

Texas Higher Education Coordinating Board
2003-2004 Texas Public Postsecondary Education Exit Cohorts
Five-year Follow-up Study

The Texas legislature mandated the development of a workforce evaluation system maintained by the Texas Workforce Commission (TWC). Texas Labor Code (Chapter 302, Subchapter E) specifies the structure and the use of the follow-up system. This system should be used by TWC, Texas Workforce Investment Council (TWIC), local workforce development boards, institution boards, the Texas Higher Education Coordinating Board (THECB), the Texas Education Agency (TEA), and other agencies “in evaluating the labor market success and effectiveness of workforce development in this state” (§302.086).

The data included in the system should come from the TWC’s Unemployment Insurance (UI) wage records and the student follow-up system available from THECB (§302.081). In §302.082 the Code specifies that:

“(b) Evaluation data in the system must include:

- (1) placement rates;
- (2) wages paid;
- (3) retention in employment statistics;
- (4) the number of education and training-related placements; and
- (5) other appropriate factors, including public welfare dependency and

the pursuit of additional education.”

THECB should use the evaluation system to (§302.084)

“(1) evaluate the effectiveness of workforce education;

(2) determine whether a public or private workforce education program is effective in placing persons who successfully complete the program in jobs related to the persons' training; and

(3) determine whether to continue, expand, or terminate a program established under Section 61.051, Education Code.”

TWIC and the development boards “shall use the information developed under this subchapter and other information to determine whether a specific workforce training and services program administered by or funded by the local board is effective and whether to continue the training and services program.” (§302.085)

Methodology

The methodology used is identical with the one used for one-year report, with the addition of 3-year follow-up outcomes. The 2003-2004 cohort was revisited again after 5 years, for educational outcomes during Fall 2008 and employment during the 4th quarter of 2008. In addition, graduation and enrollment in the five-year period is examined. The data sources are similar as those for one-year and three-year reports: THECB’s CBM reports, TWC UI wage records, and national databases including Office of Personnel Management, United States Postal Service (USPS) and military records from the Department of Defense (DoD).

In the one-year follow-up study published in 2005, the exit cohort was divided in graduates and leavers, with leavers being defined as former students who did not graduate and did not return at the same institution to enroll the following fall. The leavers had two subgroups: transfers – former students that did not graduate but enrolled at another institution and (true) leavers – former students that did not graduate and did not enroll in any institution of higher education in Texas. For the 2005 report the two subgroups were analyzed together under the label “leavers”. However, for the three-year longitudinal study published in 2006 and this five-year longitudinal report, they are analyzed separately, transfers and leavers, as their paths may be different in the long term.

A. Community and Technical Colleges

There are 50 community college districts in Texas, the Texas State Technical College System with four campuses, and the Texas State University System-Lamar with three (technical college) campuses.

Seed Records

For fiscal year (FY) 2004 a total of 746,554 former students enrolled in CTC institutions were included in the analysis. Five years later, about 64% of the cohort (478,434 individuals) was found working and 15% (108,712 individuals) were still enrolled in a postsecondary institution. About 32% were not located either in the higher education databases or in the TWC’s Unemployment Insurance (UI) wage records. Table 1a shows a breakdown of the outcomes by student 2004 exit status.

Table 1a. Seed Records by Exit Status

Exit Status	N	% of Cohort	All Working	% of All Working	All Enrolled	% of All Enrolled	Not Located	% Not Located
Graduates	49,248	6.60%	36,134	73.37%	7,159	14.54%	11,576	23.51%
Transfers	190,224	25.48%	136,297	71.65%	49,068	25.79%	37,777	19.86%
Leavers	507,082	67.92%	306,003	60.35%	52,485	10.35%	186,001	36.68%
Total	746,554	100%	478,434	64.09%	108,712	14.56%	235,354	31.53%

Retention in Employment

The data in Table 2a shows that about 77% of the individuals employed in the 4th quarter of 2004 are still employed in the 4th quarter of 2008 and 83% of those employed in 2006 are still employed in 2008.

Tables 3a and 4a show the top ten industries by retention rate by 2-digit NAICS code. The government, education services and utilities are the highest retainers.

Table 2a. Retention in employment

Group	Total	Percent Employed 2004	Percent Employed 2006	Percent Employed 2008	Percent Employed 2008	Retained Employed '04-'08	Retained Employed '06-'08	Percent Retained Employed '04-'08	Percent Retained Employed '06-'08
Female	411,999	65.51	66.87	271,928	66.00	210,204	230,022	77.89	83.49
Male	334,555	63.27	64.30	206,506	61.73	159,068	175,025	75.15	81.36
White	394,183	64.05	64.46	247,159	62.70	188,229	206,526	74.55	81.29
Black	93,877	67.11	70.40	63,626	67.78	50,272	55,185	79.79	83.50
Hispanic	197,847	67.60	69.81	136,125	68.80	108,329	117,880	81.00	85.35
Asian	31,291	53.48	55.30	17,189	54.93	11,636	13,612	69.54	78.66
Native Amer.	3,817	60.34	59.44	2,138	56.01	1,645	1,789	71.43	78.85
International	11,071	42.69	42.87	4,558	41.17	3,136	3,612	66.36	76.11
Unknown	14,468	59.08	55.56	7,639	52.80	6,025	6,443	70.48	80.15
Total	746,554	64.50	65.72	478,434	64.09	369,272	405,047	76.68	82.56

**Table 3a. Top 10 Industries with the Highest 5-year Employment Retention Rate
by 2-digit NAICS**

Industry Name	Employed 2004	Employed 2008	Percent Retained Employed 0408
Government	30,823	25,688	83.34
Educational Services	52,114	41,905	80.41
Utilities	1,899	1,519	79.99
Finance & Insurance	20,423	16,191	79.28
Health Care & Social Assistance	76,453	60,578	79.24
Manufacturing	3,512	2,778	79.10
Transportation & Warehousing	3,483	2,702	77.58
Retail Trade	74,797	57,576	76.97
Management of Companies & Enterprises	575	440	76.52
Real Estate & Rental & Leasing	7,745	5,868	75.77

**Table 4a. Top 10 Industries with the Highest 3-year Employment Retention Rate
by 2-digit NAICS**

Industry Name	Employed 2006	Employed 2008	Percent Retained Employed '06-'08
Government	30,755	27,722	89.78
Educational Services	59,039	51,285	86.68
Utilities	1,999	1,741	86.19
Health Care & Social Assistance	78,315	67,732	85.98
Finance & Insurance	25,282	21,837	85.73
Manufacturing	21,080	18,008	85.43
Information	11,169	9,352	83.12
Transportation & Warehousing	3,295	2,738	82.97
Management of Companies & Enterprises	894	745	82.55
Wholesale Trade	15,845	13,236	82.53

In Table 5a, only those industries that employed more than 10 individuals were selected. Different branches of manufacturing are in the top industry retainers by 4-digit NAICS.

Table 5a. Top 10 Industries with the Highest 3-year Employment Retention Rate by 4-digit NAICS

Industry Name	Employed 2006	Employed 2008	Percent Retained Employed '06-'08
Spring and Wire Product Manufacturing	76	74	97.37
Apparel Accessories and Other Apparel Manufacturing	47	44	93.62
Other Transportation Equipment Manufacturing	30	28	93.33
Footwear Manufacturing	29	27	93.10
Railroad Rolling Stock Manufacturing	99	92	92.93
Internet Publishing and Broadcasting	62	60	91.94
Nonferrous Metal (except Aluminum) Production and Processing	58	53	91.38
Lime and Gypsum Product Manufacturing	45	42	91.11
Animal Aquaculture	11	10	90.91
Urban Transit Systems	448	406	90.63

Outcomes of Students by “Located/Not Located” Status

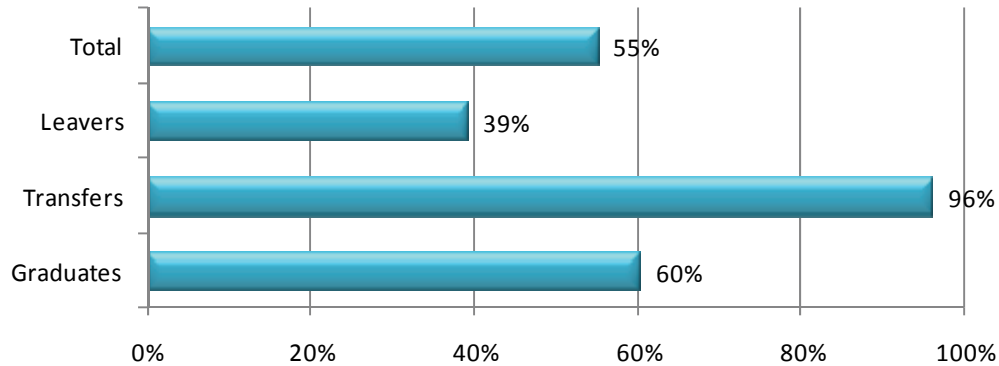
About 24% of the students (181,656) were not located as either employed or enrolled in fall 2004. In fall 2006 about 27% percent of the former students were not found and about 16% were not found either in 2004 or 2006. However, some of the students were found working or/and enrolled in fall 2008. Table 6a shows the outcomes for all categories. Students may be found working and/or enrolled in higher education in fall 2008, but also they may have been enrolled during 2004-2008 period, with or without graduating with an award.

