

**Choices
2003-2004 Exit Cohort
5-Year Longitudinal Study**

Methodology

The Labor Market and Career Information (LMCI) department of the Texas Workforce Commission (TWC) used 83,936 archived seed records. This was comprised of Choices participants who exited the program between October 1, 2003 and September 30, 2004.¹

The seed records were linked to TWC Unemployment Insurance (UI) wage records for the 4th quarter of 2004 to determine employment and earnings (baseline measure, 4Q2004). For the longitudinal snapshot, the seed records were linked to the UI wage records for the 4th quarter of 2008 (4Q2008) to determine delayed or long-term program results. Additional employment and earnings linkages were performed with the U.S. Department of Defense (DOD), the U.S. Office of Personnel Management (OPM), and the U.S. Postal Service (USPS). 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. Cohort members who were found to be deceased during the target quarters were excluded from this study. Exclusions from supplemental linkages resulted in 83,102 usable records retained for analysis.

For this report, only post-exit labor market outcomes were compared from the two study periods to ensure that comparable data are being used. For example, the initial snapshot of this cohort (4Q2004) did not include earnings data from the federal agencies to which the records were linked because the earnings data received were not compatible with state measures. For the five-year snapshot, taken at 4Q2008, the earnings data received from federal databases were compatible; however, these data will not be included in this report.

There are two distinct groups of Choices participants, Adults and Teens. Adults are participants who were 20 and above in Program Year 2004 (PY 2004). Teens are below 20 years of age and have less than a high school education. Participants less than 20 years old who possess a high school education or greater are counted as Adults. Table 1 shows a breakdown of the seed records by type of participant unduplicated by SSN. The majority of Choices participants served were Adults.

Table 1. Usable Records by Type of Participant

¹ Please reference the *Choices* chapter of the [ASALFS Final Report 2004](#) for more information regarding the seed records used for this report.

Type of Participant	N
Teen	2,681
Adult	80,421
Total	83,102

In both study periods, earnings were summed across unique Social Security Numbers (SSN). The industry sector 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

Adults

Table 2 shows that Adult females had the highest employment in 4Q2004 with 51.4 percent employed. Males had the highest median quarterly earnings with \$3,264. Overall employment for the Adult cohort was 51.2 percent and overall median quarterly earnings were \$2,329 in 4Q2004.

In the 4Q2008, Adult females had the highest employment rate at 52.2 percent. However, male exiters had the highest median earnings in the same time period, with \$5,247. Overall employment for the cohort in 4Q2008 was 51.6 percent, with median quarterly earnings of \$3,615. Overall employment and median quarterly earnings were both up at the five year point.

Table 2. Employment and Earnings by Gender

All Working in 4Q2004				
Gender	N	N Working	% Working	Median Earnings
Unknown	8	n/a	25.0	\$87
Male	10,566	5,276	49.9	\$3,264
Female	69,847	35,871	51.4	\$2,231
Total	80,421	41,149	51.2	\$2,329
All Working in 4Q2008				
Gender	N	N Working	% Working	Median Earnings
Unknown	8	n/a	25.0	\$9,207
Male	10,566	4,966	47.0	\$5,247
Female	69,847	36,488	52.2	\$3,464
Total	80,421	41,456	51.6	\$3,615
Note: Cells with values smaller than 5 are marked "n/a" to protect the privacy of cohort members.				

In 2004, Blacks had the highest employment at 54.1 percent, followed by Hawaiian Native or Pacific Islanders with 53.1 percent employed (Table 3). Hawaiian Native or Pacific Islanders had the highest median quarterly earnings at \$3,096 followed by Asians with \$2,925.

Blacks had the highest employment in 4Q2008 at 56.2 percent, followed by Hispanics with 51.4 percent employment. American Indians posted the highest median quarterly earnings in 4Q2008 at \$4,483 while Asians showed the second highest median earnings at \$4,411.

