

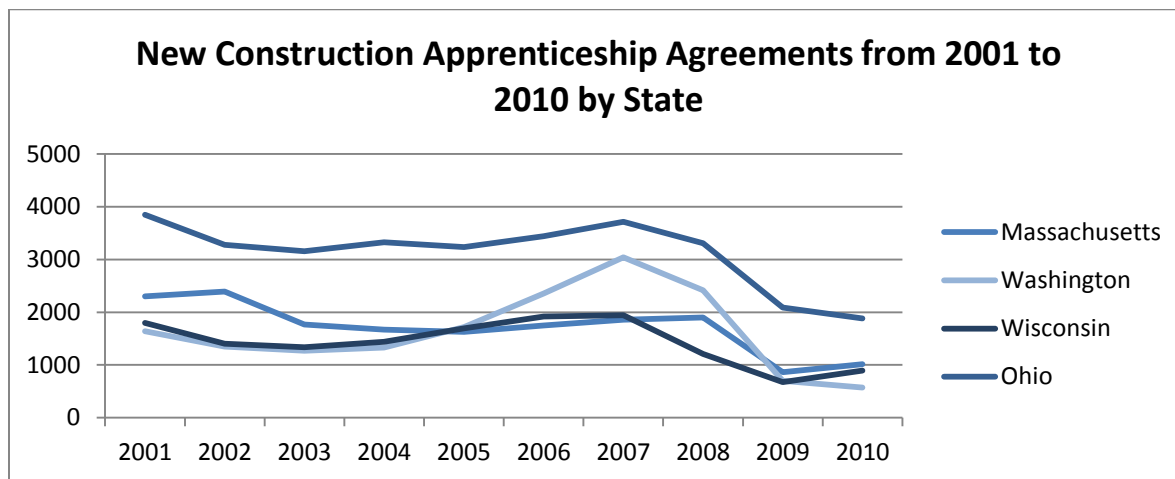
Appendix B: Registration and Demographic Information of Construction Apprentices

In this appendix, we briefly discuss registration and demographic information of construction apprentices in our national and state-level samples to provide more context as to who construction apprentices are, what occupations they work in, and registration trends.

Registration

Between 2006 and 2007, 120,972 apprenticeship agreements were federally registered in the database provided to AspenWSI by the Office of Apprenticeship. As we note in the methodology, these numbers do not reflect the total number of construction apprentices registered in the United States for these years.¹ Geographically, 9.8 percent of the construction apprenticeship agreements in the national dataset are from the Northeast, 17.7 percent are from the South, 26.8 percent are from the Midwest, 45.6 percent are from the West, and 0.3 percent are from U.S. territories.

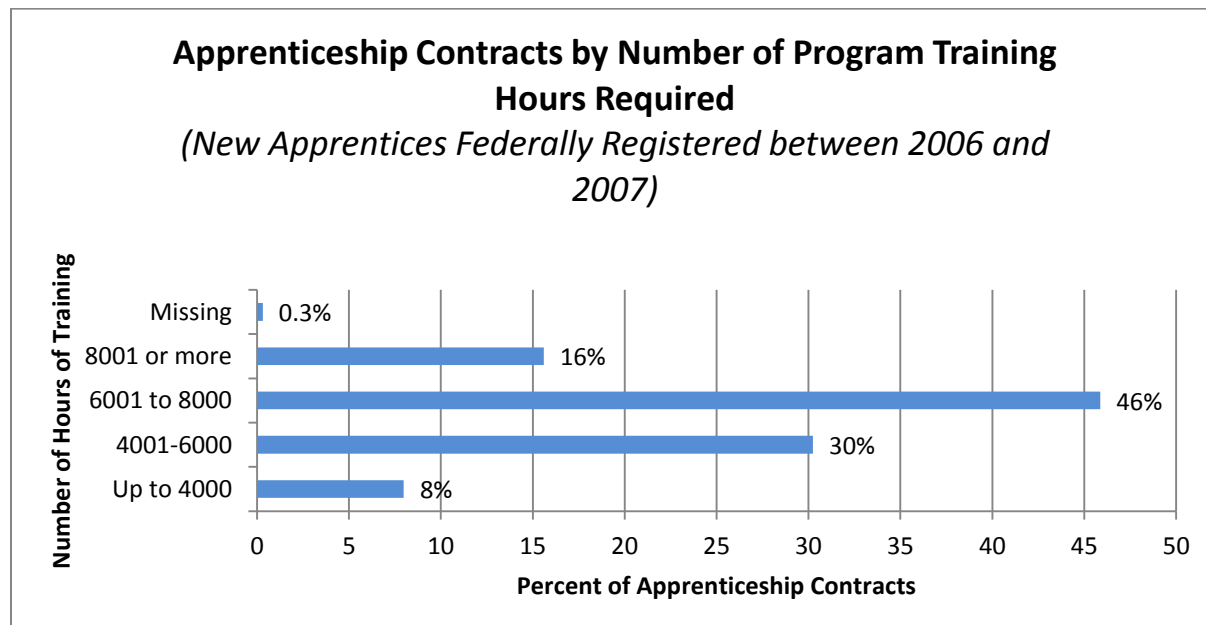
The graph below shows registration in construction apprenticeship from 2001 to 2010 in Ohio, Massachusetts, Washington and Wisconsin. The recent years of registration in this example remain to show the precipitous drop in registration during the economic recession.



