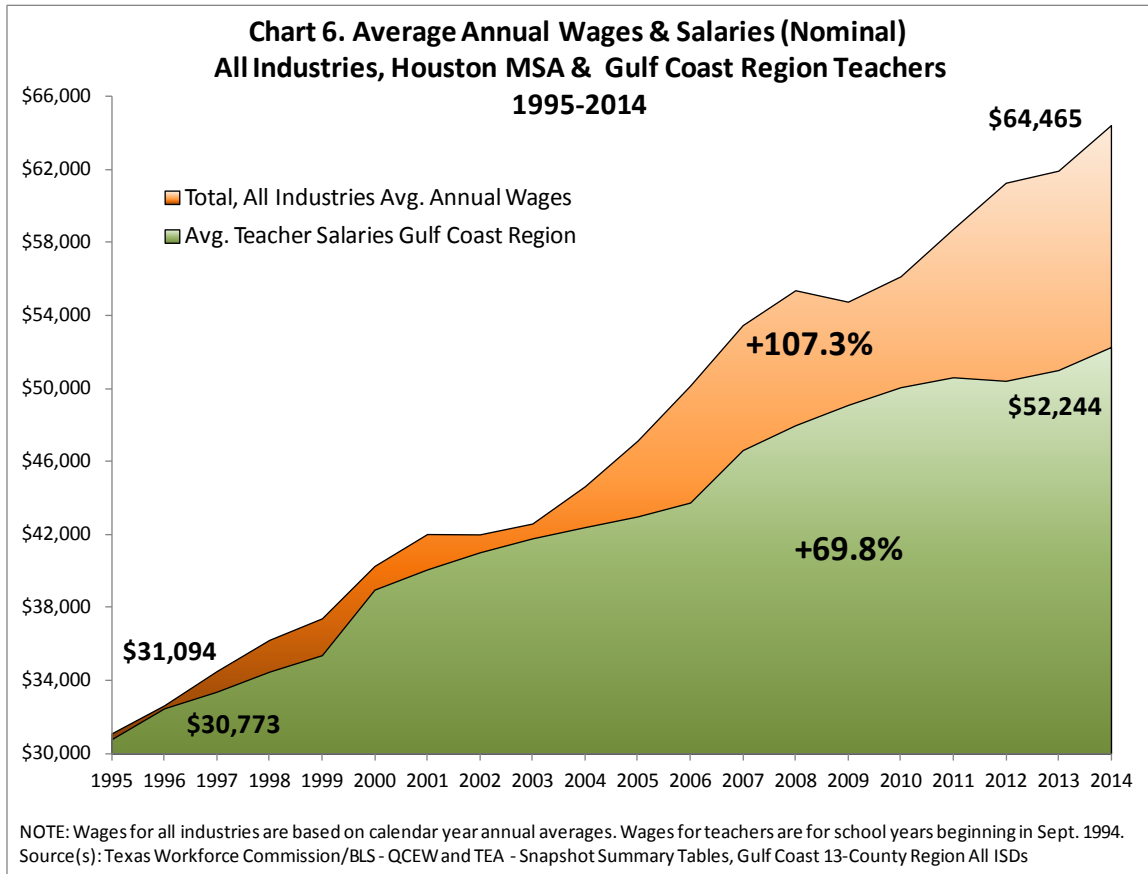
A natural consequence of fewer teachers serving a growing number of students is a rising student-to-teacher ratio. Over the past two decades, this ratio declined across the Gulf Coast region reaching a 20-year low of approximately 15.2 students per teacher during the three school years between 2007 and 2010. In the wake of layoffs related to budget cuts in 2011, the ratio rose dramatically reaching an all-time high of 16.6 in 2012-2013. In the following year the student-teacher ratio fell slightly to 16.4 yet this remained above the 20-year average of 15.9 students for every teacher.

While in reality the exact magnitude of any teacher shortages may have been more or less pronounced among certain grades, schools, districts, etc., on average an additional 2,110 teachers would have needed for the 2013-2014 school year in order lower the student-teacher ratio from 16.4 down to the 20-year average. Currently, data for the 2014-2015 school year are not yet available however recent reports of aggressive hiring initiatives suggest that the ratio will continue to fall. Nonetheless multiple years of intensive recruitment efforts may be required in order to lower the ratio back to the historical average. (See Chart 5.)



