

**TWC Apprenticeship Program
2005-2006 Exit Cohort
3-Year Longitudinal Study**

Methodology

There were 3,454 Apprenticeship exiters from Program Year 2005-2006. When this cohort was initially analyzed in the 2006 Automated Student and Adult Learner Follow-Up System (ASALFS) Final Report, labor market outcomes were determined by linking the seed records to the TWC Unemployment Insurance (UI) wage record database for the 4th quarter of 2006. These labor market outcomes form the baseline measure with which to compare the longitudinal results.

The longitudinal labor market outcomes were attained by linking the seed records to UI wage records for the 4th quarter of 2008, three years after exit. Participants who were found working and had earnings equal to or greater than \$25,000 in either target quarter were excluded from the analysis to reduce the possibility of skewing the data. Supplemental linkages were performed with the Texas Bureau of Vital Statistics (TBVS) to determine deaths, as well as the United States Office of Personnel Management (OPM) and the Department of Defense (DoD). Matches with TBVS were excluded from the analysis resulting in 3,397 records being retained for analysis.

Table 1 shows summary statistics for the seed records retained for analysis. In both study periods, earnings were summed across unique Social Security numbers (SSN).

Table 1. Summary Statistics

Participants Working in	N	N Working	% Working	Median Earnings
4Q2006	3,397	2,824	83.1	\$7,361
4Q2008	3,397	2,672	78.7	\$10,177
4Q2006 and 4Q2008	2,824	2,501	88.6	\$10,326

Results

A. Cohort Analysis

Cohort analysis looks at the results of the group during the two study periods as two distinct sets of data. Even though we analyzed the same exit cohort in both periods, it is likely that different individuals within the cohort are identified as working in the two time periods. The results should be considered as snapshots and do not take into account participants who may be working in both periods. Section B of this report will present data on participants working in both study periods.

Table 2 shows employment by occupation for Apprenticeship program completers in 4Q2006. There were several apprenticeship occupations that had employment of 100 percent, although most of these had cell sizes too small to display, and while their achievements are noteworthy, the groups are not large enough to draw any inference from. Overall, Apprenticeship program completers had employment of 83.1 percent in 4Q2006. Electrician was the occupation with the most apprentices (2,047) and employment for that occupation was 84.9 percent. Plumbers were the next largest group of apprentices (477), and 85.5 percent of plumber apprentices were found employed during the initial quarter. Plumber apprentices had the highest employment in the cohort for any occupation with more than 50 apprentices.

Table 2. Employment by Occupation in 4Q2006

Occupation	N	N Working	% Working
Aircraft Manufacturer	n/a	n/a	100.0
Machinist	n/a	n/a	100.0
Mold Maker	8	8	100.0
Motor Grader Operator	n/a	n/a	100.0
Taper	9	9	100.0
Tool & Die	5	5	100.0
Industrial Maintenance	10	9	90.0
Heavy Equip Operator	9	8	88.9
Plumbing/Heating/Cooling	25	22	88.0
Powerplant Mechanic	8	7	87.5
Plaster	7	6	85.7
Plumber	477	408	85.5
Electrician	2,047	1,738	84.9
Drywall App	18	15	83.3
Electronic Systems Tech	12	10	83.3
Glazier-AGC	6	5	83.3
Sheet Metal	169	140	82.8
Bricklayer	27	22	81.5
Millwrights	27	22	81.5
Telecommunications	15	12	80.0
Pipefitters	57	45	79.0
Plumbing	33	26	78.8
Commercial & Industrial Insulation	17	13	76.5
Carpenters	148	113	76.4
Operating Engineers	46	35	76.1
HVAC	11	8	72.7
Painter	40	28	70.0
Iron Worker	129	89	69.0
Cement Mason	12	8	66.7
Residential Electric	n/a	n/a	66.7
Diesel Mechanic	8	n/a	50.0
Form Builder	3	n/a	33.3
Floor Layers	n/a	n/a	28.6
Total	3,397	2,824	83.1

Note: Cells with fewer than 5 observations are assigned a value of "n/a" to protect the privacy of cohort members.

In the longitudinal snapshot quarter (4Q2008) there were a few occupations with total employment, however once again these occupations had less than 5 apprentices each (Table 2a). Electrician apprentices had employment of 82 percent, down almost 3 percentage points from 2006. 4Q2008 employment was 78.7 percent, down over 4 percent from 4Q2006 employment. Apprenticeship employment numbers usually drop over the course of time due to several factors. In this case the slowing of the housing market and the economy overall in the summer of 2008 played no small part in the employment figures dropping. Also, a large number of tradesmen are self-employed, and the southwest region has some of the highest self-employment numbers in the nation with regard to construction trades. It is plausible that, after spending time with companies as apprentices, a portion of the exit cohort went into business for themselves. Despite these factors, employment for Apprenticeship program participants was still excellent.