Table 6a. Follow-up Outcomes by “Located/Not Located”

Group	Total	Employed 2008	% Employed 2008	Enrolled Fall 2008	% Enrolled Fall 2008	Enrolled during 5/3 years	% Enrolled during 5/3 years	Graduated during 5-3 years	% Graduated during 5/3 years
2004									
Not Located in 2004	181,656	57,507	31.66	15,742	8.67	49,067	27.01	7,308	4.02
Located in 2004	564,898	420,927	74.51	92,970	16.46	210,896	37.33	142,955	25.31
2006									
Not Located in 2006	201,503	44,428	22.05	9,951	4.94	46,792	23.22	15,113	7.50
Located in 2006	545,051	434,006	79.63	98,761	18.12	213,171	39.11	135,150	24.80
2008									
Not Located in 2008	235,354					54,436	23.13	28,809	12.24
Located in 2008	509,959	478,434	93.82			204,567	40.11	121,180	23.76
Not Located previously	117,905	17,004	14.42	4,392	3.73	21,479	18.22	1,531	1.30
Located prev.	628,649	461,430	73.40	104,320	16.59	238,484	37.94	148,732	23.66

Figure 1a shows that 55% of the total 2004 cohort either graduated with a degree or were enrolled without graduating, up eight percent from fall 2006 outcomes (47%).

Figure 1a. Enrollment/Graduation of 2004 Exiters during 2004-2008



Outcomes of Former Students between 2004 and 2008

Of the original 2004 cohort 6.2% were graduates with a degree and/or certificate, 25.6% were transfers to a 4-year institution, and 68% left their institutions without transferring or graduating. During the 3-years, between 2005 and 2007 these former students were found either enrolled or graduating, as shown in Tables 7a and 8a.

Table 7a. Follow-up Outcomes between 2004 and 2008 (graduation)

Status in 2005	Total	Did Graduate	% that did graduate	Did Not Graduate	% that did not graduate
Graduates	49,248	14,181	28.80	35,067	71.20
Transfers	190,224	113,086	59.45	77,138	40.55
Leavers	507,082	22,996	4.53	484,086	95.47
Total	746,554	150,263	20.13	596,291	79.87

Table 8a. Follow-up Outcomes between 2004 and 2008 (enrollment)

Status in 2005	Total	Enrolled	% Enrolled	Not Enrolled	% Not Enrolled
Graduates	49,248	15,475	31.42	33,773	68.58
Transfers	190,224	69,426	36.50	120,798	63.50
Leavers	507,082	175,062	34.52	332,020	65.48
Total	746,554	259,963	34.82	486,591	65.18

Outcomes of Former Students in Fall 2008

Figure 2a depicts the post-exit achievements by the type of degree /award earned during the five years. About 54% of the total degree earners work, down from 65% in 2006. Doctoral degree earners have a high percentage (51%) of “not located” in Texas, which suggest that they may have left the state. The highest wages in the 4th quarter of 2008 are for Bachelor’s degrees (when considering undergraduate degrees only), with a quarterly median wage of \$10,334. The doctoral degrees earners have the highest median wage in all categories.

Figure 2a. Follow-up Activities in the 4th Quarter of 2008 by the Type of Degree/Award Earned During the Five Years

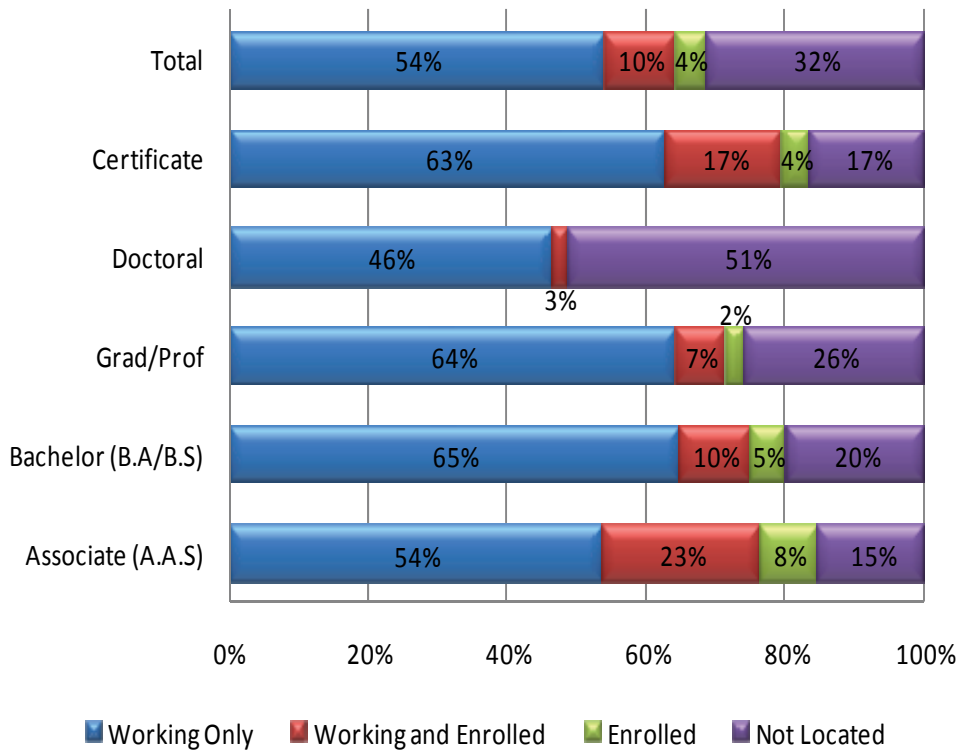


Figure 3a shows the outcomes by gender whereas Figure 4a shows by ethnicity. Even though females are more likely to work (66% vs 62% for males), males have a higher quarterly median wage at \$9,772 versus \$7,800 for females. The graduates earned more than the transfers and both of them earned more than leavers; there is a difference between graduates and leavers for males (graduates: \$11,037 transfers: \$9,356 leavers: \$9,791) and females (graduates: \$9,002 transfers: \$8,827 leavers: \$7,158). The difference in number of people in each ethnic group makes it difficult to estimate if the differences in wages are due to ethnicity or to cohort effect.

Figure 3a. Follow-up Activities in the 4th Quarter of 2008 by Gender (All Exitters)

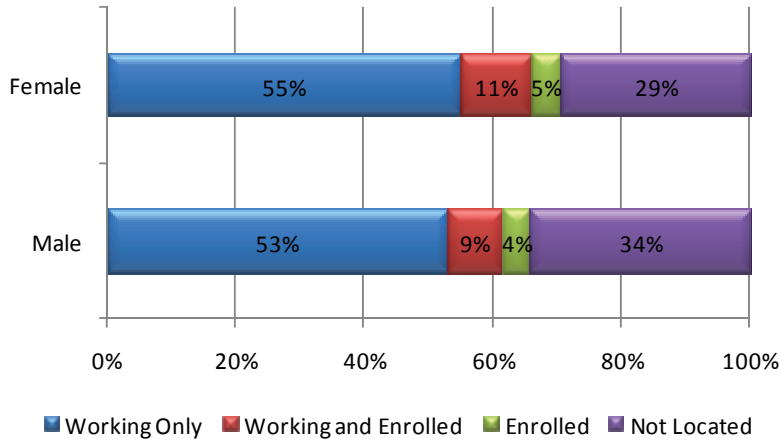


Figure 4a. Follow-up Activities in the 4th Quarter of 2008 by Ethnicity (All Exitters)