**The Wage Gap**

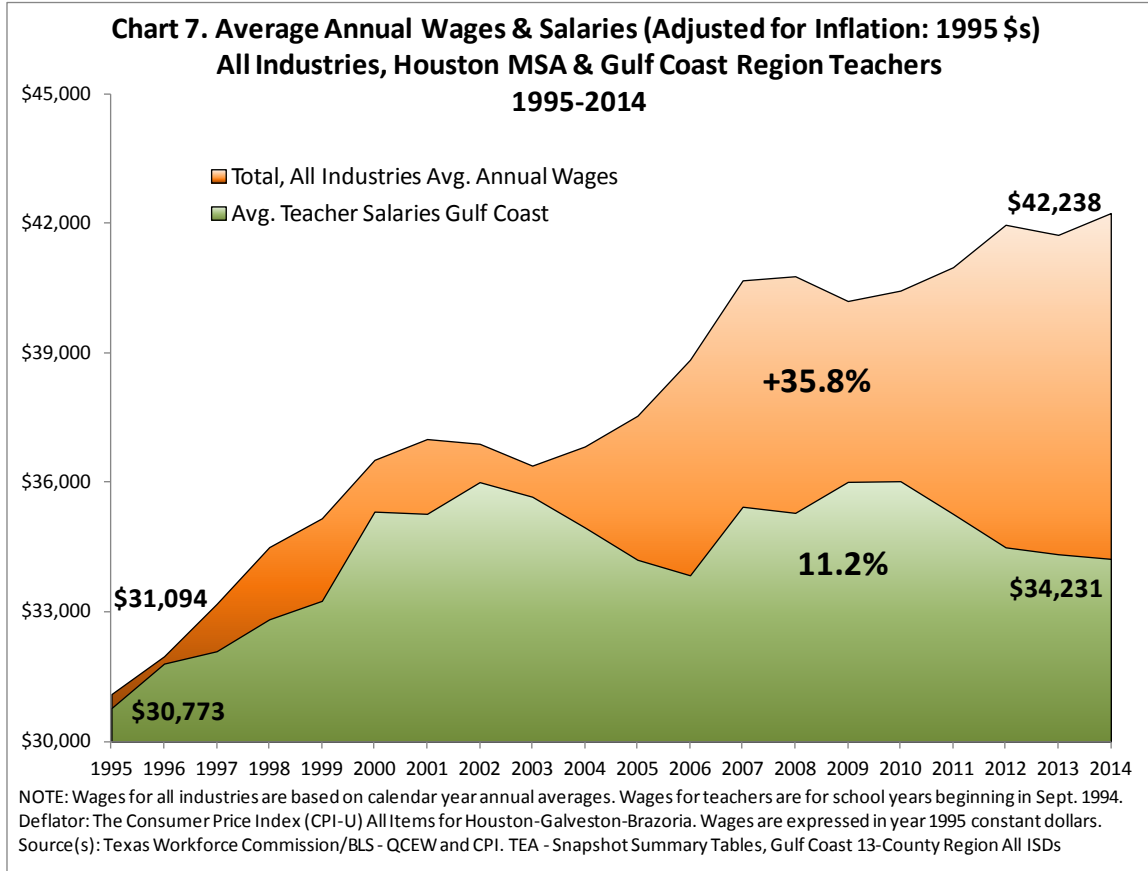
Teachers’ wages in the Gulf Coast have historically fallen below the average for all industries in the area. In 1995, the wage differential between these groups was a mere \$321. By 2014 the gap had widened to \$12,221. This was the result of average wages across all industries rising substantially faster at 107.3%, more than doubling over two decades compared to teachers who saw an increase of only 69.8% over this same timeframe. (See Chart 6.)



**Wages and Inflation**

One consequence of relatively faster and slower rates of wage growth was a notable difference in gains of purchasing power over the 20-year period. After adjusting for inflation, workers across all industries earning an average of \$31,094 in 1995 were earning the equivalent of \$42,238 as of 2014. This translates to a 35.8%-gain in purchasing power. In contrast, teachers earning an average \$30,773 in 1995 were earning the equivalent of \$34,231 two decades later for a comparatively smaller real gain of 11.2%. It is worth noting that these long-term wage gains among teachers belie the likelihood that individuals entering the profession during the 2000s in many cases would have been earning less in real terms by 2014. (See Chart 7.)