Table 3. Employment and Earnings by Ethnicity

All Working in 4Q2004				
Ethnicity	N	N Working	% Working	Median Earnings
Other/Unknown	28	11	39.3	\$3,096
Hawaiian Native or Pacific Islander	98	52	53.1	\$1,301
American Indian	518	252	48.7	\$2,461
Asian	521	209	40.1	\$2,925
White	16,983	8,048	47.4	\$2,361
Black	25,791	13,954	54.1	\$2,292
Hispanic	36,482	18,623	51.1	\$2,340
Total	80,421	41,149	51.2	\$2,329
All Working in 4Q2008				
Ethnicity	N	N Working	% Working	Median Earnings
Other/Unknown	28	11	39.3	\$3,095
Hawaiian Native or Pacific Islander	98	44	44.9	\$2,882
American Indian	518	199	38.4	\$4,483
Asian	521	213	40.9	\$4,411
White	16,983	7,744	45.6	\$3,747
Black	25,791	14,493	56.2	\$3,595
Hispanic	36,482	18,752	51.4	\$3,563
Total	80,421	41,456	51.6	\$3,615

Table 4 shows employment and earnings for Choices adults by activity for 4Q2004 and 4Q2008. In 2004, adults in the Employment activity had the highest employment with 51.2 percent employed. Participants in the Employment activity also had the highest median quarterly earnings with \$2,334.

Adults in the Training activity had the highest employment percentage in 4Q2008 at 56.8 percent, as well as the highest median quarterly earnings at \$4,627. All activity groups experienced greater earnings at the five-year mark, which may be anecdotal evidence of the wage premium associated with staying employed over time.

Table 4. Employment and Earnings by Activity

All Working in 4Q2004				
Activity	N	N Working	% Working	Median Earnings
Education	343	167	48.7	\$1,309
Training	451	229	50.8	\$2,129
Employment	79,627	40,753	51.2	\$2,334
Total	80,421	41,149	51.2	\$2,329
All Working in 4Q2008				
Activity	N	N Working	% Working	Median Earnings
Education	343	177	51.6	\$2,828
Training	451	256	56.8	\$4,627
Employment	79,627	41,023	51.5	\$3,615
Total	80,421	41,456	51.6	\$3,615

Table 5 shows the number of Adult Choices participants involved in Core, Non-Core, and Core (with Limit) activities. The majority of Choices participants were involved in Core (with Limit) activities. Choices Core activities include job-search assistance, unsubsidized and subsidized employment, on-the-job training, and work experience. Non-core activities are limited. They include job-skills training, educational services leading toward a GED certificate, and parental skills training (Texas Administrative Code §811.25). Those participating in Core activities had the highest employment and earnings in the 4th quarter of 2004 at 59.8 percent, as well as having the highest median quarterly earnings at \$2,823. In 4Q2008, Core service recipients again had the highest employment with 57.0 percent working with median quarterly earnings of \$4,159. Core activities seem to be correlated to higher employment and earnings in the adult cohort.

Table 5. Employment and Earnings by Service Type

All Working in 4Q2004				
Type of Service	N	N Working	% Working	Median Earnings
Non Core	235	128	54.5	\$1,448
Core	11,360	6,796	59.8	\$2,823
Core (with Limit)	68,826	34,225	49.7	\$2,247
Total	80,421	41,149	51.2	\$2,329
All Working in 4Q2008				
Type of Service	N	N Working	% Working	Median Earnings
Non Core	235	129	54.9	\$3,275
Core	11,360	6,475	57.0	\$4,159
Core (with Limit)	68,826	34,852	50.6	\$3,524
Total	80,421	41,456	51.6	\$3,615

Table 6 shows employment and earnings by Local Workforce Development Area (LWDA). Heart of Texas LWDA showed the highest employment in 4Q2004 with 58.5 percent employed. Heart of Texas LWDA again had the highest employment in 4Q2008 with 59.0 percent employed. North Central LWDA has the highest median quarterly earnings in 4Q2004 with \$2,766. Tarrant County LWDA had the highest median quarterly earnings in 4Q2008 at \$4,173.