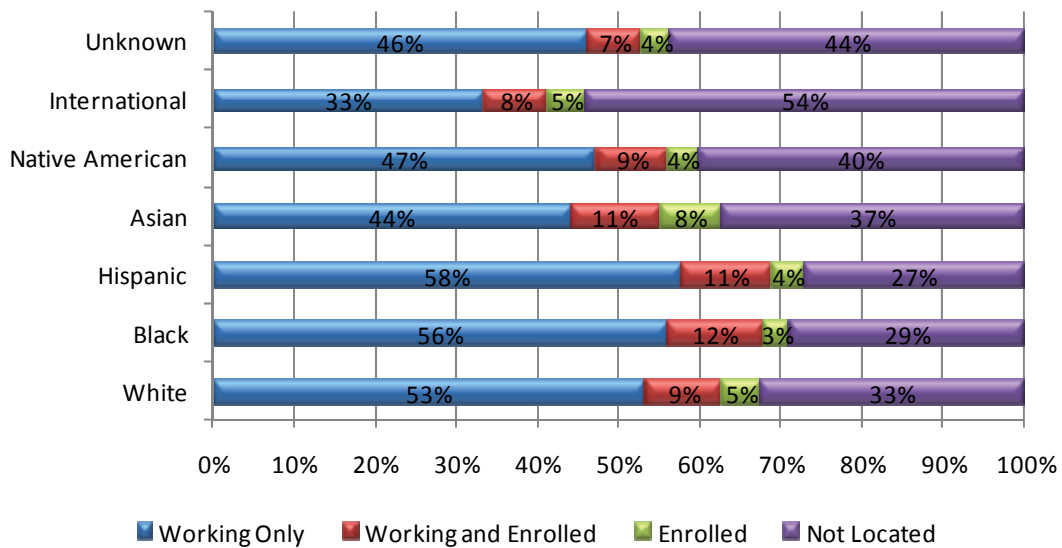


Figure 5a shows post-exit results for type of exiters as they were defined in 2004. The transfer students are more likely to be enrolled five years later; the graduates and leavers are more likely to work only or not to be located. The median income in the 4th quarter of 2008 for all those who were working was highest for graduates (\$9,749) and transfers (\$9,003). The leavers are more likely not to be found (37%) or to work for lower wages (\$8,231).

Figure 5a. Follow-up Activities in the 4th Quarter of 2008 by Type of Exiter as of 2004 (All Exiters)

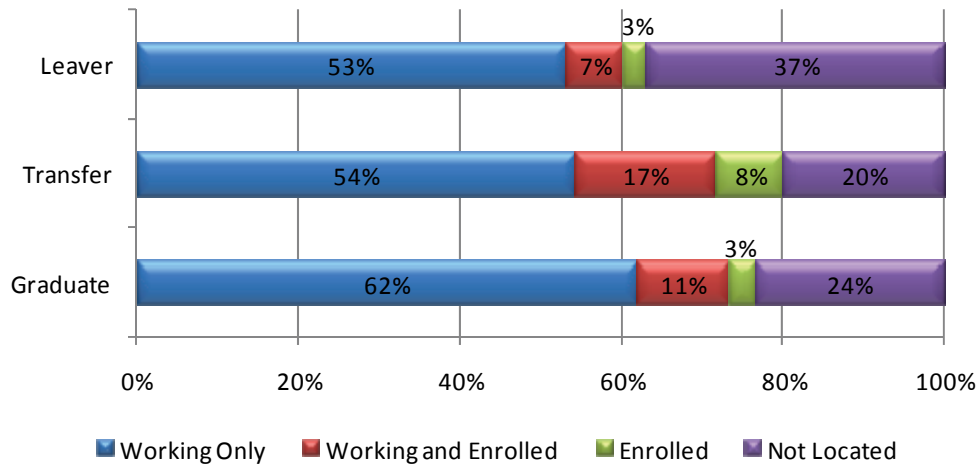


Table 9a shows the top 10 industries for employment in Fall 2008 for the 2004 community college exiters. Seventy percent of them are identical with the top 10 industries of employment in 2004.

Table 9a. Top 10 Most Common Industries for 2004 CTC Exiters Working in Fall 2008 by 4-digit NAICS codes

Industry	Employed	% of All Working
Elementary and Secondary Schools	47,433	10.05
General Medical and Surgical Hospitals	28,835	6.11
Executive, Legislative, and Other General Government Support	24,676	5.23
Employment Services	21,370	4.53
Full-Service Restaurants	14,247	3.02
Depository Credit Intermediation	10,096	2.14
Offices of Physicians	9,109	1.93
Limited-Service Eating Places	8,695	1.84
Home Health Care Services	8,481	1.80
Colleges, Universities, and Professional Schools	8,475	1.80

The exiters that were still enrolled in Fall 2007 were found mainly in universities (see Table 10a). However, the top 10 institutions for leavers were half community colleges (5 out of 10), whereas for graduates and transfers there are no community colleges in the top 10 preferred institutions.

Table 10a. Top 10 Institutions for 2004 Exiters Pursuing Additional Education in Fall 2008

Institution	Enrolled	% of All Enrolled
UNIVERSITY OF HOUSTON	3,698	3.40
UNIVERSITY OF NORTH TEXAS	3,472	3.19
HOUSTON COMMUNITY COLLEGE	3,122	2.87
TEXAS A&M UNIVERSITY	3,061	2.82
U. OF TEXAS AT ARLINGTON	3,060	2.81
TEXAS STATE UNIV - SAN MARCOS	2,900	2.67
AUSTIN COMMUNITY COLLEGE	2,601	2.39
U. OF TEXAS AT AUSTIN	2,584	2.38
U. OF TEXAS AT SAN ANTONIO	2,440	2.24
TEXAS TECH UNIVERSITY	2,135	1.96

About a quarter (24%) of 2004 CTC exiters still pursuing additional education were enrolled in occupationally specific majors, the most popular being nursing (see Table 11a).

Table 11a. Top 10 Majors for 2004 CTC Exiters Pursuing Additional Education in Fall 2008 By 4-digit 2000 CIP

Major	Enrolled	% of All Enrolled
Liberal Arts and Sciences, General Studies and	13,424	12.35
Nursing	8,518	7.84
Business Administration, Management and Operations	5,429	4.99
Multi-/Interdisciplinary Studies, Other	5,428	4.99
Undeclared	5,305	4.88
Criminal Justice and Corrections	4,587	4.22
Business/Commerce, General	2,596	2.39
Allied Health, Diagnostic, Intervention, and Treatment	2,351	2.16
Accounting and Related Services	2,281	2.10
Biology, General	2,220	2.04

**Table 12a. Type of Institution Preferred by 2004 CTC Exiters
that Continue Their Education in Fall 2008**

Category	Total Enrolled	CTC	Pct of Enrolled	University	Pct of Enrolled	HSC	Pct of Enrolled	For-Profit Institutions	Pct of Enrolled
Enrolled (All Exiters)	32,766	11,490	35.07	18,484	56.41	2,074	6.33	718	2.19
Both (All Exiters)	75,946	36,592	48.18	36,092	47.52	1,163	1.53	2,099	2.76
All Enrolled (All Exiters)	108,712	48,082	44.23	54,576	50.20	3,237	2.98	2,817	2.59
Enrolled (Graduates)	1,538	513	33.36	954	62.03	55	3.58	16	1.04
Both (Graduates)	5,621	2,483	44.17	2,930	52.13	106	1.89	102	1.81
All Enrolled (Graduates)	7,159	2,996	41.85	3,884	54.25	161	2.25	118	1.65
Enrolled (Transfer)	16,150	2,727	16.89	11,558	71.57	1,680	10.40	185	1.15
Both (Transfer)	32,918	9,442	28.68	22,103	67.15	820	2.49	553	1.68
All Enrolled (Transfer)	49,068	12,169	24.80	33,661	68.60	2,500	5.09	738	1.50
Enrolled (Leavers)	15,078	8,250	54.72	5,972	39.61	339	2.25	517	3.43
Both (Leavers)	37,407	24,667	65.94	11,059	29.56	237	0.63	1,444	3.86
All Enrolled (Leavers)	52,485	32,917	62.72	17,031	32.45	576	1.10	1,961	3.74

B. Universities and Health-Related Institutions

There are 35 public universities and nine health-related institutions with a statewide mission to provide undergraduate and graduate education in programs designed to address the education and training requirements of Texas.

Seed Records

For fiscal year (FY) 2004 a total of 240,772 former students enrolled in universities were included in the analysis. Five years later, about 65% of the cohort (156,237 individuals) was found working and almost 13% (31,993 individuals) were still enrolled in a postsecondary institution. About 31% were not located either in the higher education databases or in the TWC's Unemployment Insurance (UI) wage records. Table 1b shows a breakdown of the outcomes by student 2004 exit status.