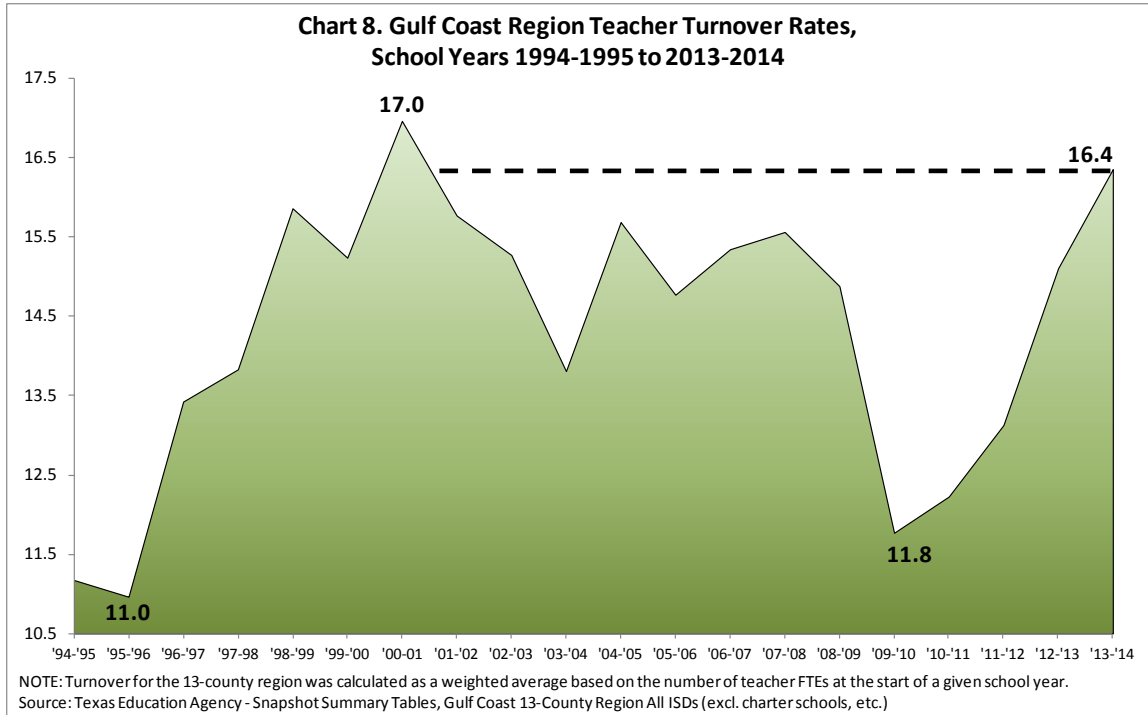




### Turnover and the Impact on Teachers' Years of Experience

Teacher turnover, which can be voluntary or involuntary, is a complex phenomenon influenced by various factors such as burnout, poor working conditions, pressure to raise student test scores, budget-related layoffs, and wages that fail to keep up with the cost of living. An increase in turnover is of concern as it can adversely impact the pipeline of future talent and lead to an inconsistent quality of instruction from one school year to the next. After a steep increase in the mid-1990s, teacher turnover oscillated between 13.8% and 17%, the latter rate registering as the 20-year high, until the onset of the Great Recession in late 2007. As the effects of the recession intensified, many teachers opted to remain in their positions given the level of economic uncertainty, and consequently turnover rates plunged reaching the second-lowest level in 20 years at 11.8% in 2009-2010. Since that school year, turnover has once again surged, hitting 16.4% and reaching levels not seen in almost 15 years. Unlike the modest improvements in staffing and student-teacher ratios related to a partially restored education budget, teacher turnover has shown no signs of abating as of the 2013-2014 school year. (See Chart 8.)<sup>3</sup>

<sup>3</sup> Two ISDs were disbanded and absorbed into neighboring ISDs: North Forest ISD into Houston ISD in 2013 and Kendleton ISD into Lamar CISD in 2010. In years immediately prior to the dissolution of these districts, turnover rates rose dramatically. Nonetheless, the impact of their turnover on the overall rate in the 13-county region was negligible as their respective numbers of teacher FTEs comprised 0.5% and 0.01% of all teacher FTEs in the region at the time of dissolution.

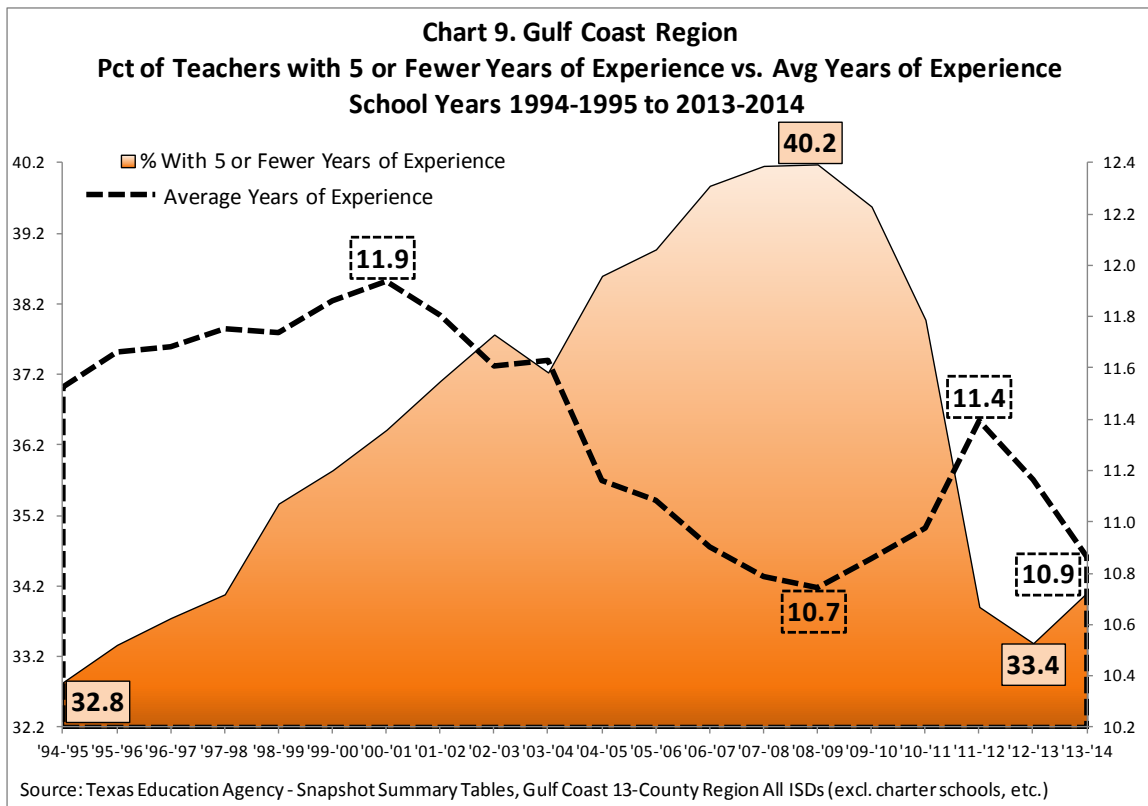


Studies have shown that teachers begin to achieve significant gains in effectiveness as instructors at around the five-year mark.<sup>v</sup> Unfortunately, 40% to 50% of new teachers also leave the profession within the first five years.<sup>vi</sup> For this reason there has been a growing emphasis not only on recruitment of new teachers, but also reducing turnover and increasing retention, particularly during the early stages of teachers' careers. For most of the past 20 years, the proportion of teachers with five or fewer years of experience in the Houston area rose steadily from a low of 32.8% in 1994-1995 to an a high of 40.2% in 2008-2009. On one hand this resulted in an overall teacher workforce with relatively less experience, which was also reflected in the declining average years of experience reaching an all-time low of 10.7. In other words, there was an inverse relationship between the share of new teachers and the average years of experience across all teachers. At the same time this indicated that new teachers were entering the field in growing numbers, potentially creating a pipeline of future talent for years to come.

