

**Trade Adjustment Assistance Program
2005-2006 Exit Cohort
3-Year Longitudinal Study**

Methodology

There were 9,458 archived TAA seed records from the 2005-2006 TAA exit cohort (PY2006). There were two distinct groups in the cohort, those who received training (Training) and those who did not receive training but were referred to Employment Services (ES). This report will only analyze the group of participants that received training, first as separate snapshots of employment, and then as cumulative employment. We are only analyzing the Training Group because the data we receive for the TAA group referred to Employment Services do not contain enough information about services received to be useful for analysis, and more importantly, these individuals are part of the broader Employment Services cohort and are included in data we received for ES and the analysis associated with that data.

TAA seed records were linked to TWC Unemployment Insurance (UI) wage records in the 4th quarter of 2006 (4Q2006) to determine initial employment and earnings and establish the baseline measure. Participant records were also linked to the UI wage record database in the 4th quarter of 2008 (4Q2008) to determine long-term labor market outcomes. In the case where participants who were found working had earnings greater than or equal to \$25,000 in any target quarter were identified, these records were excluded from analysis based on the likelihood of inaccurate wage record data and to reduce the possibility of inappropriately skewing the data. Supplemental linkages were conducted with the Texas Bureau of Vital Statistics (TBVS) to determine deaths, as well as the United States Office of Personnel Management (OPM), the United States Postal Service (USPS), and the Department of Defense (DoD). Cohort members who were found to be deceased during the study years were excluded from analysis. After all exclusions, there were 9,236 seed records retained for analysis in this report; 7,043 for the ES group and 2,193 for the Training group.

In both study periods, earnings were summed across unique Social Security Numbers (SSN). The industry sector, identified by 4-digit North American Industry Classification System (NAICS), of the employer that paid the most wages during the target quarter was retained for analysis.

Results

A. Cohort Analysis

Cohort analysis looks at the results of the group during the two study periods as two distinct sets of data. In cohort analysis it is possible, even likely, that the same persons identified as working in the baseline study period will not be identical to those found working in the terminal time period. Section B of this report presents data on participants working in both study periods. In this study, we are only analyzing the Training group.

When the results are analyzed by gender (Tables 1 and 1a), we see that 75.9 percent of males in the cohort were found employed at 4Q2006. Males in the cohort had median quarterly earnings of \$6,041 at 4Q2006. Overall employment for the Training group cohort was 72.8 percent in 4Q2006, with median earnings of \$5,079. At the longitudinal snapshot in 2008, 75.0 percent of males were found employed, with females employed at 67.4 percent. Male exiters had median earnings of \$7,542 in 4Q2008. Employment for the entire cohort was 71.1 percent and median quarterly earnings were \$6,012.

Table 1. Employment and Earnings by Gender for Training Group in 4Q2006

Gender	N	N Working	% Working	Median Earnings
Unknown	n/a	n/a	n/a	n/a
Male	1,071	813	75.9	\$6,041
Female	1,121	783	69.9	\$4,466
Total	2,193	1,596	72.8	\$5,079
Note: Cells with values smaller than 5 are marked "n/a" to protect the privacy of cohort members.				

Table 1a. Employment and Earnings by Gender for Training Group in 4Q2008

Gender	N	N Working	% Working	Median Earnings
Unknown	n/a	n/a	n/a	n/a
Male	1,071	803	75.0	\$7,542
Female	1,121	756	67.4	\$5,007
Total	2,193	1,559	71.1	\$6,012
Note: Cells with values smaller than 5 are marked "n/a" to protect the privacy of cohort members.				

Excluding the Unknown group, Black participants had the highest employment in 4Q2006 with 77.8 percent found working (Table 2). Whites had the highest earnings in 4Q2006 with median earnings of \$7,559. In 2008, American Indians had the largest percentage of participants employed, 78.2%, and Hawaiian Native or Pacific Islanders posted the highest median earnings at \$11,947 (Table 2a).