Table 1b. Seed Records by Exit Status

Exit Status	N	% of Cohort	All Working	% of All Working	All Enrolled	% of All Enrolled	Not Located	% Not Located
Graduates	93,917	39%	59,545	63%	8,021	9%	32,205	34%
Transfers	40,553	17%	28,856	71	11,116	27%	8,133	20%
Leavers	106,302	44%	67,836	64%	12,856	12%	34,864	33%
Total	240,772	100%	156,237	65%	31,993	13%	75,202	31%

Retention in Employment

The data in Table 2a shows that about 76% of the individuals employed in the 4th quarter of 2004 are still employed in the 4th quarter of 2008 and 84% of those employed in 2006 are still employed in 2008.

Tables 3a and 4a show the top ten industries by retention rate by 2-digit NAICS code. The government, education services and finance and insurance are the highest retainers.

Table 2b. Retention in employment

Group	Total	Percent Employed 2004	Percent Employed 2006	Percent Employed 2008	Percent Employed 2008	Retained Employed '04-'08	Retained Employed '06-'08	Percent Retained Employed '04-'08	Percent Retained Employed '06-'08
Female	135,165	71.35	70.15	91,915	68.00	75,423	80,588	78.20	84.99
Male	105,607	64.91	63.45	64,322	60.91	50,040	54,822	73.00	81.82
White	133,273	69.18	66.80	85,249	63.97	68,383	73,399	74.17	82.45
Black	27,651	73.06	74.16	20,081	72.62	16,433	17,781	81.35	86.71
Hispanic	51,617	74.41	75.88	38,577	74.74	31,726	34,253	82.60	87.45
Asian	13,372	59.49	57.18	7,439	55.63	5,342	5,953	67.15	77.86
Native Amer.	1,321	62.91	60.26	768	58.14	605	642	72.80	80.65
International	11,173	35.44	29.97	2,875	25.73	2,010	2,319	50.76	69.24
Unknown	2,365	60.72	56.53	1,248	52.77	964	1,063	67.13	79.51
Total	240,772	68.52	67.21	156,237	64.89	125,463	135,410	76.04	83.67

**Table 3b. Top 10 Industries with the Highest 5-year Employment Retention Rate
by 2-digit NAICS**

Industry Name	Employed 2004	Employed 2008	Percent Retained Employed '04-'08
Educational Services	47,095	38,729	82.24
Government	5,309	4,337	81.69
Transportation & Warehousing	873	684	78.35
Finance & Insurance	8,031	6,196	77.15
Retail Trade	21,557	16,519	76.63
Real Estate & Rental & Leasing	2,647	2,015	76.12
Arts, Entertainment, & Recreation	2,514	1,886	75.02
Other Services, Ex. Government	2937	2,201	74.94
Accommodation & Food Services	13,655	10,215	74.81
Information	4,006	2,994	74.74

**Table 4b. Top 10 Industries with the Highest 3-year Employment Retention Rate
by 2-digit NAICS**

Industry Name	Employed 2006	Employed 2008	Percent Retained Employed '06-'08
Government	6,236	5,576	89.00
Educational Services	47,321	42,009	88.61
Finance & Insurance	9,662	8,291	84.89
Transportation & Warehousing	755	638	84.11
Information	4,100	3,438	83.10
Management of Companies & Enterprises	258	215	82.95
Retail Trade	10,427	8,666	82.74
Real Estate & Rental & Leasing	2,437	2,032	82.52
Health Care & Social Assistance	17,502	14,525	82.19
Manufacturing	662	548	82.02

In Tables 5b and 6b, only those industries that employed more than 10 individuals were selected. Different branches of manufacturing are in the top industry retainers by 4-digit NAICS.

Table 5b. Top 10 Industries with the Highest 3-year Employment Retention Rate by 4-digit NAICS

Industry Name	Employed 2004	Employed 2008	Percent Retained Employed '04-'08
Other Leather and Allied Product Manufacturing	16	15	93.75
Alumina and Aluminum Production and Processing	13	12	92.31
Administration of Economic Programs	151	139	92.05
Household Appliance Manufacturing	12	11	91.67
Gambling Industries	11	10	90.91
Death Care Services	72	64	88.89
Other Nonmetallic Mineral Product Manufacturing	56	49	87.50
Elementary and Secondary Schools	34,561	29,922	86.58
Highway, Street, and Bridge Construction	279	239	85.66
Administration of Human Resource Programs	350	298	85.14

**Table 6b. Top 10 Industries with the Highest 3-year Employment Retention Rate
by 4-digit NAICS**

Industry Name	Employed 2006	Employed 2008	Percent Retained Employed '06-'08
Glass and Glass Product Manufacturing	21	22	100.0
Alumina and Aluminum Production and Processing	18	18	100.0
Foundries	21	20	95.24
Death Care Services	79	74	93.67
Other Animal Production	15	14	93.33
Other Ambulatory Health Care Services	375	347	92.27
Fabric Mills	12	11	91.67
Other Leather and Allied Product Manufacturing	12	11	91.67
Waste Treatment and Disposal	60	57	91.67
Elementary and Secondary Schools	35,620	32,646	91.60

Outcomes of Former students by “Located/Not Located” Status

About 23% of the students (56,098) were not located as either employed or enrolled in fall 2004. In fall 2006 about 26% percent of the former students were not found and about 15% were not found either in 2004 or 2006. However, some of the students were found working or/and enrolled in fall 2008. Table 7b shows the outcomes for all categories. Students may be found working and/or enrolled in higher education in fall 2008, but also they may have been enrolled during 2004-2008 period, with or without graduating with an award.

Table 7b. Follow-up Outcomes by “Located/Not Located”

Group	Total	Employed 2008	% Employed 2008	Enrolled Fall08	% Enrolled Fall08	Enrolled during 5/3 years	% Enrolled during 5/3 years	Graduated during 5-3 years	% Graduated during 5/3 years
2004									
Not Located in 2004	56,098	19,103	34.05	4,439	7.91	10,637	18.96	5,144	9.17
Located in 2004	184,674	137,134	74.26	27,554	14.92	60,101	32.54	38,991	21.11
2006									
Not Located in 2006	62,521	12,619	20.18	2,771	4.43	10,153	16.24	5,309	8.49
Located in 2006	178,251	143,618	80.57	29,222	16.39	60,585	33.99	38,826	21.78
2008									
Not Located in 2008	75,202					12,696	16.88	10,312	13.71
Located in 2008	165,060	156,237	94.65	31,483	19.07	57,620	34.91	33,738	20.44
Not Located previously	35,834	4,997	13.94	1,216	3.39	3,779	10.55	1,661	4.64
Located prev.	204,938	151,240	73.80	30,777	15.02	66,959	32.67	42,474	20.73

Outcomes of Former students between 2004 and 2008

Of the original 2004 cohort 39% were graduates, 17% were transfers to another 4-year institution, and 44% left their institutions without transferring or graduating. During the 5-years, between 2004 and 2008 these former students were found either enrolled or graduating, as shown in Tables 8b and 9b.

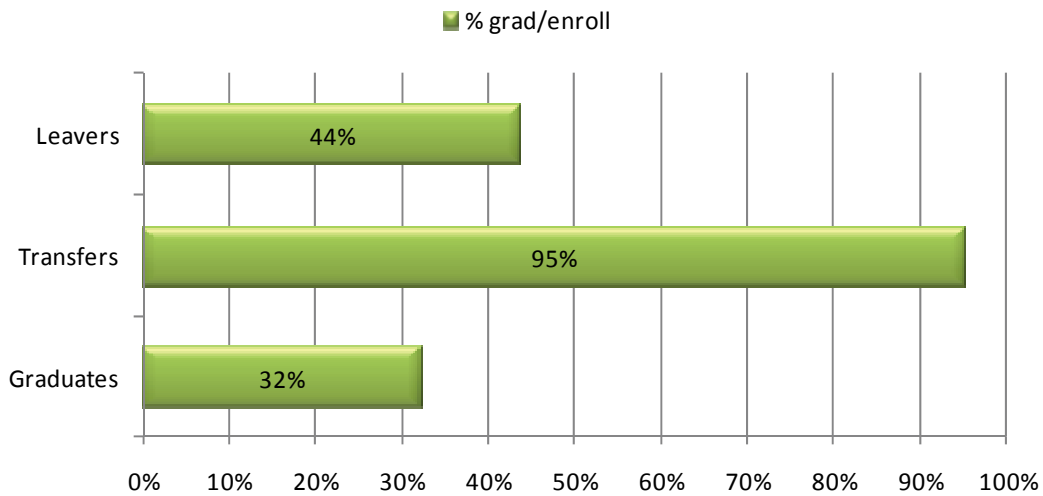
Table 8b. Follow-up Outcomes between 2004 and 2008 (graduation)