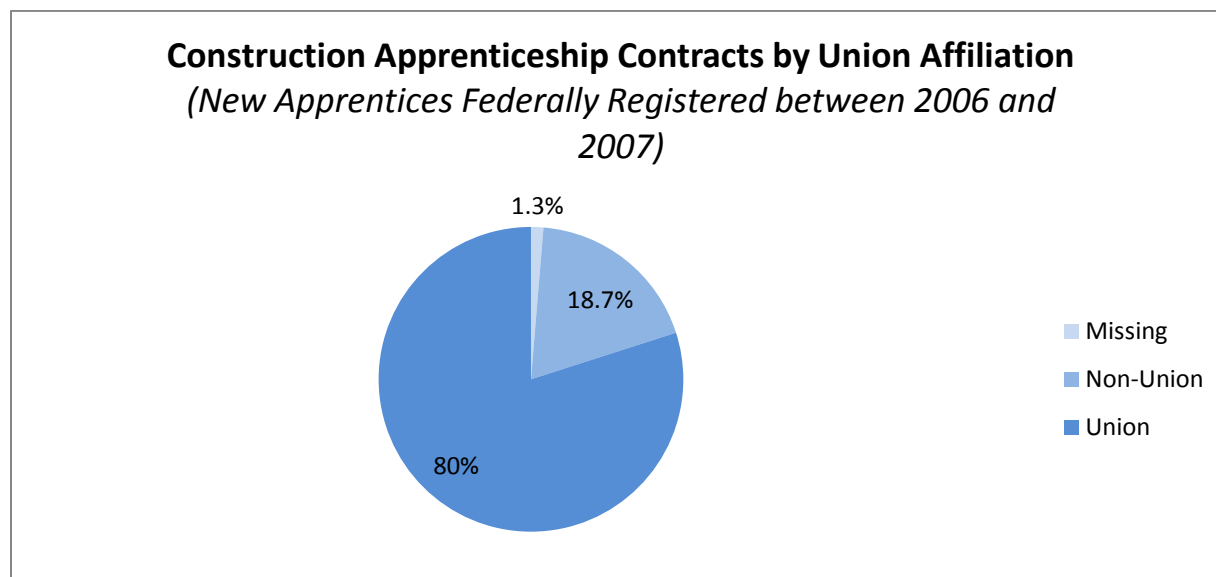
¹ California was added to the RAPIDS database in 2007.