Table 2. Employment and Earnings by Ethnicity for Training Group in 4Q2006

Ethnicity	N	N Working	% Working	Median Earnings
Hawaiian Native or Pacific Islander	n/a	n/a	75.0	\$6,795
Unknown	11	7	63.6	\$5,387
Asian	90	65	72.2	\$5,480
Black	117	91	77.8	\$6,702
American Indian	119	86	72.3	\$5,233
White	363	258	71.1	\$7,559
Hispanic	1,489	1,086	72.9	\$4,640
Total	2,193	1,596	72.8	\$5,079

Note: Cells with values smaller than 5 are marked "n/a" to protect the privacy of cohort members.

Table 2a. Employment and Earnings by Ethnicity for Training Group in 4Q2008

Ethnicity	N	N Working	% Working	Median Earnings
Hawaiian Native or Pacific Islander	n/a	n/a	75.0	\$11,947
Unknown	11	8	72.7	\$6,693
Asian	90	61	67.8	\$6,426
Black	117	83	70.9	\$8,426
American Indian	119	93	78.2	\$5,479
White	363	256	70.5	\$9,398
Hispanic	1,489	1,055	70.9	\$5,457
Total	2,193	1,559	71.1	\$6,012

Note: Cells with values smaller than 5 are marked "n/a" to protect the privacy of cohort members.

Tables 3 and 3a show employment and earnings by service received for 4Q2006 and 4Q2008, respectively. At the baseline measure, participants who had received Occupational/Vocational services had the highest employment of groups with viewable cell sizes with 73.7 percent employed, while participants receiving Job Search services had the highest median quarterly earnings with \$10,168. In 4Q2008, participants receiving Occupational/Vocational services again had the highest employment with 72.2 percent employed, while those receiving Job Search services again had the highest median quarterly earnings with \$8,438.

Table 3. Employment and Earnings by Service Received for Training Group in 4Q2006

Service Received	N	N Working	% Working	Median Earnings
ES Participants	n/a	n/a	100.0	\$8,018
Basic Education Skill	19	12	63.2	\$3,700
Job Search	19	6	31.6	\$10,168
ESL	174	118	67.8	\$4,084
Occupational/Vocational	1,979	1,458	73.7	\$5,235
Total	2,193	1,596	72.8	\$5,079

Note: Cells with values smaller than 5 are marked "n/a" to protect the privacy of cohort members.

Table 3a. Employment and Earnings by Service Received for Training Group in 4Q2008

Service Received	N	N Working	% Working	Median Earnings
ES Participants	n/a	n/a	100.0	\$8,472
Basic Education Skill	19	11	57.9	\$5,097
Job Search	19	8	42.1	\$8,438
ESL	174	109	62.6	\$4,836
Occupational/Vocational	1,979	1,429	72.2	\$6,080
Total	2,193	1,559	71.1	\$6,012

Note: Cells with values smaller than 5 are marked "n/a" to protect the privacy of cohort members.

Table 4 shows employment and earnings by Local Workforce Development Area (LWDA). Several of the LWDAs had cohort sizes too small to display. Of the LWDAs with more than 100 participants, Cameron County LWDA had the highest percentage of program exiters employed during 4Q2006 with 83.4 percent employed, and again had the highest employment in 4Q2008 with 78.8 percent employed. Dallas LWDA posted the highest median earnings at 4Q2006 with \$5,272 and also had the highest median earnings at the longitudinal snapshot with \$6,695.