Status in 2004	Total	Did Graduate	% that did graduate	Did Not Graduate	% that did not graduate
Graduates	93,917	9,322	9.93	94,595	90.07
Transfers	40,553	20,592	50.78	19,961	49.22
Leavers	106,302	14,221	13.38	92,081	86.62
Total	240,772	44,135	18.33	196,637	81.67

Table 9b. Follow-up Outcomes between 2004 and 2008 (enrollment)

Status in 2004	Total	Enrolled	% Enrolled	Not Enrolled	% Not Enrolled
Graduates	93,917	20,681	22.02	73,236	77.98
Transfers	40,553	17,909	44.16	22,644	55.84
Leavers	106,302	32,148	30.24	74,154	69.76
Total	240,772	70,738	29.38	170,034	70.62

Figure 1b. Enrollment/Graduation of 2005 Exiters during 2004-2008



Outcomes of Former students in Fall 2008

Figure 2b depicts the post-exit achievements by the type of degree /award earned during the three years. Almost 72% of the degree earners work, with the exception of doctoral degree earners. A higher percentage of doctorate degrees earners (56%) are not found as they are more likely to move out of state. The highest wages in the 4th quarter of 2008 are for doctoral degrees, with a quarterly median wage of \$14,927. The doctoral degrees earners have the highest median wage in almost all categories.

Figure 2b. Follow-up Activities in the 4th Quarter of 2008 by the Type of Degree/Award Earned During the Five Years

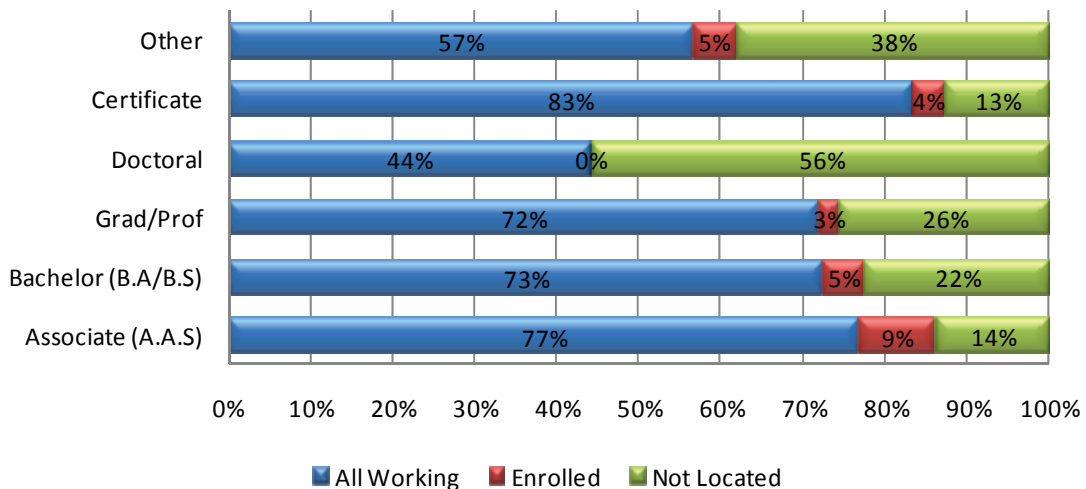


Figure 3b shows the outcomes by gender whereas Figure 4b shows by ethnicity. Out of all exiters working, males have a higher quarterly median wage at \$11,336 versus \$10,815 for females. The graduates earned more than the transfers and leavers. The difference in number of people in each ethnic group makes it difficult to estimate if the differences in wages are due to ethnicity or to cohort effect.

Figure 3b. Follow-up Activities in the 4th Quarter of 2008 by Gender (All Exiters)

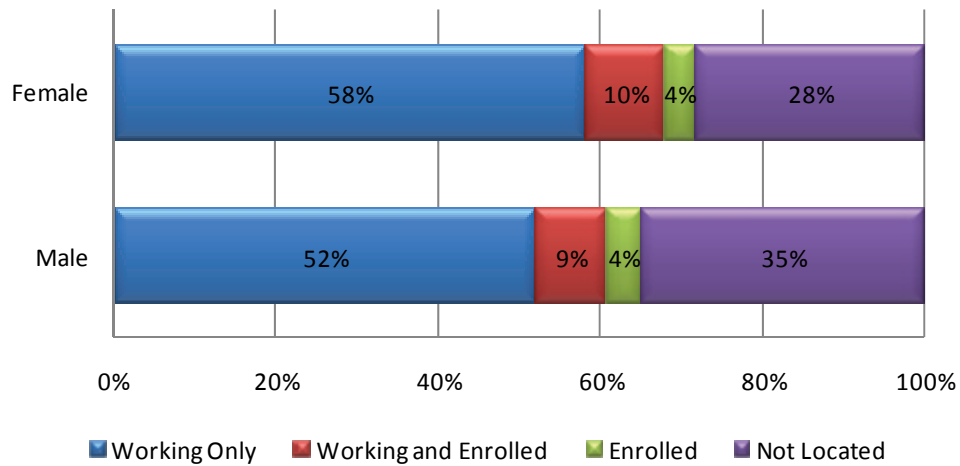


Figure 4b. Follow-up Activities in the 4th Quarter of 2008 by Ethnicity (All Exiters)

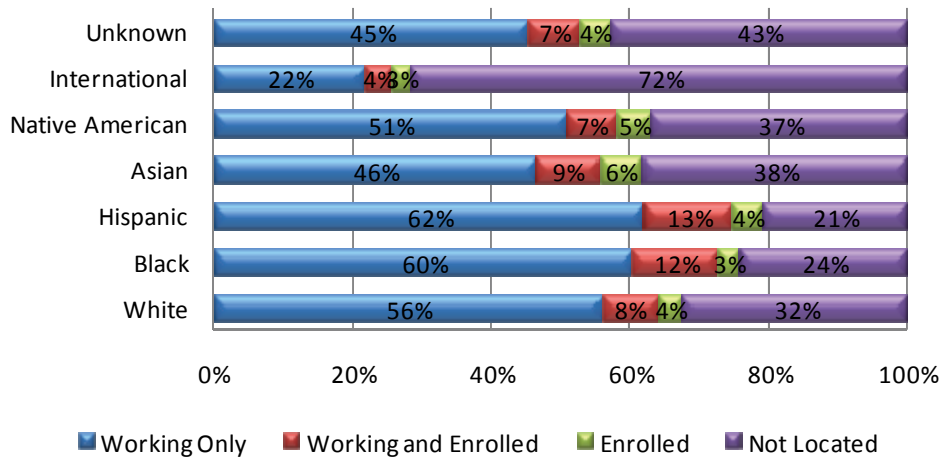


Figure 5b shows post-exit results for type of exiters as they were defined in 2004. The transfer students are more likely to be enrolled five years later; the graduates and leavers are more likely to work only or not to be located. The median income in the 4th quarter of 2007 for all those who were working was highest for graduates (\$10,992) and leavers (\$9,304). The transfers are more likely to work and be enrolled in school, working less hours and/or having a lesser pay (\$5,087).

Figure 5b. Follow-up Activities in the 4th Quarter of 2008 by Type of Exiter as of 2004 (All Exiters)

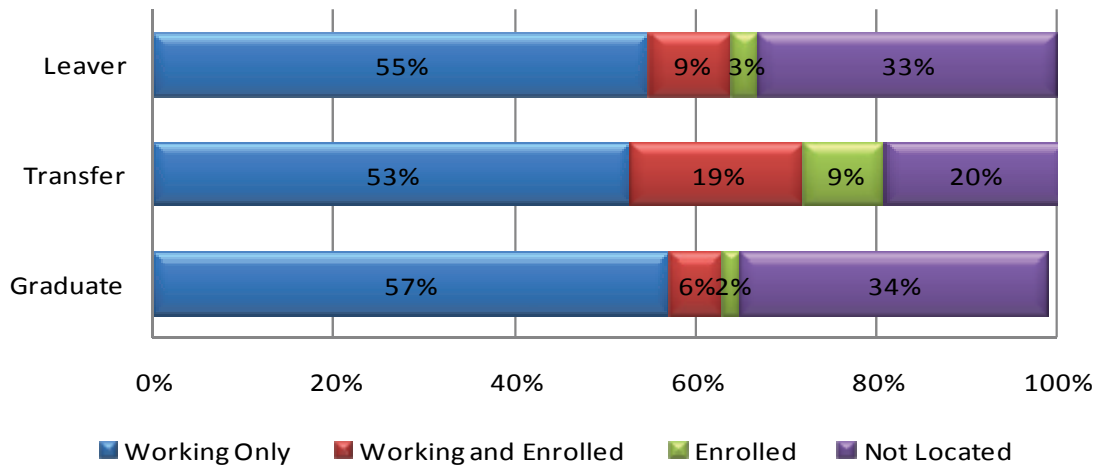


Table 10b shows the top 10 industry for employment in Fall 2008 for the 2004 university exiters. Seventy percent of them are identical with the top 10 industries of employment in 2005.