The following school year a precipitous drop in teachers with five or fewer years of experience began, culminating in the second-lowest share of new teachers in 20 years with 33.4% in 2012-2013. This suggests that new teachers left the profession in significant numbers over a relatively brief period. In fact, it took 15 years for the proportion of new teachers to rise 7.3 percentage points and only 5 years to undo the vast majority of those gains. Despite a slight recovery in 2013-2014, the share of teachers with five or fewer years of experience remained well-below the levels seen just a few years earlier.

A brief by-product of the surge in attrition of new teachers was a temporary spike in the average years of experience to 11.4 during the 2011-2012 school year. Note that the magnitude of this spike was relatively weak compared to the levels observed just over a decade earlier, and despite a far steeper decline in teachers with five or fewer years of

experience. Interestingly, a new phenomenon has emerged in recent years wherein the proportion of new teachers *and* the average years of experience hover near all-time lows. This suggests that a) the inverse relationship between the share of new teachers and average experience observed throughout much of the past 20 years is now in question and b) new teachers have failed to return in significant numbers even after increased education budgets and intensive hiring initiatives. At the same time the most highly tenured educators have also begun leaving the field due to retirement, career changes, or other reasons. This leaves teachers that are relatively more experienced on average (i.e. more than five years) but are not yet eligible for retirement as a fast-growing contingent within the educator workforce. Consequently, a failure to attract and retain sufficient numbers of new teachers in the short to medium-term may result in acute shortages in the future. (See Chart 9.)



**Projected Growth in the Educational Services Industry**

The demand for qualified educators in the Gulf Coast will remain strong into the foreseeable future as our young population continues to grow and more individuals recognize the importance of postsecondary education.

As of 2012, there were 277,420 jobs in educational services (public and private) according to estimates produced by the Texas Workforce Commission. (See Table 1. and Chart 10.) This sector is projected to add 70,260 jobs between 2012 and 2022 for an above average growth rate of 25.3%.

**Elementary & Secondary Schools, Public & Private** are expected to increase payrolls by 51,550 from 2012 to 2022 and will account for the largest number of jobs in education representing two-thirds of total educational services employment by 2022. This industry is projected to grow 28.3% over the decade for the third-highest growth rate of any education-related industry.

**Colleges and Universities, Public & Private** are expected to increase payrolls by from 62,340 in 2012 to 74,480 in 2022. This industry is the second-largest within educational services and is projected to account for one out every five education-related jobs in the region throughout the decade despite a slower-than-average growth rate of 19.5%.

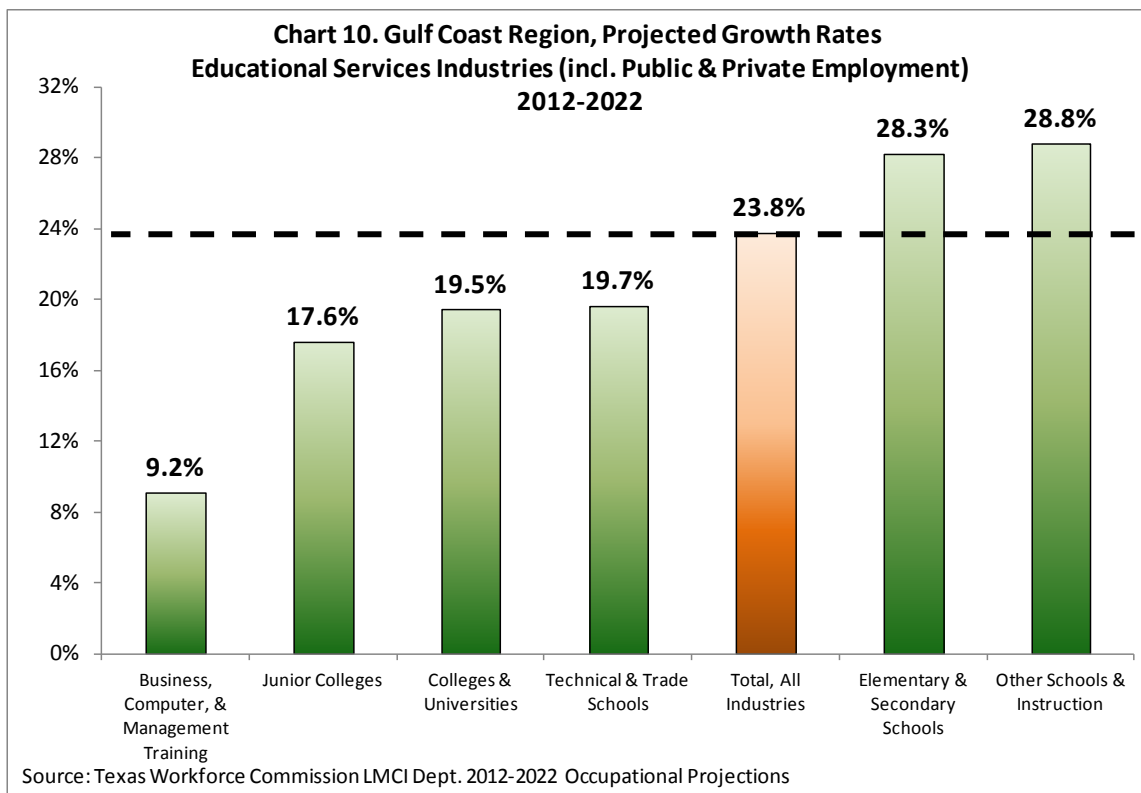
**Junior Colleges, Public & Private** are expected to add 3,520 jobs between 2012 and 2022 and will account for about 7% of total education employment throughout the decade. Similar to colleges and universities, this education industry is projected to grow slower than average at 17.6%.