Table 4. Employment and Earnings by LWDA

LWDA	N	All Working in 4Q2006			All Working in 4Q2008			
		N Working	% Working	Median Earnings	N	N Working	% Working	Median Earnings
Panhandle	n/a	n/a	100.0	\$3,132	n/a	n/a	100.0	\$10,220
West Central	n/a	n/a	100.0	\$6,694	n/a	n/a	100.0	\$6,711
Permian Basin	n/a	n/a	100.0	\$316	n/a	n/a	.	.
Coastal Bend	n/a	n/a	100.0	.	n/a	n/a	100.0	\$14,096
North East Texas	n/a	n/a	100.0	\$7,415	n/a	n/a	100.0	\$12,404
South Texas	n/a	n/a	.	.	n/a	n/a	.	.
Central Texas	n/a	n/a	100.0	\$7,127	n/a	n/a	66.7	\$8,256
Concho Valley	n/a	n/a	75.0	\$6,041	n/a	n/a	50.0	\$10,321
North Texas	5	5	100.0	\$6,252	5	n/a	80.0	\$8,618
Heart of Texas	9	8	88.9	\$5,949	9	9	100.0	\$7,223
South East Texas	14	12	85.7	\$11,811	14	9	64.3	\$14,477
Lower Rio Grande Valley	17	11	64.7	\$4,122	17	12	70.6	\$5,461
East Texas	19	15	79.0	\$7,904	19	15	79.0	\$10,447
South Plains	23	18	78.3	\$5,991	23	18	78.3	\$8,294
Rural Capital	27	21	77.8	\$7,352	27	25	92.6	\$7,917
Capital Area	29	17	58.6	\$6,929	29	19	65.5	\$8,479
Unknown	29	7	24.1	\$9,104	29	10	34.5	\$7,167
Gulf Coast	46	28	60.9	\$9,744	46	28	60.9	\$7,468
Texoma	67	45	67.2	\$7,150	67	48	71.6	\$9,115
Deep East Texas	75	52	69.3	\$7,753	75	57	76.0	\$9,566
North Central	78	64	82.1	\$7,991	78	61	78.2	\$8,474
Dallas	113	84	74.3	\$5,272	113	73	64.6	\$6,695
Tarrant County	154	112	72.7	\$4,828	154	96	62.3	\$6,135
Cameron County	241	201	83.4	\$4,120	241	190	78.8	\$5,755
Alamo	466	355	76.2	\$5,052	466	341	73.2	\$5,333
Upper Rio Grande	765	529	69.2	\$4,607	765	535	69.9	\$5,448
Total	2,193	1,596	72.8	\$5,079	2,193	1,559	71.1	\$6,012

Note: Cells with values smaller than 5 are marked "n/a" to protect the privacy of cohort members.

Employment Services was the most common industry of employment for program exiters working at 4Q2006, followed by Elementary and Secondary School (Table 5). Employment Services usually include temporary employment agencies that many employers use to find workers to try out first before hiring permanently. Employers also use Temporary Employment Agencies to augment staff during high demand periods without being saddled with paying benefits for permanent staff. We expect individuals who are continuously employed over the study period to move out of temporary employment and into an industry sector with longer term employment. Participants employed in the General Medical and Surgical Hospitals sector had the highest median earnings with \$9,156.

Table 5. Top 10 Industries of Employment for All Working in Training Group in 4Q2006

Industry of Employment	N Working	Median Earnings	NAICS Code
Employment Services	226	\$4,041	5613
Elementary and Secondary Schools	71	\$3,724	6111
General Medical and Surgical Hospitals	54	\$9,156	6221
Cut and Sew Apparel Manufacturing	52	\$4,673	3152
General Freight Trucking	48	\$7,182	4841
Motor Vehicle Parts Manufacturing	47	\$6,664	3363
Offices of Physicians	46	\$4,619	6211
Building Equipment Contractors	36	\$5,383	2382
Home Health Care Services	32	\$1,791	6216
Other General Merchandise Stores	30	\$3,732	4529

Table 6 shows the top ten industries of employment for all working in 4Q2008. Employment Services was the most common industry sector of employment, followed by Elementary and Secondary Schools. Participants employed in the Semiconductor and Other Electronic Component Manufacturing sector had the highest median earnings with \$9,418, followed by General Medical and Surgical Hospitals with \$9,211.

Table 6. Top 10 Industries of Employment for All Working in Training Group in 4Q2008

Industry of Employment	N Working	Median Earnings	NAICS Code
Employment Services	115	\$4,313	5613
Elementary and Secondary Schools	93	\$4,550	6111
General Medical and Surgical Hospitals	58	\$9,211	6221
Motor Vehicle Parts Manufacturing	51	\$5,016	3363
Business Support Services	39	\$5,417	5614
Semiconductor and Other Electronic Component Manufacturing	38	\$9,418	3344
Building Equipment Contractors	37	\$6,450	2382
Home Health Care Services	36	\$3,203	6216
Offices of Physicians	34	\$6,408	6211
Executive, Legislative, and Other General Government Support	32	\$6,413	9211

B. Individuals Found Working in Both Study Periods

The first part of this study looked at a snapshot of labor market outcomes for TAA participants in the Training group who exited in PY 2005. This part of the study is designed to more closely examine the outcomes associated with continued employment. Labor market data for participants who were found working in 4Q2006 and also found working in the 4th quarter of 2007 were analyzed.