Table 2a. Employment by Occupation in 4Q2008

Occupation	N	N Working	% Working
Aircraft Manufacturer	n/a	n/a	100.0
Machinist	n/a	n/a	100.0
Motor Grader Operator	n/a	n/a	100.0
Powerplant Mechanic	8	7	87.5
Telecommunications	15	13	86.7
Electrician	2,047	1,679	82.0
Tool & Die	5	n/a	80.0
Plumbing/Heating/Cooling	25	20	80.0
Plumber	477	380	79.7
Plumbing	33	26	78.8
Taper	9	7	77.8
Sheet Metal	169	127	75.2
Electronic Systems Technician	12	9	75.0
Carpenters	148	111	75.0
Millwrights	27	20	74.1
HVAC	11	8	72.7
Plasterer	7	5	71.4
Commercial & Industrial Insulation	17	12	70.6
Bricklayer	27	19	70.4
Pipefitters	57	40	70.2
Industrial Maintenance	10	7	70.0
Painter	40	28	70.0
Operating Engineers	46	31	67.4
Residential Electric	n/a	n/a	66.7
Diesel Mechanic	8	5	62.5
Mold Maker	8	5	62.5
Cement Mason	12	7	58.3
Iron Worker	129	74	57.4
Heavy Equipment Operator	9	5	55.6
Drywall App	18	10	55.6
Glazier-AGC	6	n/a	50.0
Floor Layers	7	n/a	42.9
Form Builder	n/a	n/a	33.3
Total	3,397	2,672	78.7
Note: Cells with fewer than 5 observations are assigned a value of "n/a" to protect the privacy of cohort members.			

Earnings by occupation for those found working in 4Q2006 are shown in Table 3. The overall median quarterly earnings for the cohort were \$7,361 in 4Q2006. Electrician apprentices posted median earnings of \$7,435 during the initial study period. Motor Grader Operator apprentices posted the highest median earnings in 4Q2006 at \$14,442, although there were less than 5 of them.

Table 3. Earnings by Occupation in 4Q2006

Occupation	N	N Working	Median Earnings
Aircraft Manufacturer	n/a	n/a	\$8,358
Machinist	n/a	n/a	\$10,164
Mold Maker	8	8	\$8,214
Motor Grader Operator	n/a	n/a	\$14,442
Taper	9	9	\$4,935
Tool & Die	5	5	\$13,248
Industrial Maintenance	10	9	\$12,408
Heavy Equipment Operator	9	8	\$4,876
Plumbing/Heating/Cooling	25	22	\$6,814
Powerplant Mechanic	8	7	\$6,344
Plasterer	7	6	\$4,692
Plumber	477	408	\$7,816
Electrician	2,047	1,738	\$7,435
Drywall Applier	18	15	\$5,318
Electronic Systems Technician	12	10	\$2,608
Glazier-AGC	6	5	\$4,553
Sheet Metal	169	140	\$6,940
Bricklayer	27	22	\$7,350
Millwrights	27	22	\$5,980
Telecommunications	15	12	\$6,715
Pipefitters	57	45	\$7,177
Plumbing	33	26	\$7,078
Commercial & Industrial Insulation	17	13	\$5,238
Carpenters	148	113	\$6,582
Operating Engineers	46	35	\$11,063
HVAC	11	8	\$5,043
Painter	40	28	\$5,588
Iron Worker	129	89	\$7,241
Cement Mason	12	8	\$5,670
Residential Electric	n/a	n/a	\$6,137
Diesel Mechanic	8	n/a	\$9,980
Form Builder	3	n/a	\$8,976
Floor Layers	n/a	n/a	\$7,704
Total	3,397	2,824	\$7,361

Note: Cells with fewer than 5 observations are assigned a value of "n/a" to protect the privacy of cohort members.

Table 3a shows earnings by occupation for those found working in 4Q2008. The overall median quarterly earnings for the cohort were \$10,177 in 4Q2008, up from the 4Q2006 mark seen in Table 3. Electrician apprentices posted median earnings of \$10,314 at the longitudinal snapshot. Motor Grader Operator apprentices again posted the highest median earnings, earning \$17,150 in 4Q2008.

Table 3a. Earnings by Occupation in 4Q2008

Occupation	N	N Working	Median Earnings
Aircraft Manufacturer	n/a	n/a	\$10,563
Machinist	n/a	n/a	\$8,625
Motor Grader Operator	n/a	n/a	\$17,150
Powerplant Mechanic	8	7	\$9,334
Telecommunications	15	13	\$9,819
Electrician	2,047	1,679	\$10,314
Tool & Die	5	n/a	\$11,178
Plumbing/Heating/Cooling	25	20	\$8,538
Plumber	477	380	\$11,061
Plumbing	33	26	\$8,625
Taper	9	7	\$5,631
Sheet Metal	169	127	\$9,773
Electronic Systems Technician	12	9	\$7,023
Carpenters	148	111	\$8,355
Millwrights	27	20	\$10,499
HVAC	11	8	\$5,762
Plasterer	7	5	\$4,670
Commercial & Industrial Insulation	17	12	\$9,882
Bricklayer	27	19	\$6,532
Pipefitters	57	40	\$11,314
Industrial Maintenance	10	7	\$11,487
Painter	40	28	\$6,954
Operating Engineers	46	31	\$14,421
Residential Electric	n/a	n/a	\$2,391
Diesel Mechanic	8	5	\$10,435
Mold Maker	8	5	\$8,248
Cement Mason	12	7	\$3,810
Iron Worker	129	74	\$8,875
Heavy Equipment Operator	9	5	\$11,700
Drywall App	18	10	\$5,868
Glazier-AGC	6	n/a	\$10,357
Floor Layers	7	n/a	\$8,598
Form Builder	n/a	n/a	\$14,022
Total	3,397	2,672	\$10,177

Note: Cells with fewer than 5 observations are assigned a value of "n/a" to protect the privacy of cohort members.