Table 6. Employment and Earnings by LWDA

LWDA	N	All Working in 4Q2004			All Working in 4Q2008			
		N Working	% Working	Median Earnings	N	N Working	% Working	Median Earnings
Texoma	408	208	51.0	\$1,984	408	166	40.7	\$3,005
Concho Valley	518	288	55.6	\$1,996	518	279	53.9	\$3,525
Golden Crescent	718	354	49.3	\$2,152	718	377	52.5	\$3,263
North Texas	835	451	54.0	\$2,051	835	434	52.0	\$3,275
Brazos Valley	942	488	51.8	\$2,075	942	533	56.6	\$3,650
Rural Capital	1,077	594	55.2	\$2,635	1,077	573	53.2	\$3,901
South Texas	1,166	632	54.2	\$2,347	1,166	616	52.8	\$3,450
Middle Rio Grande	1,166	524	44.9	\$1,848	1,166	550	47.2	\$2,976
Central Texas	1,268	669	52.8	\$2,234	1,268	604	47.6	\$3,233
North East Texas	1,280	627	49.0	\$1,812	1,280	614	48.0	\$2,949
Heart of Texas	1,401	820	58.5	\$2,050	1,401	827	59.0	\$3,399
Panhandle	1,425	734	51.5	\$2,218	1,425	741	52.0	\$3,473
West Central	1,585	849	53.6	\$2,071	1,585	879	55.5	\$3,284
South East Texas	1,600	799	49.9	\$2,042	1,600	858	53.6	\$2,833
Permian Basin	1,818	1,024	56.3	\$2,127	1,818	1,023	56.3	\$3,639
South Plains	1,830	1,051	57.4	\$2,079	1,830	1,076	58.8	\$3,158
Capital Area	1,841	1,068	58.0	\$2,682	1,841	997	54.2	\$4,100
Deep East Texas	1,953	978	50.1	\$2,265	1,953	985	50.4	\$3,371
Cameron County	2,115	1,096	51.8	\$2,284	2,115	1,084	51.3	\$3,561
Coastal Bend	2,738	1,468	53.6	\$1,918	2,738	1,474	53.8	\$3,128
North Central	2,781	1,449	52.1	\$2,766	2,781	1,402	50.4	\$4,064
East Texas	2,955	1,645	55.7	\$2,286	2,955	1,608	54.4	\$3,451
Tarrant County	5,135	2,655	51.7	\$2,717	5,135	2,659	51.8	\$4,173
Upper Rio Grande	5,209	2,448	47.0	\$2,433	5,209	2,402	46.1	\$3,563
Lower Rio Grande Valley	6,290	3,026	48.1	\$2,257	6,290	3,064	48.7	\$3,493
Alamo	7,081	3,660	51.7	\$2,208	7,081	3,536	49.9	\$3,470
Dallas	9,247	4,595	49.7	\$2,699	9,247	4,781	51.7	\$4,138
Gulf Coast	14,039	6,949	49.5	\$2,464	14,039	7,314	52.1	\$3,901
Total	80,421	41,149	51.2	\$2,329	80,421	41,456	51.6	\$3,615

Table 7 shows the top ten industries of employment in 4Q2004 by 4-digit NAICS code. We see that Employment Services was the most common industry sector of employment in 4Q2004, followed by Limited-Service Eating Places. Those participants working in the Other General Merchandise Stores sector posted the highest median quarterly earnings in 4Q2004 at \$2,714.

Table 7. Top 10 Industries of Employment for Adults Working in 4Q2004

Industry Sector	N Working	Median Earnings	NAICS Code
Employment Services	4,173	\$1,710	5613
Limited-Service Eating Places	4,107	\$1,676	7222
Home Health Care Services	2,818	\$1,278	6216
Other General Merchandise Stores	1,833	\$2,714	4529
Full-Service Restaurants	1,713	\$1,656	7221
Nursing Care Facilities	1,700	\$2,682	6231
Elementary and Secondary Schools	1,420	\$2,655	6111
Business Support Services	1,203	\$2,357	5614
Gasoline Stations	1,125	\$2,466	4471
Grocery Stores	1,025	\$2,224	4451

Table 8 shows the top ten industries of employment for Adults working in 4Q2008. Replacing Employment Services at the top of the list was Limited-Service Eating Places, the second most common industry sector for those employed in 4Q2004. General Medical and Surgical Hospitals had the highest median quarterly earnings in 4Q2008 at \$6,110.