Table 10b. Top 10 Most Common Industries for 2005 CTC Exiters Working in Fall 2007 by 4-digit NAICS codes

Industry	Employed	% of All Working
Elementary and Secondary Schools	36,722	24.07
General Medical and Surgical Hospitals	6,711	4.40
Colleges, Universities, and Professional Schools	6,571	4.31
Employment Services	5,358	3.51
Executive, Legislative, and Other General Government Support	4,786	3.14
Full-Service Restaurants	3,748	2.46
Depository Credit Intermediation	3,532	2.32
Architectural, Engineering and Related Services	2,806	1.84
Junior Colleges	2,534	1.66
Individual and Family Services	2,117	1.39

The exiters that were still enrolled in Fall 2008 were found in universities (see Table 11b), with no community colleges in the top 10 preferred institutions.

Table 11b. Top 10 Institutions for 2005 Exiters Pursing Additional Education in Fall 2008

Institution	Enrolled	% of All Enrolled
UNIVERSITY OF HOUSTON	1,510	4.72
UNIVERSITY OF NORTH TEXAS	1,466	4.58
U. OF TEXAS AT AUSTIN	1,231	3.85
U. OF TEXAS AT ARLINGTON	1,151	3.60
U. OF TEXAS AT SAN ANTONIO	1,096	3.43
TEXAS STATE UNIV - SAN MARCOS	1,034	3.23
U. OF TEXAS AT EL PASO	968	3.03
U. OF TEXAS-PAN AMERICAN	931	2.91
TEXAS A&M UNIVERSITY	879	2.75
TEXAS WOMAN UNIVERSITY	800	2.50

The majority of 2008 exiters still pursuing additional education were enrolled in “Liberal Arts and Sciences”, “Multi-/Interdisciplinary Studies”, or were still “undeclared” (see Table 12b). The most popular occupationally specific major was “Nursing”, followed by “Business Administration”.

Table 12b. Top 10 Majors for 2005 Exiters Pursuing Additional Education in Fall 2007 By 4-digit 2000 CIP

Major	Enrolled	% of All Enrolled
Liberal Arts and Sciences, General Studies and Humanities	2,338	7.31
Undeclared	1,820	5.69
Nursing	1,785	5.58
Business Administration, Management and Operations	1,762	5.51
Educational Administration and Supervision	1,422	4.44
Multi-/Interdisciplinary Studies, Other	1,203	3.76
Criminal Justice and Corrections	722	2.26
Biology, General	682	2.13
Business/Commerce, General	649	2.03
Accounting and Related Services	639	2.00

Table 13b. Type of Institution Preferred by 2005 Exiters that Continue Their Education in Fall 2008

Category	Total Enrolled	CTC	Pct of Enrolled	University	Pct of Enrolled	HSC	Pct of Enrolled	For-Profit Institutions	Pct of Enrolled
Enrolled (All Exiters)	9,333	1,599	17.13	6,526	69.92	1,074	11.51	134	1.44
Both (All Exiters)	22,660	5,443	24.02	16,125	71.16	656	2.89	436	1.92
All Enrolled (All Exiters)	31,993	7,042	22.01	22,651	70.80	1,730	5.41	570	1.78
Enrolled (Graduates)	2,167	193	8.91	1,492	68.85	460	21.23	22	1.02
Both (Graduates)	5,854	866	14.79	4,599	78.56	305	5.21	84	1.43
All Enrolled (Graduates)	8,021	1,059	13.20	6,091	75.94	765	9.54	106	1.32
Enrolled (Transfer)	3,564	631	17.70	2,518	70.65	377	10.58	38	1.07
Both (Transfer)	7,552	2,139	28.32	5,075	67.20	222	2.94	116	1.54
All Enrolled (Transfer)	11,116	2,770	24.92	7,593	68.31	599	5.39	154	1.39
Enrolled (Leavers)	3,602	775	21.52	2,516	69.85	237	6.58	74	2.05
Both (Leavers)	9,254	2,438	26.35	6,451	69.71	129	1.39	236	2.55
All Enrolled (Leavers)	12,856	3,213	24.99	8,967	69.75	366	2.85	310	2.41

C. Career Schools and Colleges

There are 144 for-profit career schools operating under Certificate of Authority in Texas.

Seed Records

For fiscal year (FY) 2004 a total of 23,866 former students enrolled in career schools were included in the analysis. five years later, about 68% of the cohort (16,331 individuals) was found working and about 2% (376 individuals) were still enrolled in a postsecondary institution. About 30% were not located either in the higher education databases or in the TWC's Unemployment Insurance (UI) wage records. Table 1c shows a breakdown of the outcomes by student 2004 exit status.

Table 1c. Seed Records by Exit Status

Exit Status	N	% of Cohort	All Working	% of All Working	Enrolled	% of Enrolled	Not Located	% Not Located
Graduates	4,459	19%	3,177	71%	45	1%	1,237	28%
Transfers	456	2%	338	74%	27	6%	91	20%
Leavers	18,951	79%	12,816	68%	304	2%	5,831	31%
Total	23,866	100%	16,331	68%	376	2%	7,159	30%

Retention in Employment

Table 2c shows the top ten industries by retention rate by 2-digit NAICS code. The utilities and the “healthcare and social assistance” are the highest retainers between 2004 and 2008.

Table 2c. Top 10 Industries with the Highest Employment Retention Rate by 2-digit NAICS

Industry Name	Employed 2004	Employed 2008	Percent Retained Employed
Utilities	38	31	81.58
Health Care & Social Assistance	1,064	860	80.83
Finance & Insurance	645	520	80.62
Wholesale Trade	579	464	80.14
Manufacturing	901	722	80.13
Information	455	358	78.68
Retail Trade	3,453	2,690	77.90
Government	246	191	77.64
Professional, Scientific, & Technical Services	1,017	780	76.70
Transportation & Warehousing	613	470	76.67

The data in Table 3c shows that about 77% of the individuals employed in the 4th quarter of 2004 are still employed in the 4th quarter of 2008. Between 2006 and 2008 82% of employed individuals were retained, with government and utilities being the top retainer industries.

Table 3c. Retention in employment

Group	Total	Percent	Percent	Percent	Employed 2008	Percent	Retained	Retained	Retained	Percent	Percent
		Employed 2004	Employed 2006	Employed 2008		Employed '04-'08	Employed '06-'08	Employed '04-'08	Employed '06-'08	Employed '04-'08	Employed '06-'08
Female	10,577	66.46	71.44	7,236	68.41	5,369	6,169	76.38	81.64		
Male	13,262	70.70	71.69	9,095	68.58	7,199	7,917	76.78	83.28		
White	7,965	66.50	67.57	5,080	63.78	3,852	4,327	72.72	80.40		
Black	6,415	68.32	72.64	4,419	68.89	3,380	3,822	77.12	82.02		
Hispanic	7,666	72.52	75.41	5,631	73.45	4,464	4,912	80.30	84.97		
Asian	464	65.73	68.10	306	65.95	225	260	73.77	82.28		
Native Amer.	225	69.33	71.56	159	70.67	119	142	76.28	88.20		
International	58	63.79	58.62	33	56.90	28	27	75.68	79.41		
Unknown	1,046	63.86	69.69	703	67.21	500	596	74.85	81.76		
Total	23,839	68.82	71.58	16,331	68.51	12,568	14,086	76.61	82.55		

Outcomes of Former students by “Located/Not Located” Status

About 31% of the former students (7,266) were not located as either employed or enrolled in fall 2004. However, some of the former students were found working or/and enrolled in fall 2008. About 33% were found graduating with a degree or certificate, 14% were enrolled during the three years without graduating, with 5% still enrolled in Fall2008, and 50% were found employed in the 4th quarter of 2008. Even though 30% of the cohort were not located in fall 2008, the former students had graduated during the five years (26%) or were enrolled without graduating (12%) (Table 4c).