Employment and earnings statistics for the ten apprenticeship program training providers with the most apprentices are seen here in Tables 4 through 5a. Statistics for the entire list of training providers can be seen in the various tables located in Appendix A. Table 4 displays employment for 4Q2006. Manor ISD apprentices had the highest employment at 94.2 percent, with Amarillo College close behind with 92.2 percent employed. Table 4a shows employment in 4Q2008. Overall cohort employment dropped between 2005 and 2008, and each one of the top ten training providers had fewer apprentices employed at the three-year mark.

Table 4. Employment for Top 10 Training Providers in 4Q2006

Training Provider	N	N Working	% Working
Northside ISD	574	478	83.3
El Paso Community College	411	294	71.5
Ft. Worth ISD	404	352	87.1
Dallas ISD	335	279	83.3
Manor ISD	243	229	94.2
Beaumont ISD	240	198	82.5
Leander ISD	198	157	79.3
South San Antonio ISD	174	147	84.5
TSTC-Harlingen	165	130	78.8
Amarillo College	154	142	92.2
Total	3,397	2,824	83.1

Table 4a. Employment for Top 10 Training Providers in 4Q2008

Training Provider	N	N Working	% Working
Northside ISD	574	467	81.4
El Paso Community College	411	278	67.6
Ft. Worth ISD	404	333	82.4
Dallas ISD	335	260	77.6
Manor ISD	243	199	81.9
Beaumont ISD	240	189	78.8
Leander ISD	198	144	72.7
South San Antonio ISD	174	144	82.8
TSTC-Harlingen	165	118	71.5
Amarillo College	154	135	87.7
Total	3,397	2,672	78.7

While the drop-off in “percent employed” between 2006 and 2008 might seem discouraging, the earnings figures in Tables 5 and 5a tell a different story. It is important to understand that a significant number of Apprenticeship Program participants transition from employment with a cooperative or organization to self-employment once they become journeymen in their field. Overall median quarterly earnings for the cohort rose from \$7,361 in 2006 (Table 5) to \$10,177 in 2008 (Table 5a). Manor ISD had the highest earnings in 2006, and Beaumont ISD had the highest earnings in 2008, and every training provider experienced earnings gains between the target quarters.

Table 5. Median Quarterly Earnings for Top 10 Training Providers in 4Q2006

Training Provider	N	N Working	Median Earnings
Northside ISD	574	478	\$7,215
El Paso Community College	411	294	\$5,489
Ft. Worth ISD	404	352	\$8,234
Dallas ISD	335	279	\$7,983
Manor ISD	243	229	\$9,364
Beaumont ISD	240	198	\$7,473
Leander ISD	198	157	\$7,270
South San Antonio ISD	174	147	\$7,197
TSTC-Harlingen	165	130	\$5,132
Amarillo College	154	142	\$7,343
Total	3,397	2,824	\$7,361

Table 5a. Median Quarterly Earnings for Top 10 Training Providers in 4Q2008

Training Provider	N	N Working	Median Earnings
Northside ISD	574	467	\$10,828
El Paso Community College	411	278	\$7,422
Ft. Worth ISD	404	333	\$11,075
Dallas ISD	335	260	\$10,142
Manor ISD	243	199	\$12,166
Beaumont ISD	240	189	\$13,446
Leander ISD	198	144	\$8,918
South San Antonio ISD	174	144	\$8,987
TSTC-Harlingen	165	118	\$7,009
Amarillo College	154	135	\$10,647
Total	3,397	2,672	\$10,177

Employment and earnings statistics for the ten apprenticeship program sponsors with the most apprentices are seen here in Tables 6 through 7a. Statistics for the entire list of sponsors can be seen in the various tables located in Appendix A. Table 6 displays employment for 4Q2006. Austin Plumbers and Pipefitters apprentices had the highest employment at 95.8 percent, with Plumbing and Pipefitters close behind with 93.3 percent employed. Table 6a shows employment in 4Q2008. Plumbing and Pipefitters had the highest employment in 2008 with 91.4 percent employed, followed by AIECA and Independent Electrical Co., both with 88 percent employed.

Table 6. Employment for Top 10 Sponsors in 4Q2006

Sponsor	N	N Working	% Working
South Texas Electrical JA	323	269	83.3
Centex IEC	197	156	79.2
AIECA	191	174	91.1
Independent Electrical Co	167	152	91.0
ABC South Texas Chapter	152	131	86.2
Austin Electrical JATC	147	137	93.2
Electrical JATC	123	107	87.0
Plumbing & Pipefitters	105	98	93.3
Austin Plumber & Pipefitters	96	92	95.8
RGV IEC	90	76	84.4
Total	3,397	2,824	83.1

Table 6a. Employment for Top 10 Sponsors in 4Q2008

Sponsor	N	N Working	% Working
South Texas Electrical JA	323	268	83.0
Centex IEC	197	143	72.6
AIECA	191	168	88.0
Independent Electrical Co	167	147	88.0
ABC South Texas Chapter	152	127	83.6
Austin Electrical JATC	147	121	82.3
Electrical JATC	123	105	85.4
Plumbing & Pipefitters	105	96	91.4
Austin Plumber & Pipefitters	96	78	81.3
RGV IEC	90	69	76.7
Total	3,397	2,672	78.7

Overall median quarterly earnings for the cohort rose from \$7,361 in 2006 (Table 7) to \$10,177 in 2008 (Table 7a). Austin Plumbers and Pipefitters had the highest earnings in 2006, while Electrical JATC had the highest median earnings in 2008 with \$15,820. Every sponsor experienced earnings gains between the target quarters.