Table 8. Top 10 Industries of Employment for Adults Working in 4Q2008

Industry Sector	N Working	Median Earnings	NAICS Code
Limited-Service Eating Places	3,498	\$2,219	7222
Home Health Care Services	3,238	\$1,944	6216
Employment Services	3,216	\$2,621	5613
Elementary and Secondary Schools	1,857	\$3,919	6111
Nursing Care Facilities	1,817	\$3,589	6231
Other General Merchandise Stores	1,560	\$3,500	4529
Full-Service Restaurants	1,454	\$2,399	7221
Gasoline Stations	1,010	\$3,249	4471
General Medical and Surgical Hospitals	971	\$6,110	6221
Grocery Stores	939	\$3,082	4451

Teens

In the Choices program, adults and teens are counted separately. Table 9 shows employment and earnings by gender for Teen Choices participants during the study period. Females make up a large percentage of the teen cohort. Males had the higher employment percentage in 4Q2008 at 48.6 percent, and both groups showed a positive change in employment percentage between 4Q2004 and 4Q2008. Males had higher median earnings in the 4th quarter of 2008 at \$3,380 both genders showed earnings gains over the study period. Overall, teens had 41.4 percent employment in 4Q2004 with median quarterly earnings of \$1,369 and 51.3 percent employment in 4Q2008 with median earnings of \$2,499.

Table 9. Employment and Earnings for Teens by Gender

All Working in 4Q2004				
Gender	N	N Working	% Working	Median Earnings
Unknown	n/a	n/a	n/a	n/a
Male	177	86	48.6	\$2,336
Female	2,503	1,023	40.9	\$1,329
Total	2,681	1,109	41.4	\$1,369
All Working in 4Q2008				
Gender	N	N Working	% Working	Median Earnings
Unknown	n/a	n/a	n/a	n/a
Male	177	96	54.2	\$3,380
Female	2,503	1,279	51.1	\$2,457
Total	2,681	1,376	51.3	\$2,499
Note: Cells with values smaller than 5 are marked "n/a" to protect the privacy of cohort members.				

Table 10 shows employment and earnings by ethnicity. In 4Q2004, Blacks had the highest employment at 43.7 percent, excluding unknowns. Whites had the next highest employment at 41.3 percent. Asians had the highest median quarterly earnings at \$1,795 in 4Q2004.

Excluding unknowns, American Indians had the highest employment in 4Q2008 at 66.7 percent, and Asians had the highest median quarterly earnings in 4Q2008 at \$3,114. Care must be taken in generalizing from these results because the numbers in some cells are too small to yield statistically significant inferences about the groups from which they come.

Table 10. Employment and Earnings for Teens by Ethnicity

All Working in 4Q2004				
Ethnicity	N	N Working	% Working	Median Earnings
Other/Unknown	n/a	n/a	n/a	n/a
Hawaiian Native or Pacific Islander	n/a	n/a	n/a	n/a
Asian	8	n/a	37.5	\$1,795
American Indian	12	n/a	25.0	\$1,363
White	358	148	41.3	\$1,172
Black	792	346	43.7	\$1,075
Hispanic	1,508	608	40.3	\$1,569
Total	2,681	1,109	41.4	\$1,369
All Working in 4Q2008				
Ethnicity	N	N Working	% Working	Median Earnings
Other/Unknown	n/a	n/a	100.0	\$1,824
Hawaiian Native or Pacific Islander	n/a	n/a	100.0	\$2,200
Asian	8	n/a	25.0	\$3,114
American Indian	12	8	66.7	\$2,464
White	358	159	44.4	\$2,301
Black	792	439	55.4	\$2,201
Hispanic	1,508	765	50.7	\$2,655
Total	2,681	1,376	51.3	\$2,499
Note: Cells with values smaller than 5 are marked "n/a" to protect the privacy of cohort members.				