Male participants showed the highest employment retention between study periods at 88.9 percent (Table 7). Male participants had the highest median earnings at 4Q2008 with \$7,641. Males also had the highest earnings gains over the study period, earning \$1,600 more in 4Q2008 than in 4Q2006. Overall employment retention for the cohort over the study period was 86.7 percent, with median earnings of \$6,066 and earnings gains of \$987.

Table 7. Employment Retention and Earnings Gains for Training Group by Gender

Gender	N	Working in 4Q2006			Working in 4Q2006 and 4Q2008			Earnings Gains/ (Losses)
		N Working	% Working	Median Earnings	N Working	% Working	Median Earnings	
Male	1,071	813	75.9	\$6,041	723	88.9	\$7,641	\$1,600
Female	1,121	783	69.9	\$4,466	661	84.4	\$5,174	\$708
Total	2,193	1,596	72.8	\$5,079	1,384	86.7	\$6,066	\$987

Table 8 shows that, excluding Unknowns and groups with cell sizes too small to display, American Indian participants had the highest employment retention at 95.3 percent. Whites also had the highest earnings gains over the period at \$1,975. Blacks had the second highest earnings gains over the period at \$1,965.

Table 8. Employment Retention and Earnings Gains by Ethnicity

Ethnicity	N	Working in 4Q2006			Working in 4Q2006 and 4Q2008			Earnings Gains/ (Losses)
		N Working	% Working	Median Earnings	N Working	% Working	Median Earnings	
Hawaiian Native or Pacific Islander	n/a	n/a	75.0	\$6,795	n/a	100.0	\$11,947	\$5,152
Unknown	11	7	63.6	\$5,387	7	100.0	\$7,051	\$1,664
Asian	90	65	72.2	\$5,480	55	84.6	\$6,426	\$946
Black	117	91	77.8	\$6,702	76	83.5	\$8,667	\$1,965
American Indian	119	86	72.3	\$5,233	82	95.3	\$5,561	\$328
White	363	258	71.1	\$7,559	228	88.4	\$9,534	\$1,975
Hispanic	1,489	1,086	72.9	\$4,640	933	85.9	\$5,540	\$900
Total	2,193	1,596	72.8	\$5,079	1,384	86.7	\$6,066	\$987

Note: Cells with values smaller than 5 are marked "n/a" to protect the privacy of cohort members.

Table 9 shows employment retention and earnings gains by service received. Participants receiving Job Search services had the highest employment retention with 100 percent, followed by participants receiving Occupational/Vocational services at 87.0 percent. Participants receiving Basic Education Skill services had the highest earnings gains with \$1,397, although that group is small in comparison to the others.

Table 9. Employment Retention and Earnings Gains by Service Received

Service Received	N	Working in 4Q2006			Working in 4Q2006 and 4Q2008			Earnings Gains/ (Losses)
		N Working	% Working	Median Earnings	N Working	% Working	Median Earnings	
ES Participants	n/a	n/a	100.0	\$8,018	n/a	100.0	\$8,472	\$454
Basic Education Skill	19	12	63.2	\$3,700	9	75.0	\$5,097	\$1,397
Job Search	19	6	31.6	\$10,168	6	100.0	\$11,246	\$1,078
ESL	174	118	67.8	\$4,084	99	83.9	\$4,902	\$818
Occupational/ Vocational	1,979	1,458	73.7	\$5,235	1,268	87.0	\$6,204	\$969
Total	2,193	1,596	72.8	\$5,079	1,384	86.7	\$6,066	\$987

Note: Cells with values smaller than 5 are marked "n/a" to protect the privacy of cohort members.