Table 7. Median Quarterly Earnings for Top 10 Sponsors in 4Q2006

Sponsor	N	N Working	Median Earnings
South Texas Electrical JA	323	269	\$7,179
Centex IEC	197	156	\$7,270
AIECA	191	174	\$8,005
Independent Electrical Co	167	152	\$6,842
ABC South Texas Chapter	152	131	\$7,468
Austin Electrical JATC	147	137	\$8,811
Electrical JATC	123	107	\$7,464
Plumbing & Pipefitters	105	98	\$7,959
Austin Plumber & Pipefitters	96	92	\$10,462
RGV IEC	90	76	\$5,365
Total	3,397	2,824	\$7,361

Table 7a. Median Quarterly Earnings for Top 10 Sponsors in 4Q2008

Sponsor	N	N Working	Median Earnings
South Texas Electrical JA	323	268	\$10,368
Centex IEC	197	143	\$8,923
AIECA	191	168	\$10,892
Independent Electrical Co	167	147	\$8,970
ABC South Texas Chapter	152	127	\$9,253
Austin Electrical JATC	147	121	\$12,130
Electrical JATC	123	105	\$15,820
Plumbing. & Pipefitters	105	96	\$12,095
Austin Plumber & Pipefitters	96	78	\$12,404
RGV IEC	90	69	\$7,516
Total	3,397	2,672	\$10,177

Tables 8 and 9 shows the top ten industries of employment for program participants employed at 4Q2006 and 4Q2008, respectively. Building Equipment Contractors was the most common industry of employment in 2006 and again in 2008. Employment Services was the second most common industry of employment in both target quarters, although a majority of the 10 industries of employment are in the construction, contracting, or manufacturing fields during both target quarters. Participants employed in the Support Activities for Mining sector had the highest median earnings in 2006 with \$15,984, as well as the highest median quarterly earnings in 2008 with \$15,978.

**Table 8. Top 10 Industries of Employment for All Working in 4Q2006
by 4-digit NAICS**

Industry of Employment	N Working	% Working	Median Earnings	Naics Code
Building Equipment Contractors	1,534	61.3	\$10,811	2382
Employment Services	139	5.6	\$7,213	5613
Nonresidential Building Construction	85	3.4	\$10,831	2362
Foundation, Structure, and Building Exterior Contractors	52	2.1	\$9,743	2381
Building Finishing Contractors	49	2.0	\$8,551	2383
Architectural and Structural Metals Manufacturing	35	1.4	\$11,775	3323
Support Activities for Mining	28	1.1	\$15,984	2131
Executive, Legislative, and Other General Government Support	26	1.0	\$8,695	9211
Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers	21	0.8	\$14,884	4237
Other Specialty Trade Contractors	20	0.8	\$14,031	2389

**Table 9. Top 10 Industries of Employment for All Working in 4Q2008
by 4-digit NAICS**

Industry of Employment	N Working	% Working	Median Earnings	Naics Code
Building Equipment Contractors	1,600	59.9	\$10,730	2382
Employment Services	158	5.9	\$6,881	5613
Nonresidential Building Construction	91	3.4	\$11,133	2362
Building Finishing Contractors	54	2.0	\$7,427	2383
Foundation, Structure, and Building Exterior Contractors	53	2.0	\$9,744	2381
Architectural and Structural Metals Manufacturing	37	1.4	\$11,775	3323
Support Activities for Mining	29	1.1	\$15,978	2131
Executive, Legislative, and Other General Government Support	26	1.0	\$8,695	9211
Utility System Construction	22	0.8	\$9,218	2371
Other Specialty Trade Contractors	22	0.8	\$14,031	2389

B. Individuals Found Working in Both Study Periods

The first part of this study looked at a snapshot of labor market outcomes for Apprenticeship program participants who exited in PY 2006. This part of the study is designed to more closely examine the outcomes associated with continued employment. Participants who were found working in both 4Q2006 and 4Q2008 were analyzed in this section of the report.

Table 8 shows employment retention and earnings gains by occupation for those found working in 4Q2006 and 4Q2008. Electricians had employment retention of 90.9 percent, meaning 9 out of 10 of those employed in 4Q2006 were also employed in 4Q2008. Plumbers had employment retention of 87.0 percent. Overall, 88.6 percent of those working in 4Q2006 were also found working in 4Q2008.