All other educational services industries (public and private) combined, are projected to grow from 12,670 to 15,710 jobs between 2012 and 2022. Within this group, **Educational Support Services, Public & Private** are projected to have the fastest growth rate of any education-related industry at 29.5% however this industry also has some the lowest employment levels making up only 0.5% of education employment throughout the decade.

Table 1. Gulf Coast Region Educational Services Industries Projections 2012-2022

Industry Code	Industry Title	Annual Average Employment 2012	Annual Average Employment 2022	Net Change	Percent Change
61	<b>Educational Services, Public &amp; Private</b>	277,420	347,680	70,260	25.3%
611	Educational Services	277,420	347,680	70,260	25.3%
6111	<i>Elementary &amp; Secondary Schools, Public &amp; Private</i>	182,450	234,000	51,550	28.3%
6112	<i>Junior Colleges, Public &amp; Private</i>	19,970	23,490	3,520	17.6%
6113	<i>Colleges &amp; Universities, Public &amp; Private</i>	62,340	74,480	12,140	19.5%
6114	<i>Business, Computer, &amp; Management Training, Public &amp; Private</i>	1,420	1,550	130	9.2%
6115	<i>Technical &amp; Trade Schools, Public &amp; Private</i>	3,710	4,440	730	19.7%
6116	<i>Other Schools &amp; Instruction, Public &amp; Private</i>	6,250	8,050	1,800	28.8%

Source: Texas Workforce Commission LMCI Dept.



### Projected Growth in Primary & Secondary School Teacher & School Counselor Occupations

As of 2012, there were 90,900 **Preschool, Primary, Secondary, & Special Education Teachers** in the Gulf Coast region according to estimates produced by the Texas Workforce Commission. (See Table 2. and Chart 11.) Collectively these occupations are projected to add 28,270 jobs between 2012 and 2022 for an above average growth rate of 31.6%.

**Elementary School Teachers Ex. Special Education** are the largest subset of Preschool, Primary, Secondary, & Special Education Teachers, comprising 36.3% of employment. This detailed occupation is expected to grow by 11,650 jobs between 2012 and 2022 for the second-highest growth rate among this group of occupations at 35.3%.

**Secondary School Teachers, Ex. Special & Career/Technical Education** are the second-largest subset of Preschool, Primary, Secondary, & Special Education Teachers accounting for one in four jobs in this group. Secondary School Teachers are expected to add 6,240 jobs over the 10-year projection period for an above average growth rate of 27%.

**Middle School Teachers, Ex. Special & Career/Technical Education** are the third-largest occupation with 16,470 jobs or 18.1% of total employment among Preschool, Primary, Secondary, & Special Education Teachers. Middle School Teachers had the highest projected growth of 35.4% between 2012 and 2022.