Table 4c. Follow-up Outcomes by “Located/Not Located”

Group	Total	Employed 2008	% Employed 2008	Enrolled Fall08	% Enrolled Fall08	Enrolled during 5/3 years	% Enrolled during 5/3 years	Graduated during 5-3 years	% Graduated during 5/3 years
2004									
Not Located in 2004	7,266	3,661	50.39	354	4.87	1,013	13.94	2,364	32.54
Located in 2004	16,600	12,670	76.33	1,278	7.70	3,133	18.87	5,327	32.09
2006									
Not Located in 2006	6,522	2,090	32.05	213	3.27	879	13.48	1,611	24.70
Located in 2006	17,344	14,241	82.11	1,419	8.18	3,267	18.84	6,080	35.06
2008									
Not Located in 2008	7,159					865	12.08	1,879	26.25
Located in 2008	16,700	16,331	97.79	1,625	9.73	3,279	19.63	5,809	34.78
Not Located previously	3,538	940	26.57	108	3.05	419	11.84	794	22.44
Located prev.	20,328	15,391	75.71	1,524	7.50	3,727	18.33	6,897	33.93

Outcomes of Former students between 2004 and 2008

Of the original 2004 cohort 19% were graduates, 2% were transfers to another institution, and 79% left their institutions without transferring or graduating. During the 5-years, between 2004 and 2008 these former students were found either enrolled or graduating, as shown in Tables 5c and 6c.

Table 5c. Follow-up Outcomes between 2004 and 2008 (graduation)

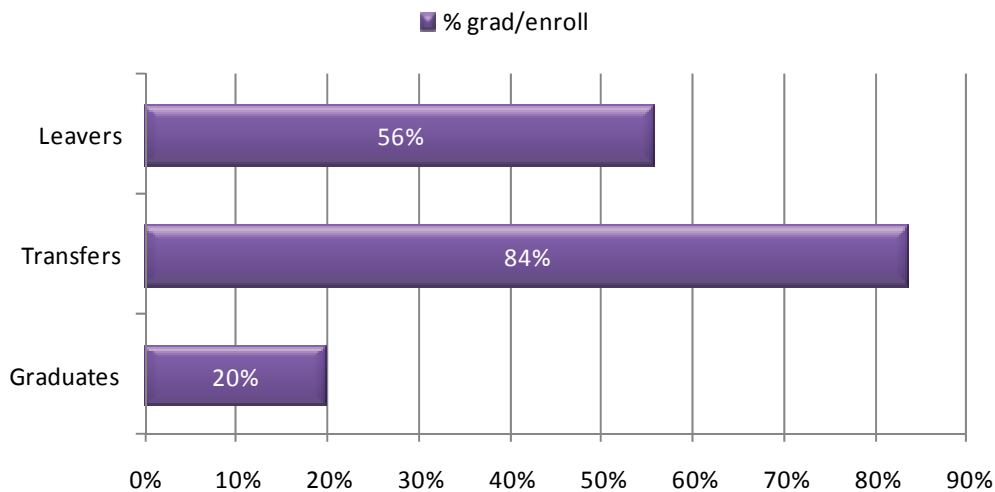
Status in 2004	Total	Did Graduate	% that did graduate	Did Not Graduate	% that did not graduate
Graduates	4,459	217	4.87	4,242	95.13
Transfers	456	86	18.86	370	81.14
Leavers	18,951	7,388	38.98	11,563	61.02
Total	23,866	7,691	32.23	16,175	67.77

Table 6c. Follow-up Outcomes between 2004 and 2008 (enrollment)

Status in 2004	Total	Enrolled	% Enrolled	Not Enrolled	% Not Enrolled
Graduates	4,459	662	14.85	3,797	85.15
Transfers	456	295	64.69	161	35.31
Leavers	18,951	3,189	16.83	15,762	83.17
Total	23,866	4,146	17.37	19,720	82.63

Figure 1c shows that 20% of the 2004 graduates were enrolled or got another award in 5 years. More than half of leavers and 84% of transfers were found in higher education, either graduating or enrolled in postsecondary institutions.

Figure 1c. Enrollment/Graduation of 2004 Exiters during 2004-2008



Outcomes of Former students in Fall 2008

Figure 2c depicts the post-exit achievements by the type of degree /award earned during the five years. Seventy-two percent of the degree earners work. The highest wages in the 4th quarter of 2008 are for graduate degrees recipients, with a quarterly median wage of \$13,756.

Figure 2c. Follow-up Activities in the 4th Quarter of 2008 by the Type of Degree/Award Earned During the Five Years

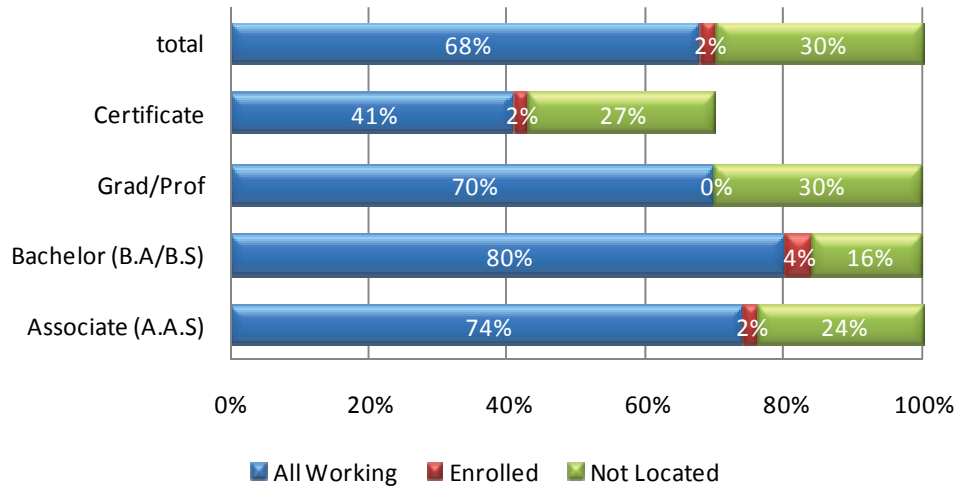


Figure 3c shows the outcomes by gender whereas Figure 4c shows by ethnicity. Out of all exiters working, males have a higher quarterly median wage at \$8,156 versus \$6,608 for females. The graduates earned more (\$8,781) than the transfers (\$6,516) and leavers (\$7,064). The difference in number of people in each ethnic group makes it difficult to estimate if the differences in wages are due to ethnicity or to cohort effect.

Figure 3c. Follow-up Activities in the 4th Quarter of 2008 by Gender (All Exiters)

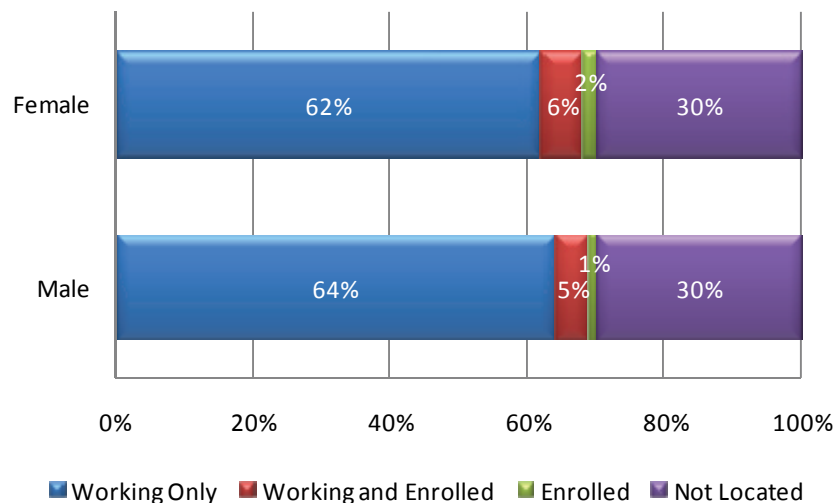


Figure 4c. Follow-up Activities in the 4th Quarter of 2008 by Ethnicity (All Exitters)