Registration by Type of Apprenticeship Programs

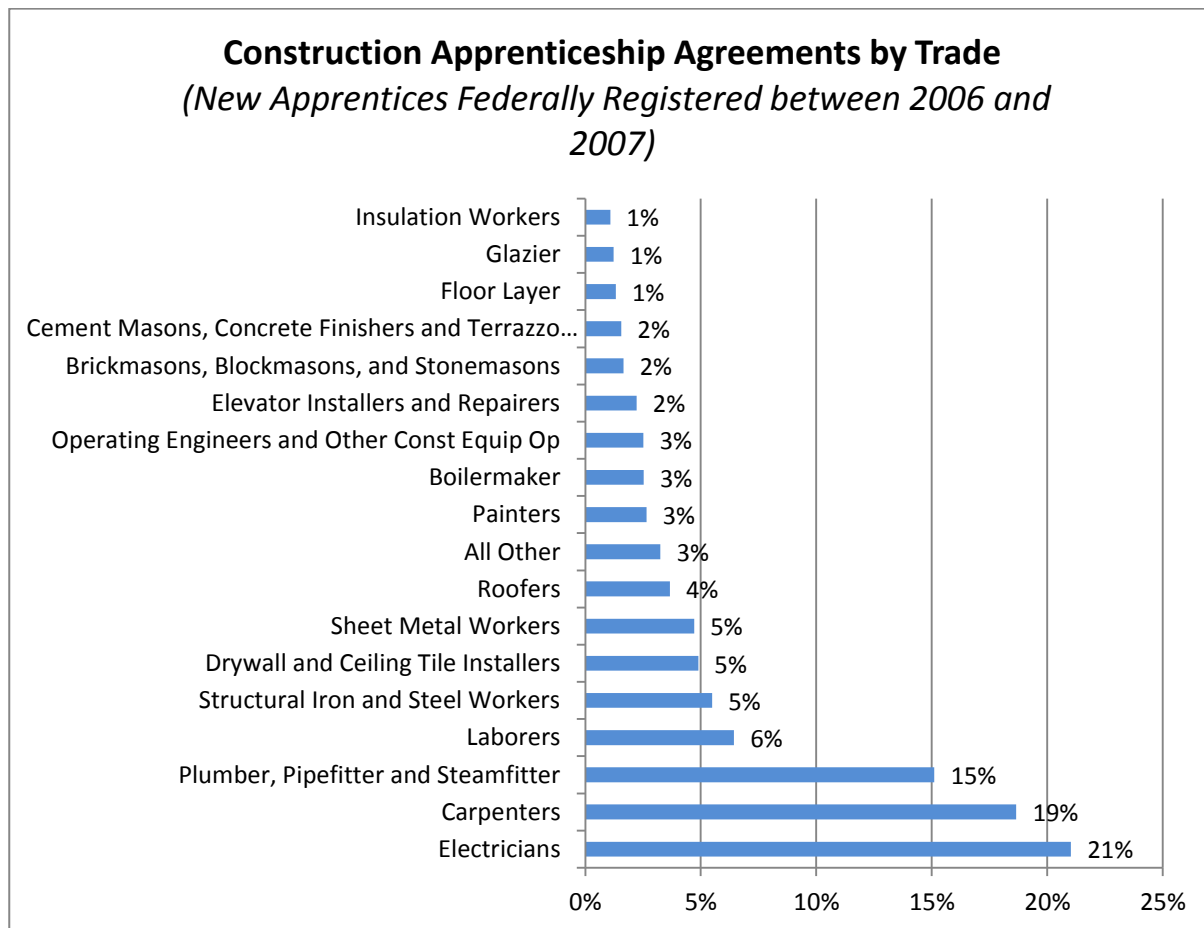
The apprenticeship programs construction apprentices participate in vary in a few ways. Some require longer hours of training, some are sponsored by unions, and apprenticeships obviously also vary by the occupation in which the apprentice is being trained. Apprentices can spend a number of years in training. Apprentices in our national data set participated in apprenticeship programs requiring a median of 8,000 hours or about four years of training.



Apprenticeship programs are sometimes provided by individual employers or by groups of employers. In some instances, the employers have a relationship with a union who is a bargaining agency. In cases where a union is involved, a joint apprenticeship committee (JATC), which includes representatives of labor and management, is created to administer and design the program. The committee sets standards for training, which includes the occupations, length of training, selection procedures, affirmative action plan, wages, the number of apprentices to be trained, and more. In the construction industry, the apprenticeship model is predominantly used by union employers as seen in the pie chart below.



Construction apprentices are trained and work in a variety of different skilled trades. The chart below shows the occupation of construction apprentices in our national data set. Carpenters, electricians, and plumbers, pipefitters and steamfitters have the largest number of construction apprentices. In Washington, carpenters were the largest trade represented while electricians were the largest in Massachusetts, Ohio and Wisconsin. In the state-data sets, electricians, laborers and carpenters were frequently in the top five of the largest occupations.