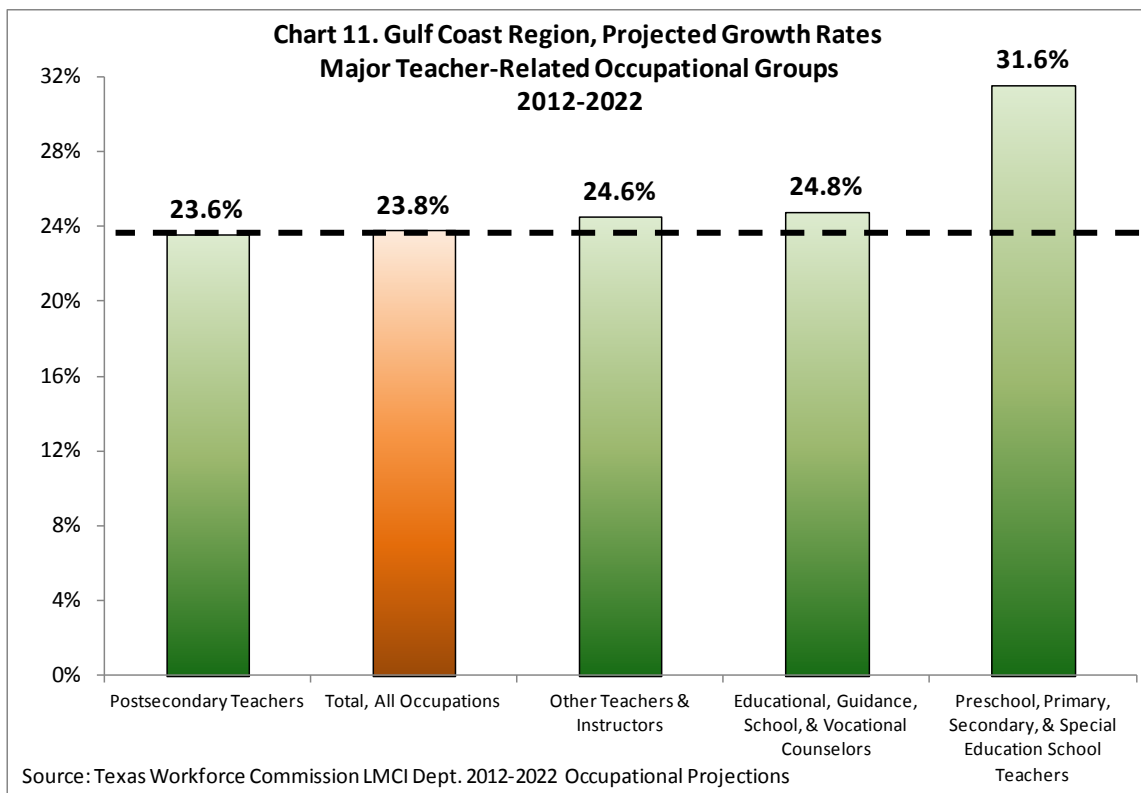
In 2012, there were 5,200 Educational, Guidance, School, & Vocational Counselors in the Gulf Coast region. This detailed occupation is expected to add a total of 1,290 jobs by 2022 for a slightly above average growth rate of 24.8%.

Table 2. Gulf Coast Region Preschool, Primary, Secondary, Special Education, Other Teachers & Counselors Occupations

Occupation Code	Industry Title	Annual Average Employment 2012	Annual Average Employment 2022	Net Change	Percent Change	Total Job Openings	Mean Annual Wage 2014
25-2000	<i>Preschool, Primary, Secondary, &amp; Special Education School Teachers</i>	90,900	119,620	28,720	31.6%	5,025	-
25-2021	Elementary School Teachers, Ex. Special Education	33,010	44,660	11,650	35.3%	1,890	\$52,681
25-2031	Secondary School Teachers, Ex. Special & Career/Technical Education	23,110	29,350	6,240	27.0%	1,255	\$53,865
25-2022	Middle School Teachers, Ex. Special & Career/Technical Education	16,470	22,300	5,830	35.4%	945	\$52,669
25-2011	Preschool Teachers, Ex. Special Education	6,040	7,500	1,460	24.2%	315	\$34,287
25-2012	Kindergarten Teachers, Ex. Special Education	3,260	4,400	1,140	35.0%	205	\$49,470
25-2052	Special Education Teachers, Kindergarten & Elementary School	2,800	3,550	750	26.8%	125	\$52,932
25-2032	Career/Technical Education Teachers, Secondary School	2,300	2,920	620	27.0%	125	\$55,992
25-2054	Special Education Teachers, Secondary School	1,920	2,420	500	26.0%	85	\$52,995
25-2053	Special Education Teachers, Middle School	1,290	1,630	340	26.4%	55	\$51,416
25-2023	Career/Technical Education Teachers, Middle School	340	440	100	29.4%	20	\$52,565
25-2051	Special Education Teachers, Preschool	230	300	70	30.4%	10	\$51,823
25-2059	Special Education Teachers, All Other	140	170	30	21.4%	5	\$52,062
25-3000	<i>Other Teachers &amp; Instructors</i>	21,520	26,810	5,290	24.6%	895	-
25-9041	Teacher Assistants	18,250	23,080	4,830	26.5%	900	\$20,951
25-3098	Substitute Teachers	12,710	16,010	3,300	26.0%	545	\$22,974
25-3021	Self-Enrichment Education Teachers	3,630	4,560	930	25.6%	155	\$42,035
25-3099	Teachers & Instructors, All Other	3,210	3,930	720	22.4%	125	-
25-3011	Adult Basic & Secondary Education & Literacy Teachers & Instructors	1,960	2,320	360	18.4%	70	\$53,562
21-1012	<i>Educational, Guidance, School, &amp; Vocational Counselors</i>	5,200	6,490	1,290	24.8%	240	\$56,911

Source: Texas Workforce Commission LMCI Dept.

**Educational, Guidance, School, & Vocational Counselors** are currently on the Gulf Coast Workforce Board's list of targeted high-skill high-growth occupations. Occupations under **Other Teachers & Instructors** are excluded.



### Projected Growth in Postsecondary Teacher Occupations

As of 2012, there were 30,750 **Postsecondary Teachers** in the Gulf Coast region according to estimates produced by the Texas Workforce Commission. (See Table 3. and Chart 11.) Collectively these occupations are projected to add 7,250 jobs between 2012 and 2022 for a slightly below average growth rate of 23.6%.

**Health Specialties Teachers** are the largest subset of Postsecondary Teachers comprising 16.6% of employment in this occupational group. Over the 10-year projection period Health Specialties Teachers are expected to add 2,100 jobs for a growth rate that is 75% higher than the average of all occupations at 23.8%.