Table 11 shows employment and earnings for teens by activity for 4Q2004 and 4Q2008. In 2004, teens in the Employment activity had the highest employment at 43.2 percent, and Teens in the Training activity had the highest median quarterly earnings at \$2,169. Teens in the Training activity had the highest 4Q2008 employment percentage at 53.9 percent, as well as the highest median quarterly earnings in 4Q2008 at \$4,791 (Table 11). Participants in all activities experienced increased earnings over the study period.

Table 11. Employment and Earnings for Teens by Activity

All Working in 4Q2004				
Activity	N	N Working	% Working	Median Earnings
Training	13	n/a	30.8	\$2,169
Education	1,144	446	39.0	\$1,194
Employment	1,524	659	43.2	\$1,554
Total	2,681	1,109	41.4	\$1,369
All Working in 4Q2008				
Activity	N	N Working	% Working	Median Earnings
Training	13	7	53.9	\$4,791
Education	1,144	582	50.9	\$2,271
Employment	1,524	787	51.6	\$2,635
Total	2,681	1,376	51.3	\$2,499
Note: Cells with values smaller than 5 are marked "n/a" to protect the privacy of cohort members.				

Table 12 shows the number of Teen Choices participants involved in Core, Non-Core, and Core (with Limit) activities. A slightly higher percentage of Teen participants from this cohort were involved in Core (with Limit) activities. Those participating in Core activities had the highest employment in the 4th quarters of 2004 and 2008, with 66.7 percent and 62.2 percent working, respectively. Participants receiving Core services had the highest median quarterly earnings in 4Q2004 and 4Q2008, with \$1,711 and \$3,112. Core activities seem to be related to high employment and earnings in the teen portion of the cohort as well.

Table 12. Employment and Earnings for Teens by Service Type

All Working in 4Q2004				
Type of Service	N	N Working	% Working	Median Earnings
Core	180	120	66.7	\$1,711
Non Core	1,146	447	39.0	\$1,194
Core (with Limit)	1,355	542	40.0	\$1,526
Total	2,681	1,109	41.4	\$1,369
All Working in 4Q2008				
Type of Service	N	N Working	% Working	Median Earnings
Core	180	112	62.2	\$3,112
Non Core	1,146	584	51.0	\$2,247
Core (with Limit)	1,355	680	50.2	\$2,556
Total	2,681	1,376	51.3	\$2,499

Table 13 shows employment and earnings for teens by LWDA. In 4Q2004, North Texas LWDA had the highest employment at 61.4 percent. Cameron County LWDA had the highest median quarterly earnings with \$1,770. Brazos Valley LWDA showed the highest employment in 4Q2008 at 69.7 percent. Capital Area LWDA had the highest median quarterly earnings in 4Q2008 at \$3,747 followed by Texoma LWDA at \$3,120.