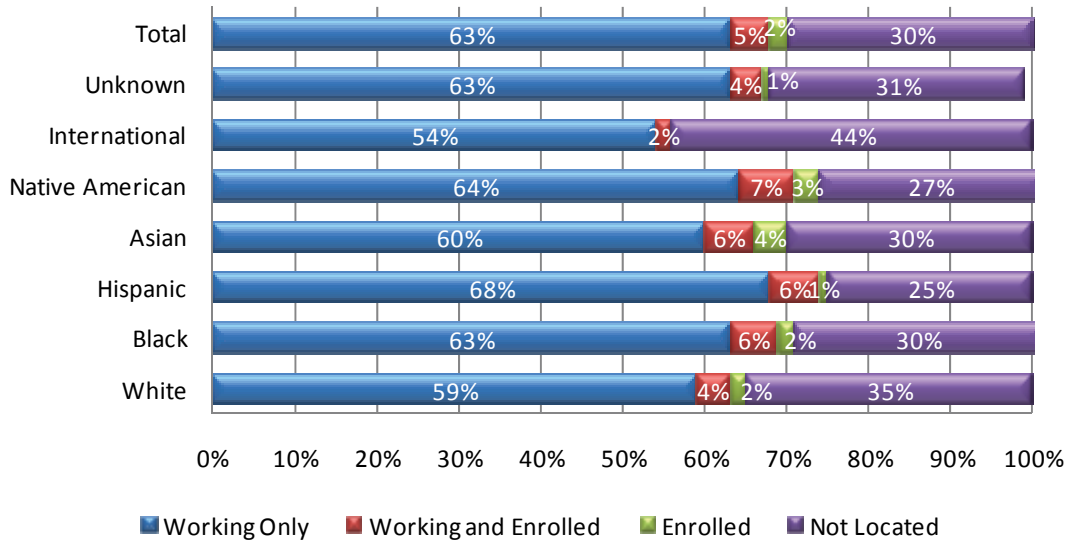
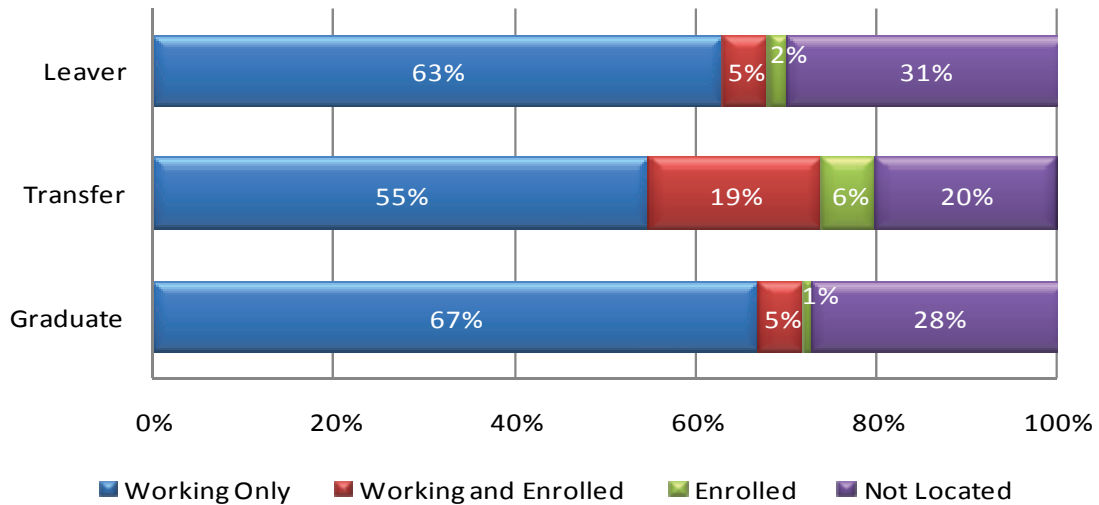


Figure 5c shows post-exit results for type of exitters as they were defined in 2004. The transfer students are more likely to be enrolled five years later; the graduates and leavers are more likely to work only or not to be located. The median income in the 4th quarter of 2008 for all those who were working was highest for graduates (\$8,781) and leavers (\$7,064). The transfers earned the lowest median income with \$6,516.

Figure 5c. Follow-up Activities in the 4th Quarter of 2008 by Type of Exiter as of 2004 (All Exitters)



The exiters that were still enrolled in Fall 2008 were found in for-profit institutions and community colleges (see Table 7c), with no public or independent universities in the top 10 preferred institutions.

Table 7c. Top 10 Institutions for 2004 Exiters Pursing Additional Education in Fall 2008

Institution	Enrolled	% of All Enrolled
DEVRY UNIVERSITY	139	8.52
AUSTIN COMMUNITY COLLEGE	89	5.45
HOUSTON COMMUNITY COLLEGE	72	4.41
COURT REPORTING INST OF DALLAS	52	3.19
DCCCD EL CENTRO COLLEGE	46	2.82
DCCCD RICHLAND COLLEGE	45	2.76
EL PASO COMMUNITY COLLEGE DIST	43	2.63
COLLIN CO COMM COLL DISTRICT	43	2.63
UNIVERSITY OF PHOENIX-HOUSTON	41	2.51
SAN ANTONIO COLLEGE	37	2.27

The majority of 2004 exiters still pursuing additional education were enrolled in “Liberal Arts and Sciences”, “Legal Support Services” or “Business Administration” (see Table 8c). The most popular occupationally specific major was “Business Administration”, followed by “Legal Support Services”.

Table 8c. Top 10 Majors for 2004 Exiters Pursuing Additional Education in Fall 2008 By 4-digit 2000 CIP

Major	Enrolled	% of All Enrolled
Liberal Arts and Sciences, General Studies and Humanities	288	17.65
Business Administration, Management and Operations	225	13.79
Legal Support Services (NEW)	107	6.56
Nursing	75	4.60
Undeclared	69	4.23
Criminal Justice and Corrections	66	4.04
Multi-/Interdisciplinary Studies, Other	45	2.76
Business/Commerce, General	40	2.45
Computer Systems Networking and Telecommunications (NEW)	38	2.33
Electrical and Electronic Engineering Technologies/Technicians	34	2.08

Table 9c. Type of Institution Preferred by 2004 CS Exiters that Continue Their Education in Fall 2008

Category	Total Enrolled	CTC	Pct of Enrolled	University	Pct of Enrolled	HSC	Pct of Enrolled	For-Profit Institutions	Pct of Enrolled
Enrolled (All Exiters)	376	174	46.28	89	23.67	1	0.27	112	29.79
Both (All Exiters)	1,256	707	56.29	187	14.89	1	0.08	361	28.74
All Enrolled (All Exiters)	1,632	881	53.98	276	16.91	2	0.12	473	28.98
Enrolled (Graduates)	45	16	35.56	19	42.22	0	0.00	10	22.22
Both (Graduates)	211	124	58.77	36	17.06	0	0.00	51	24.17
All Enrolled (Graduates)	256	140	54.69	55	21.48	0	0.00	61	23.83
Enrolled (Transfer)	27	15	55.56	10	37.04	0	0.00	2	7.41
Both (Transfer)	86	49	56.98	29	33.72	1	1.16	7	8.14
All Enrolled (Transfer)	113	64	56.64	39	34.51	1	0.88	9	7.96
Enrolled (Leavers)	304	143	47.04	60	19.74	1	0.33	100	32.89
Both (Leavers)	959	534	55.68	122	12.72	0	0.00	303	31.60
All Enrolled (Leavers)	1,263	677	53.60	182	14.41	1	0.08	403	31.91

References

NCES. (2002). *CIP taxonomy*. Retrieved December, 2005, from <http://nces.ed.gov/>

SB281. (2003). Texas Workforce Investment Council, Senate, 78th Ses.

Texas Education Code. (1971). Higher Education Coordinating Act of 1965, 67th Ses.

Texas Labor Code. (2009). *Texas Labor Code*. Available online at <http://www.statutes.legis.state.tx.us/>

APPENDIX A

Glossary

All Working	All participants that are found working in the TWC UI wage records and participants who are working at the same time going to school
All Enrolled	All participants that are found enrolled in a higher education institution and participants who are working at the same time going to school
Enrolled Only	Participants found enrolled in a higher education institution but not working
Graduates	Former students that graduated by the end of 2003-2004 academic year
Leavers	Non-returning former students enrolled during Summer (I or II), Fall 2003, Spring 2004, and did not enroll in Fall 2005 at the same institution
Transfers	Non-returning former students found enrolled at another institution in Fall 2004
Working only	All participants that are found working in the TWC UI wage records but not enrolled in higher education
Not Located	Participants not found in the UI wage records or in the THECB database