Table 3. Gulf Coast Region Postsecondary Teacher Occupations

Occupation Code	Occupation Title	Annual Average Employment 2012	Annual Average Employment 2022	Net Change	Percent Change	Total Job Openings	Mean Annual Wage 2014
25-1000	Postsecondary Teachers	30,750	38,000	7,250	23.6%	1,185	-
25-1071	Health Specialties Teachers	5,090	7,190	2,100	41.3%	285	\$143,874
25-1194	Vocational Education Teachers	3,200	3,820	620	19.4%	110	\$52,255
25-1121	Art, Drama, & Music Teachers	1,470	1,780	310	21.1%	50	\$65,895
25-1011	Business Teachers	1,420	1,720	300	21.1%	50	\$106,985
25-1123	English Language & Literature Teachers	1,250	1,480	230	18.4%	45	\$69,332
25-1022	Mathematical Science Teachers	1,130	1,340	210	18.6%	35	\$77,186
25-1072	Nursing Instructors & Teachers	1,070	1,530	460	43.0%	60	\$76,191
25-1042	Biological Science Teachers	1,040	1,270	230	22.1%	40	\$95,878
25-1081	Education Teachers	1,020	1,230	210	20.6%	35	\$61,117
25-1199	Postsecondary Teachers, All Other	990	1,180	190	19.2%	35	\$61,963
25-1032	Engineering Teachers	940	1,110	170	18.1%	30	\$101,836
25-1066	Psychology Teachers	720	870	150	20.8%	25	\$76,245
25-1122	Communications Teachers	590	710	120	20.3%	20	\$57,095
25-1125	History Teachers	590	700	110	18.6%	20	\$73,376
25-1021	Computer Science Teachers	540	650	110	20.4%	20	\$82,207
25-1124	Foreign Language & Literature Teachers	470	570	100	21.3%	15	\$58,536
25-1193	Recreation & Fitness Studies Teachers	450	530	80	17.8%	15	\$62,836
25-1041	Agricultural Sciences Teachers	440	510	70	15.9%	10	\$71,555
25-1065	Political Science Teachers	440	530	90	20.5%	15	\$73,234
25-1052	Chemistry Teachers	390	470	80	20.5%	15	\$88,378
25-1126	Philosophy & Religion Teachers	340	420	80	23.5%	15	\$77,697
25-1067	Sociology Teachers	290	350	60	20.7%	10	\$76,047
25-1054	Physics Teachers	280	330	50	17.9%	10	\$90,066
25-1069	Social Sciences Teachers, All Other	250	310	60	24.0%	10	\$53,931
25-1111	Criminal Justice & Law Enforcement Teachers	250	300	50	20.0%	10	\$57,206
25-1051	Atmospheric, Earth, Marine, & Space Sciences Teachers	240	290	50	20.8%	10	\$86,189
25-1063	Economics Teachers	240	280	40	16.7%	10	\$108,258
25-1031	Architecture Teachers	210	260	50	23.8%	10	\$76,215
25-1112	Law Teachers	200	250	50	25.0%	10	\$102,157
25-1113	Social Work Teachers	190	230	40	21.1%	10	\$67,263
25-1062	Area, Ethnic, & Cultural Studies Teachers	170	210	40	23.5%	10	\$71,321
25-1082	Library Science Teachers	110	130	20	18.2%	0	\$67,688
25-1061	Anthropology & Archeology Teachers	70	90	20	28.6%	0	\$87,453
25-1064	Geography Teachers	70	80	10	14.3%	0	\$54,878
25-1192	Home Economics Teachers	70	80	10	14.3%	0	\$55,596
25-1053	Environmental Science Teachers	40	40	0	0.0%	0	\$59,915
25-1043	Forestry & Conservation Science Teachers	20	20	0	0.0%	0	-

Source: Texas Workforce Commission LMCI Dept.

NOTE: **Postsecondary Teachers** occupations are currently excluded from the Gulf Coast Workforce Board's list of targeted high-skill high-growth occupations.



**Appendix A. Gulf Coast Region Institutions of Higher Education - 2013 Enrollment in  
Region per The Texas Higher Education Coordinating Board\***

**Public Community and Technical Colleges**

<b>Name/System</b>	<b>Enrollment as of 2013</b>
Alvin Community College	5,092
Blinn College**	8,925
Brazosport College	4,124
College of the Mainland	4,270
Galveston College	1,866
Houston Community College	51,279
Lee College	5,821
Lone Star College	70,096
San Jacinto College	32,486
Texas State Technical College***	N/A
Wharton County Junior College	7,258
<b>Total</b>	<b>182,292</b>

**Four-Year Public Institutions**

<b>Name/System</b>	<b>Enrollment as of 2013</b>
Prarie View A&M University	4,719
Sam Houston State University	11,888
Texas A&M University at Galveston	1,037
Texas Southern University	6,055
University of Houston-Clear Lake	6,975
University of Houston (main & downtown campuses)	50,413
<b>Total</b>	<b>74,112</b>

**Independent Institutions**

<b>Name/System</b>	<b>Enrollment as of 2013</b>
Houston Baptist University	2,469
Rice University	2,129
South Texas College of Law	857
Texas Chiropractic College	104
University of St. Thomas	2,991
<b>Total</b>	<b>8,550</b>

Source: The Texas Higher Education Coordinating Board Regional Data - 2014 (fall 2013 enrollment)

\*Totals for each category of institution are based on enrollments in the Gulf Coast by students from the region and include satellite locations and campuses.