Overall the members of the cohort found employed during both study quarters posted earnings gains over the period. Median earnings for 2008 were \$2,965 higher than they were in 2006. There were seven occupations posting a net earnings loss during the study, and while some of the earnings losses look substantial on the surface, a closer examination reveals that the occupations posting the largest losses had fewer than 10 and in some cases fewer than 5 apprentices employed in 2006. For those groups, even one participant not found employed in 2008 will cause a substantial net earnings loss. In other words, these losses are not indicative of broader losses within the apprenticeship community. Electricians showed earnings gains over the study period of \$2,961. Plumber apprentices earned \$3,452 more in 2008 than they did in 2006.

**Table 10. Employment Retention and Earnings Gains
by Occupation for All Employed**

Occupation	N	Working in 2006			Working in 2006 and 2008			Earnings Gains/ (Losses)
		N Working	% Working	Median Earnings	N Working	% Working	Median Earnings	
Aircraft Manufacturer	n/a	n/a	100.0	\$8,358	n/a	100.0	\$10,563	\$2,205
Bricklayer	27	22	81.5	\$7,350	18	81.8	\$6,947	(\$403)
Carpenters	148	113	76.4	\$6,582	100	88.5	\$8,618	\$2,036
Cement Mason	12	8	66.7	\$5,670	6	75.0	\$4,453	(\$1,217)
Commercial & Industrial Insulation	17	13	76.5	\$5,238	12	92.3	\$9,882	\$4,644
Diesel Mechanic	8	4	50.0	\$9,980	n/a	100.0	\$10,337	\$357
Drywall App	18	15	83.3	\$5,318	10	66.7	\$5,868	\$550
Electrician	2,047	1,738	84.9	\$7,435	1,580	90.9	\$10,396	\$2,961
Electronic Systems Tech	12	10	83.3	\$2,608	9	90.0	\$7,023	\$4,415
Floor Layers	7	2	28.6	\$7,704	n/a	50.0	\$12,749	\$5,045
Form Builder	n/a	n/a	33.3	\$8,976	n/a	100.0	\$14,022	\$5,046
Glazier-AGC	6	5	83.3	\$4,553	n/a	60.0	\$10,357	\$5,804
Heavy Equip Operator	9	8	88.9	\$4,876	5	62.5	\$11,700	\$6,824
HVAC	11	8	72.7	\$5,043	7	87.5	\$6,237	\$1,194
Industrial Maintenance	10	9	90.0	\$12,408	7	77.8	\$11,487	(\$921)
Iron Worker	129	89	69.0	\$7,241	68	76.4	\$9,271	\$2,030
Machinist	n/a	n/a	100.0	\$10,164	n/a	100.0	\$8,625	(\$1,539)
Millwrights	27	22	81.5	\$5,980	19	86.4	\$10,500	\$4,520
Mold Maker	8	8	100.0	\$8,214	5	62.5	\$8,248	\$34
Motor Grader Operator	n/a	n/a	100.0	\$14,442	n/a	100.0	\$17,150	\$2,708
Operating Engineers	46	35	76.1	\$11,063	28	80.0	\$14,558	\$3,495
Painter	40	28	70.0	\$5,588	26	92.9	\$7,046	\$1,458
Pipefitters	57	45	79.0	\$7,177	37	82.2	\$11,405	\$4,228
Plaster	7	6	85.7	\$4,692	5	83.3	\$4,670	(\$22)
Plumber	477	408	85.5	\$7,816	355	87.0	\$11,268	\$3,452
Plumbing	33	26	78.8	\$7,078	22	84.6	\$8,705	\$1,627
Plumbing/Heating/Cooling	25	22	88.0	\$6,814	17	77.3	\$8,528	\$1,714
Powerplant Mechanic	8	7	87.5	\$6,344	6	85.7	\$10,223	\$3,879
Residential Electric	n/a	n/a	66.7	\$6,137	n/a	50.0	\$330	(\$5,807)
Sheet Metal	169	140	82.8	\$6,940	122	87.1	\$10,031	\$3,091
Taper	9	9	100.0	\$4,935	7	77.8	\$5,631	\$696
Telecommunications	15	12	80.0	\$6,715	12	100.0	\$9,990	\$3,275
Tool & Die	5	5	100.0	\$13,248	n/a	80.0	\$11,178	(\$2,070)
Total	3,397	2,824	83.1	\$7,361	2,501	88.6	\$10,326	\$2,965

Note: Cells with fewer than 5 observations are assigned a value of "n/a" to protect the privacy of cohort members.

Table 11 shows employment retention and earnings gains for the ten training providers serving the largest number of apprentices. Beaumont ISD had the largest earnings gains over the period, \$6,150. Northside ISD, the training provider serving the most apprentices, had the second-largest earnings gains with \$3,707, as well as the highest employment retention for any training provider, with 92.3 percent of those employed in 4Q2006 also employed in 4Q2008.