When looking at LWDA with more than 100 participants, exiters from the Alamo LWDA had the highest employment retention of the cohort at 89.0 percent (Table 10). Participants from Dallas LWDA had the highest median earnings at 4Q2008 with \$6,809. Participants from Cameron County LWDA also had the highest median earnings gains over the study period with \$1,776, followed most closely by Dallas LWDA exiters with earnings gains of \$1,537.

Table 10. Employment Retention and Earnings Gains by LWDA

LWDA	N	Working in 4Q2006			Working in 4Q2006 and 4Q2008			Earnings Gains/ (Losses)
		N Working	% Working	Median Earnings	N Working	% Working	Median Earnings	
Panhandle	n/a	n/a	100.0	\$3,132	n/a	100.0	\$10,220	\$7,088
West Central	n/a	n/a	100.0	\$6,694	n/a	100.0	\$6,711	\$17
North East Texas	n/a	n/a	100.0	\$7,415	n/a	100.0	\$12,404	\$4,989
Central Texas	n/a	n/a	100.0	\$7,127	n/a	66.7	\$8,256	\$1,129
Concho Valley	n/a	n/a	75.0	\$6,041	n/a	66.7	\$10,321	\$4,280
North Texas	5	5	100.0	\$6,252	n/a	80.0	\$8,618	\$2,366
Heart of Texas	9	8	88.9	\$5,949	8	100.0	\$7,193	\$1,244
South East Texas	14	12	85.7	\$11,811	9	75.0	\$14,477	\$2,666
Lower Rio Grande Valley	17	11	64.7	\$4,122	10	90.9	\$5,243	\$1,121
East Texas	19	15	79.0	\$7,904	14	93.3	\$10,700	\$2,796
South Plains	23	18	78.3	\$5,991	18	100.0	\$8,294	\$2,303
Rural Capital	27	21	77.8	\$7,352	20	95.2	\$7,604	\$252
Capital Area	29	17	58.6	\$6,929	15	88.2	\$9,843	\$2,914
Unknown	29	7	24.1	\$9,104	7	100.0	\$9,427	\$323
Gulf Coast	46	28	60.9	\$9,744	24	85.7	\$8,307	(\$1,437)
Texoma	67	45	67.2	\$7,150	40	88.9	\$8,936	\$1,786
Deep East Texas	75	52	69.3	\$7,753	49	94.2	\$9,913	\$2,160
North Central	78	64	82.1	\$7,991	56	87.5	\$8,538	\$547
Dallas	113	84	74.3	\$5,272	66	78.6	\$6,809	\$1,537
Tarrant County	154	112	72.7	\$4,828	91	81.3	\$6,246	\$1,418
Cameron County	241	201	83.4	\$4,120	178	88.6	\$5,896	\$1,776
Alamo	466	355	76.2	\$5,052	316	89.0	\$5,591	\$539
Upper Rio Grande	765	529	69.2	\$4,607	450	85.1	\$5,476	\$869
Total	2,193	1,596	72.8	\$5,079	1,384	86.7	\$6,066	\$987

Note: Cells with values smaller than 5 are marked "n/a" to protect the privacy of cohort members.

Table 11 shows the top ten industries of employment for program participants employed at 4Q2006 and in 4Q2008. Employment Services was the most common industry of employment, followed by Elementary and Secondary Schools. Participants employed in the Semiconductor and Other Electronic Component Manufacturing sector had the highest median earnings with \$9,270.

Table 11. Top 10 Industries of Employment for Participants Working in 4Q2006 and 4Q2008

Industry of Employment	N Working	Median Earnings	NAICS Code
Employment Services	102	\$4,541	5613
Elementary and Secondary Schools	76	\$4,726	6111
General Medical and Surgical Hospitals	53	\$9,118	6221
Motor Vehicle Parts Manufacturing	48	\$5,067	3363
Semiconductor and Other Electronic Component Manufacturing	37	\$9,270	3344
Building Equipment Contractors	36	\$6,480	2382
Business Support Services	35	\$5,417	5614
Home Health Care Services	31	\$4,105	6216
Offices of Physicians	30	\$6,584	6211
Executive, Legislative, and Other General Government Support	30	\$6,696	9211

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