\*\*Blinn College provides services to students in Austin County however its enrollment totals were not included in the overall total as the majority of its students fall within the Central Texas rather than Gulf Coast region.

\*\*\* THECB reported no enrollment data for Texas State Technical College in the Gulf Coast as of 2013.

## **Definitions and Notes**

The Educational Services sector comprises establishments that provide instruction and training in a wide variety of subjects. This instruction and training is provided by specialized establishments, such as schools, colleges, universities, and training centers. These establishments may be privately owned and operated for profit or not for profit, or they may be publicly owned and operated. They may also offer food and/or accommodation services to their students.

The Current Employment Statistics (CES) program of the Bureau of Labor Statistics produces nonfarm industry employment estimates for the Houston-The Woodlands-Sugar Land Metropolitan Statistical Area (MSA) based on a monthly employer's survey. While the data is more current, the level of detail is insufficient to perform an in-depth analysis of the educational services sector. (See Chart 3.)

Payroll data acquired from the Texas Workforce Commission enables a more detailed view of employment for the region. Historical data in this report was compiled from quarterly employment reports submitted by employers subject to the Texas Unemployment Compensation Act. (See Charts 1. and 2.)

The Texas Education Agency "Snapshot" summary tables provide general information about the characteristics of public schools in Texas. See bullet points below for item definitions and concepts.

- **TOTAL NUMBER OF SCHOOLS:** A count of schools in a district that have a unique state-assigned nine-digit identifier and had students enrolled as of October of a given school year.
- **TOTAL STUDENTS:** The number of students in membership as of October of a given school year, at any grade, from early education through grade 12. Membership is defined as the count of students enrolled with an average daily attendance status code that is not equal to zero. Students with a status code of zero, meaning they are enrolled but not in membership, are not included in this item.
- **TOTAL TEACHER FTE:** The FTE count of personnel categorized as teachers, including special duty and permanent substitute teachers. Substitute teachers should not be confused with persons hired on a daily basis to substitute teach.
- **AVERAGE TEACHER SALARY:** The sum of all the salaries of teachers divided by the total FTE count of teachers. The salary amount is pay for regular duties only; supplemental payments for activities such as coaching, band and orchestra assignments, and club sponsorships are excluded.
- **NUMBER OF STUDENTS PER TEACHER (STUDENT-TEACHER RATIO):** The total number of students divided by the total teacher FTE count.

- **TEACHER % WITH 5 OR FEWER YEARS OF EXPERIENCE:** The FTE count of teachers with zero through five years of total professional experience expressed as a percent of the total teacher FTE count. Total years of professional experience include experience earned in another Texas school district or in another state.
- **TEACHER AVERAGE YEARS OF EXPERIENCE:** A weighted average obtained by multiplying each teacher's FTE count by his or her years of experience, summing for all weighted counts, and then dividing by total teacher FTEs. Adjustments are made so that teachers with zero years of experience are appropriately weighted in the formula.
- **TEACHER TURNOVER RATE:** The FTE count of teachers not employed in the district in the fall of a given school year, who were employed in the district in the fall of the previous school year, divided by the teacher FTE count for the fall of the previous school year. Social security numbers of reported teachers are checked to verify their employment status in the same district in the fall of the given school year.

### Projection Limitations

Industry and occupation projections are funded by the Employment and Training Administration, U.S. Department of Labor and updated every two years. The methodology involves four primary steps:

- Identify industry historical trends
- Develop industry employment projections
- Develop occupation staffing patterns for each industry
- Develop occupation employment projections

The projections will foretell the general industry and occupational trends and act as an indicator of relative magnitude and probable direction as opposed to an estimate of absolute values. Additional detail on projection methodology and its limitations can be found at: <http://www.tracer2.com/?PAGEID=67&SUBID=114>

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<sup>i</sup> Source: Texas Education Agency– Includes all independent school districts located in the 13 counties of the Gulf Coast region irrespective of Education Service Center affiliation. Charter schools, academies, and other alternative schools were excluded for the purposes of this report. <http://ritter.tea.state.tx.us/perfreport/snapshot/>

<sup>ii</sup> Teacher turnover for the 13-county region was calculated using a weighted average based on the number of teacher FTEs at the start of a given school year. This was due to the lack of detailed data on the number of teachers that were not employed within the same district from one school year to the next. See definition of teacher turnover in Definitions and Notes section at end of report.

<sup>iii</sup> Source: Texas High Education Coordinating Board, 13-county Higher Education Region 6 shares identical geography with the 13-county Gulf Coast Workforce Investment Board region 28. [www.txhighereddata.org/reports/performance/regions/](http://www.txhighereddata.org/reports/performance/regions/)

<sup>iv</sup> “In region” refers to students enrolled in postsecondary education in the same Texas Higher Education Region in which they maintain a permanent address. “Out of region” refers to students enrolled in postsecondary education in a Texas Higher Education Region other than the one in which they maintain a permanent address.

<sup>v</sup> Source: New York Times, April 24, 2010 *Last Teacher In, First Out? City Has Another Idea*

<sup>vi</sup> Source: Education Week, May 16, 2012, Richard M. Ingersoll *Beginning Teacher Induction: What the Data Tell Us*