Table 11. Employment Retention and Earnings Gains for Top 10 Training Providers

Training Provider	N	Working in 2006			Working in 2006 and 2008			Earnings Gains/ (Losses)
		N Working	% Working	Median Earnings	N Working	% Working	Median Earnings	
Northside ISD	574	478	83.3	\$7,215	441	92.3	\$10,922	\$3,707
El Paso Community College	411	294	71.5	\$5,489	249	84.7	\$7,607	\$2,118
Ft. Worth ISD	404	352	87.1	\$8,234	318	90.3	\$11,117	\$2,883
Dallas ISD	335	279	83.3	\$7,983	242	86.7	\$10,393	\$2,410
Manor ISD	243	229	94.2	\$9,364	196	85.6	\$12,192	\$2,828
Beaumont ISD	240	198	82.5	\$7,473	174	87.9	\$13,623	\$6,150
Leander ISD	198	157	79.3	\$7,270	136	86.6	\$8,953	\$1,683
South San Antonio ISD	174	147	84.5	\$7,197	134	91.2	\$9,267	\$2,070
TSTC-Harlingen	165	130	78.8	\$5,132	109	83.8	\$7,356	\$2,224
Amarillo College	154	142	92.2	\$7,343	125	88.0	\$10,647	\$3,304
Total	3,397	2,824	83.1	\$7,361	2,501	88.6	\$10,326	\$2,965

Appendix A

Table A1. Employment and Earnings by Training Provider in 4Q2006

Training Provider	N	N Working	% Working	Median Earnings
Hallsville ISD	3	2	66.7	\$8,608
Vernon College	14	13	92.9	\$6,751
ACCD-St. Phillips	16	10	62.5	\$6,385
Tyler ISD	19	16	84.2	\$8,418
El Paso ISD	24	17	70.8	\$5,480
Hooks ISD	24	16	66.7	\$5,886
South Plains College	29	28	96.6	\$5,440
Grayson County College	30	19	63.3	\$7,223
Seguin ISD	32	29	90.6	\$12,144
College Station ISD	46	40	87.0	\$7,199
Waco ISD	60	50	83.3	\$7,787
Region 9 ESC	64	54	84.4	\$6,453
North East ISD	138	124	89.9	\$7,197
Amarillo College	154	142	92.2	\$7,343
TSTC-Harlingen	165	130	78.8	\$5,132
South San Antonio ISD	174	147	84.5	\$7,197
Leander ISD	198	157	79.3	\$7,270
Beaumont ISD	240	198	82.5	\$7,473
Manor ISD	243	229	94.2	\$9,364
Dallas ISD	335	279	83.3	\$7,983
Ft. Worth ISD	404	352	87.1	\$8,234
El Paso Community College	411	294	71.5	\$5,489
Northside ISD	574	478	83.3	\$7,215
Total	3,397	2,824	83.1	\$7,361
Note: Cells with fewer than 5 observations are assigned a value of "n/a" to protect the privacy of cohort members.				

Table A2. Employment and Earnings by Training Provider in 4Q2008

Training Provider	N	N Working	% Working	Median Earnings
Hallsville ISD	3	2	66.7	\$11,837
Vernon College	14	10	71.4	\$8,972
ACCD-St. Phillips	16	11	68.8	\$9,334
Tyler ISD	19	19	100.0	\$10,121
El Paso ISD	24	18	75.0	\$7,087
Hooks ISD	24	13	54.2	\$9,224
South Plains College	29	23	79.3	\$8,487
Grayson County College	30	21	70.0	\$9,251
Seguin ISD	32	24	75.0	\$12,574
College Station ISD	46	39	84.8	\$11,082
Waco ISD	60	47	78.3	\$11,354
Region 9 ESC	64	54	84.4	\$10,727
North East ISD	138	124	89.9	\$9,169
Amarillo College	154	135	87.7	\$10,647
TSTC-Harlingen	165	118	71.5	\$7,009
South San Antonio ISD	174	144	82.8	\$8,987
Leander ISD	198	144	72.7	\$8,918
Beaumont ISD	240	189	78.8	\$13,446
Manor ISD	243	199	81.9	\$12,166
Dallas ISD	335	260	77.6	\$10,142
Ft. Worth ISD	404	333	82.4	\$11,075
El Paso Community College	411	278	67.6	\$7,422
Northside ISD	574	467	81.4	\$10,828
Total	3,397	2,672	78.7	\$10,177
Note: Cells with fewer than 5 observations are assigned a value of "n/a" to protect the privacy of cohort members.				

Table A3. Employment and Earnings by Training Provider for Participants Found Working in 4Q2006 and 4Q2008

Training Provider	N	N Working	% Working	Median Earnings
ACCD-St. Phillips	16	8	80.0	\$10,838
Amarillo College	154	125	88.0	\$10,647
Beaumont ISD	240	174	87.9	\$13,623
College Station ISD	46	37	92.5	\$11,082
Dallas ISD	335	242	86.7	\$10,393
El Paso Community College	411	249	84.7	\$7,607
El Paso ISD	24	15	88.2	\$7,087
Ft. Worth ISD	404	318	90.3	\$11,117
Grayson County College	30	18	94.7	\$9,026
Hallsville ISD	3	2	100.0	\$11,837
Hooks ISD	24	10	62.5	\$8,970
Leander ISD	198	136	86.6	\$8,953
Manor ISD	243	196	85.6	\$12,192
North East ISD	138	118	95.2	\$9,305
Northside ISD	574	441	92.3	\$10,922
Region 9 ESC	64	51	94.4	\$10,812
Seguin ISD	32	24	82.8	\$12,574
South Plains College	29	23	82.1	\$8,487
South San Antonio ISD	174	134	91.2	\$9,267
TSTC-Harlingen	165	109	83.8	\$7,356
Tyler ISD	19	16	100.0	\$11,146
Vernon College	14	10	76.9	\$8,972
Waco ISD	60	45	90.0	\$11,354
Total	3,397	2,501	88.6	\$10,326
Note: Cells with fewer than 5 observations are assigned a value of "n/a" to protect the privacy of cohort members.				