Table 13. Employment and Earnings for Teens by LWDA

LWDA	N	All Working in 4Q2004			All Working in 4Q2008			
		N Working	% Working	Median Earnings	N	N Working	% Working	Median Earnings
Concho Valley	15	6	40.0	\$1,317	15	6	40.0	\$1,725
Golden Crescent	20	9	45.0	\$1,649	20	9	45.0	\$2,753
Rural Capital	24	9	37.5	\$1,134	24	13	54.2	\$2,007
Texoma	26	11	42.3	\$820	26	14	53.9	\$3,120
Brazos Valley	33	11	33.3	\$1,035	33	23	69.7	\$2,057
Central Texas	39	16	41.0	\$1,252	39	19	48.7	\$2,293
South East Texas	42	19	45.2	\$1,332	42	25	59.5	\$1,183
North Texas	44	27	61.4	\$1,190	44	22	50.0	\$2,417
Panhandle	46	21	45.7	\$1,692	46	14	30.4	\$1,543
Deep East Texas	46	15	32.6	\$1,005	46	19	41.3	\$1,374
North East Texas	47	21	44.7	\$858	47	16	34.0	\$1,256
Middle Rio Grande	49	18	36.7	\$869	49	20	40.8	\$2,377
South Texas	50	22	44.0	\$1,679	50	31	62.0	\$2,093
West Central	57	25	43.9	\$1,640	57	29	50.9	\$2,153
Capital Area	60	31	51.7	\$1,481	60	41	68.3	\$3,747
Permian Basin	69	25	36.2	\$1,608	69	39	56.5	\$1,773
Heart of Texas	69	30	43.5	\$640	69	36	52.2	\$2,403
North Central	71	29	40.9	\$1,140	71	30	42.3	\$2,528
South Plains	78	40	51.3	\$1,445	78	53	68.0	\$2,390
East Texas	87	37	42.5	\$1,356	87	49	56.3	\$2,687
Coastal Bend	103	39	37.9	\$1,574	103	53	51.5	\$2,000
Cameron County	103	34	33.0	\$1,770	103	53	51.5	\$2,876
Tarrant County	160	74	46.3	\$1,706	160	87	54.4	\$2,553
Upper Rio Grande	175	75	42.9	\$1,306	175	84	48.0	\$3,092
Alamo	256	106	41.4	\$1,286	256	129	50.4	\$2,348
Dallas	271	123	45.4	\$1,131	271	146	53.9	\$2,997
Gulf Coast	314	117	37.3	\$1,348	314	169	53.8	\$2,725
Lower Rio Grande Valley	327	119	36.4	\$1,442	327	147	45.0	\$3,019
Total	2,681	1,109	41.4	\$1,369	2,681	1,376	51.3	\$2,499

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

Table 14 shows the top ten industries of employment for teens in 4Q2004. Limited-Service Eating Places was the most common industry sector of employment with median earnings of \$1,227. Those working in the Grocery Stores sector posted the highest median quarterly earnings at \$1,885.

Table 14. Top 10 Industries of Employment for Teens Working in 4Q2004

Industry Sector	N Working	Median Earnings	NAICS Code
Limited-Service Eating Places	303	\$1,217	7222
Employment Services	84	\$623	5613
Full-Service Restaurants	82	\$1,030	7221
Other General Merchandise Stores	70	\$1,437	4529
Grocery Stores	44	\$1,885	4451
Gasoline Stations	43	\$1,713	4471
Business Support Services	33	\$1,005	5614
Home Health Care Services	31	\$985	6216
Department Stores	30	\$862	4521
Child Day Care Services	27	\$1,662	6244

Limited-Service Eating Places remained the top industry sector five years later at the longitudinal snapshot, with median earnings of \$1,957 (Table 15). Those working in the Offices of Physicians sector had the highest median quarterly earnings in 4Q2008 at \$4,393.

Table 15. Top 10 Industries of Employment for Teens Working in 4Q2008

Industry Sector	N Working	Median Earnings	NAICS Code
Limited-Service Eating Places	205	\$1,957	7222
Employment Services	101	\$1,800	5613
Home Health Care Services	93	\$1,676	6216
Other General Merchandise Stores	75	\$2,437	4529
Full-Service Restaurants	59	\$2,096	7221
Business Support Services	54	\$3,514	5614
Grocery Stores	46	\$1,653	4451
Nursing Care Facilities	46	\$2,400	6231
Gasoline Stations	43	\$2,676	4471
Offices of Physicians	33	\$4,393	6211

References

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

Temporary Assistance for Needy Families Employment and Training.
<http://www.twc.state.tx.us/welref/wrchoices.html>

Temporary Assistance for Needy Families Employment and Training (Choices)
Guidelines and Rules. <http://www.twc.state.tx.us/welref/wrchoices.html#rules>

Texas TANF Work Verification Plan. http://www.twc.state.tx.us/welref/tanf_workver_plan.pdf

United States Department of Health and Human Services. <http://www.hhs.gov/>