Table A4. Employment and Earnings by Sponsor 4Q2006

Sponsor	N	N Working	% Working	Median Earnings
Central Texas Training & Engineers Local	1	1	100.0	\$10,164
East Texas JATC	3	2	66.7	\$8,608
Friedrich Air Conditioning	4	4	100.0	\$11,578
Lockheed Martin-Kelly Aviation	4	3	75.0	\$6,344
TX Iron Workers	4	4	100.0	\$13,661
Mooney Aircraft Mfg	5	5	100.0	\$8,358
Takata	5	5	100.0	\$13,248
Intertech Flooring	7	2	28.6	\$7,704
Dallas Joint Plumbers & P	11	7	63.6	\$1,487
Texarkana Electrical JATC	13	9	69.2	\$7,096
IEC Texhoma	14	13	92.9	\$6,751
R.E.C. Industries, Inc.	14	12	85.7	\$7,423
Lubbock Area Plumbers JAT	15	14	93.3	\$7,521
Asbestos Workers # 87	17	13	76.5	\$5,238
Bricklayers JATC	17	13	76.5	\$8,274
IEC of East Texas. Inc	19	16	84.2	\$8,418
JATC of Local 196-Plumber	19	18	94.7	\$6,185
Operating Engineers JATC	19	14	73.7	\$11,908
Wichita Falls Plumbers JA	20	16	80.0	\$6,391
Titus Electrical Contractors	23	20	87.0	\$12,002
Associated Heating & Co	24	17	70.8	\$5,480
Carpentry	24	14	58.3	\$6,567
TX Panhandle Chapter APHC	25	22	88.0	\$6,814
Waco JATC	25	20	80.0	\$7,343
Specialty Contractors In	29	19	65.5	\$7,223
UA Local #823	29	21	72.4	\$4,608
Britt Rice Electric	31	28	90.3	\$6,630
Iron Workers	35	22	62.9	\$6,596
Waco Electricians Area JA	35	30	85.7	\$8,304
TX Panhandle Chapter IEC	37	35	94.6	\$7,956
Wichita Falls Electrical	38	33	86.8	\$6,333
RGV IPA	46	33	71.7	\$4,618
West TX JATC	54	49	90.7	\$7,127
Pipefitters JATC	57	45	79.0	\$7,177

Sheet Metal SA	65	58	89.2	\$6,563
N TX Carpenters & Millwrights	75	60	80.0	\$6,810
RGV IEC	90	76	84.4	\$5,365
Austin Plumber & Pipefitters	96	92	95.8	\$10,462
Plumbing. & Pipefitters	105	98	93.3	\$7,959
Electrical JATC	123	107	87.0	\$7,464
Austin Electrical JATC	147	137	93.2	\$8,811
ABC South Texas Chapter	152	131	86.2	\$7,468
Independent Electrical Co	167	152	91.0	\$6,842
AIECA	191	174	91.1	\$8,005
Centex IEC	197	156	79.2	\$7,270
South Texas Electrical JA	323	269	83.3	\$7,179
Unknown	942	734	77.9	\$7,092
Total	3,397	2,824	83.1	\$7,361

Table A5. Employment and Earnings by Sponsor 4Q2008

Sponsor	N	N Working	% Working	Median Earnings
Central Texas Training & Engineers Local	1	1	100.0	\$8,625
East Texas JATC	3	2	66.7	\$11,837
Friedrich Air Conditioning	4	2	50.0	\$11,324
Lockheed Martin-Kelly Aviation	4	4	100.0	\$8,309
TX Iron Workers	4	4	100.0	\$10,770
Mooney Aircraft Mfg	5	4	80.0	\$10,838
Takata	5	4	80.0	\$11,178
Intertech Flooring	7	3	42.9	\$8,598
Dallas Joint Plumbers & P	11	6	54.6	\$4,215
Texarkana Electrical JATC	13	7	53.9	\$12,098
IEC Texhoma	14	10	71.4	\$8,972
R.E.C. Industries, Inc.	14	12	85.7	\$11,221
Lubbock Area Plumbers JAT	15	12	80.0	\$9,719
Asbestos Workers # 87	17	12	70.6	\$9,882
Bricklayers JATC	17	13	76.5	\$6,532
IEC of East Texas. Inc	19	19	100.0	\$10,121
JATC of Local 196-Plumber	19	16	84.2	\$10,919
Operating Engineers JATC	19	11	57.9	\$12,209
Wichita Falls Plumbers JA	20	14	70.0	\$10,417
Titus Electrical Contractors	23	18	78.3	\$13,642
Associated Heating & Co	24	18	75.0	\$7,087
Carpentry	24	17	70.8	\$5,973
TX Panhandle Chapter APHC	25	20	80.0	\$8,538
Waco JATC	25	20	80.0	\$12,338
Specialty Contractors In	29	20	69.0	\$9,026
UA Local #823	29	18	62.1	\$6,621
Britt Rice Electric	31	26	83.9	\$11,108
Iron Workers	35	17	48.6	\$9,621
Waco Electricians Area JA	35	27	77.1	\$10,680
TX Panhandle Chapter IEC	37	34	91.9	\$11,541
Wichita Falls Electrical	38	35	92.1	\$10,641
RGV IPA	46	31	67.4	\$5,855
West TX JATC	54	49	90.7	\$11,318
Pipefitters JATC	57	40	70.2	\$11,314
Sheet Metal SA	65	53	81.5	\$9,694

N TX Carpenters & Millwrights	75	59	78.7	\$9,386
RGV IEC	90	69	76.7	\$7,516
Austin Plumber & Pipefitters	96	78	81.3	\$12,404
Plumbing. & Pipefitters	105	96	91.4	\$12,095
Electrical JATC	123	105	85.4	\$15,820
Austin Electrical JATC	147	121	82.3	\$12,130
ABC South Texas Chapter	152	127	83.6	\$9,253
Independent Electrical Co	167	147	88.0	\$8,970
AIECA	191	168	88.0	\$10,892
Centex IEC	197	143	72.6	\$8,923
South Texas Electrical JA	323	268	83.0	\$10,368
Unknown	942	691	73.4	\$9,589
Total	3,397	2,672	78.7	\$10,177

Table A6. Employment and Earnings Both 4Q2006 and 4Q2008

Sponsor	N	N Working	% Working	Median Earnings
ABC South Texas Chapter	152	119	90.8	\$9,436
Asbestos Workers # 87	17	12	92.3	\$9,882
AIECA	191	164	94.3	\$10,892
Associated Heating & Co	24	15	88.2	\$7,087
Austin Electrical JATC	147	120	87.6	\$12,159
Austin Plumber & Pipefitters	96	76	82.6	\$12,755
Bricklayers JATC	17	12	92.3	\$7,320
Britt Rice Electric	31	26	92.9	\$11,108
Carpentry	24	13	92.9	\$8,504
Central Texas Training &	1	1	100.0	\$8,625
Centex IEC	197	135	86.5	\$8,957
Dallas Joint Plumbers & P	11	4	57.1	\$4,215
East Texas JATC	3	2	100.0	\$11,837
Electrical JATC	123	98	91.6	\$16,021
Engineers Local	1	1	100.0	\$7,916
Friedrich Air Conditioning	4	2	50.0	\$11,324
IEC of East Texas. Inc	19	16	100.0	\$11,146
IEC Texhoma	14	10	76.9	\$8,972
Independent Electrical Co	167	141	92.8	\$8,996
Intertech Flooring	7	1	50.0	\$12,749
Iron Workers	35	16	72.7	\$9,122
JATC of Local 196-Plumber	19	15	83.3	\$10,905
Lockheed Martin-Kelly Aviation	4	3	100.0	\$9,334
Lubbock Area Plumbers JAT	15	11	78.6	\$9,918
Mooney Aircraft Mfg	5	4	80.0	\$10,838
N TX Carpenters & Millwrights	75	54	90.0	\$10,212
Operating Engineers JATC	19	11	78.6	\$12,209
Pipefitters JATC	57	37	82.2	\$11,405
Plumbing. & Pipefitters	105	93	94.9	\$12,259
R.E.C. Industries, Inc.	14	11	91.7	\$10,897
RGV IEC	90	65	85.5	\$7,528
RGV IPA	46	26	78.8	\$6,408
Sheet Metal SA	65	53	91.4	\$9,694
South Texas Electrical JA	323	250	92.9	\$10,471
Specialty Contractors In	29	18	94.7	\$9,026
Takata	5	4	80.0	\$11,178

Sponsor	N	N Working	% Working	Median Earnings
Texarkana Electrical JATC	13	6	66.7	\$10,661
Titus Electrical Contractors	23	18	90.0	\$13,642
TX Iron Workers	4	4	100.0	\$10,770
TX Panhandle Chapter APHC	25	17	77.3	\$8,528
TX Panhandle Chapter IEC	37	32	91.4	\$11,541
UA Local #823	29	18	85.7	\$6,621
Waco Electricians Area JA	35	26	86.7	\$10,798
Waco JATC	25	19	95.0	\$12,060
West TX JATC	54	46	93.9	\$11,024
Wichita Falls Electrical	38	32	97.0	\$10,585
Wichita Falls Plumbers JA	20	14	87.5	\$10,417
Unknown	942	630	85.8	\$9,859
Total	3,397	2,501	88.6	\$10,326

References

Apprenticeship Training Program Administrator's Guide. Texas Workforce Commission
Apprenticeship Training Program. http://www.twc.state.tx.us/svcs/app_guide_toc.html

Texas Education Code Chapter 133. Apprenticeship System of Adult Career and Technology
Education.

Texas Workforce Commission Annual Report 2008. <http://www.twc.state.tx.us/news/ar08.pdf>

TRACER. <http://www.tracer2.com>

United States Department of Labor Employment and Training Administration,
Office of Apprenticeship. <http://www.doleta.gov/OA/>