Gender

Construction is still a men-dominated industry. Though some states, such as Washington, have made considerable progress in helping women enter the industry, the numbers of women in construction apprenticeship are still very low as seen in the table below.

Summary Table on Percent of Women in Construction Apprenticeships			
	Number of Apprenticeship Agreements	Time Period for Newly Registered Apprentices	Percent of New Apprenticeship Agreements Entered into by Women
National Data, Office of Apprenticeship	120,972	2006-2007	2.5%
Massachusetts	13,366	2001-2007	4.3%
Ohio	16,850	2001-2005	3.7%
Washington	45,790	1994-2007	7.2%
Wisconsin	13,904	2000-2007	2.3%

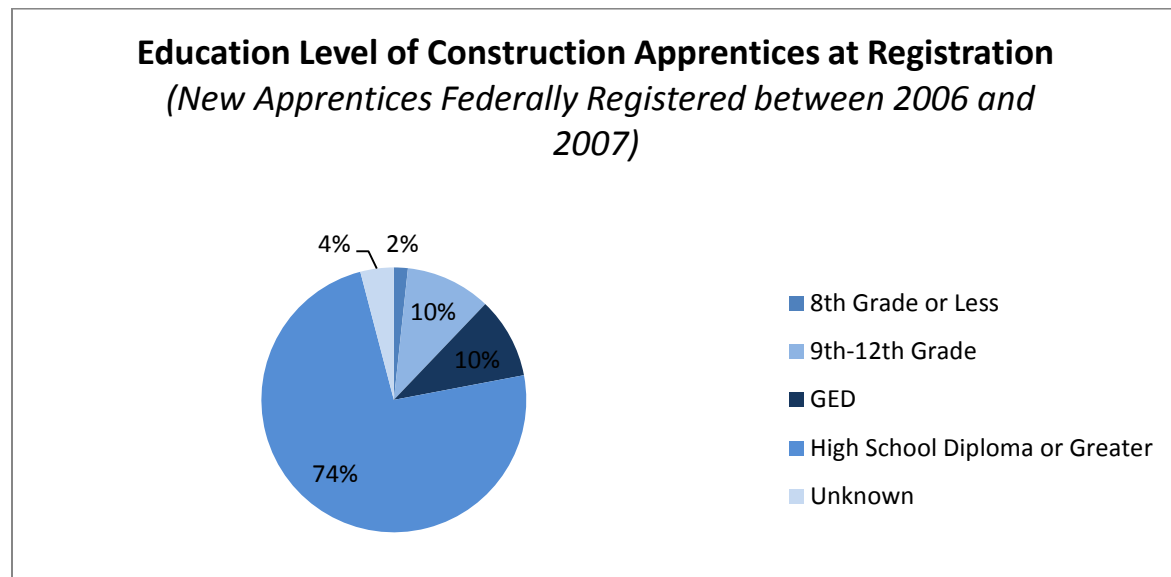
Race

The tables and charts below show the percentage of minority apprentices in the national and state-level datasets.

Summary Table on Percent of Minorities in Construction Apprenticeships			
	Number of Apprenticeship Agreements	Time Period for Newly Registered Apprentices	Percent of New Apprenticeship Agreements Entered into by Minorities
National Data, Office of Apprenticeship	120,972	2006-2007	40% (includes Asian, African-American, Native-American/Alaskan as well as all apprentices with Hispanic ethnicity) ²
Massachusetts	13,366	2001-2007	17.0% (includes Asian-Pacific Islander, African-American and Hispanic apprentices)
Ohio	16,850	2001-2005	9.5% (includes Asian, African-American, Native American/Alaskan Native, Hispanic and Hawaiian-Pacific Islander apprentices)
Washington	45,790	1994-2007	22.8% (Includes Asian, African-American, Hispanic, Native American, Multi-Racial and Pacific Islander apprentices)
Wisconsin	13,904	2000-2007	8.1% (Includes Asian African-American, Native-American, Hispanic and Hawaiian-Pacific Islander apprentices)

Education Levels of Construction Apprentices at Time of Registration

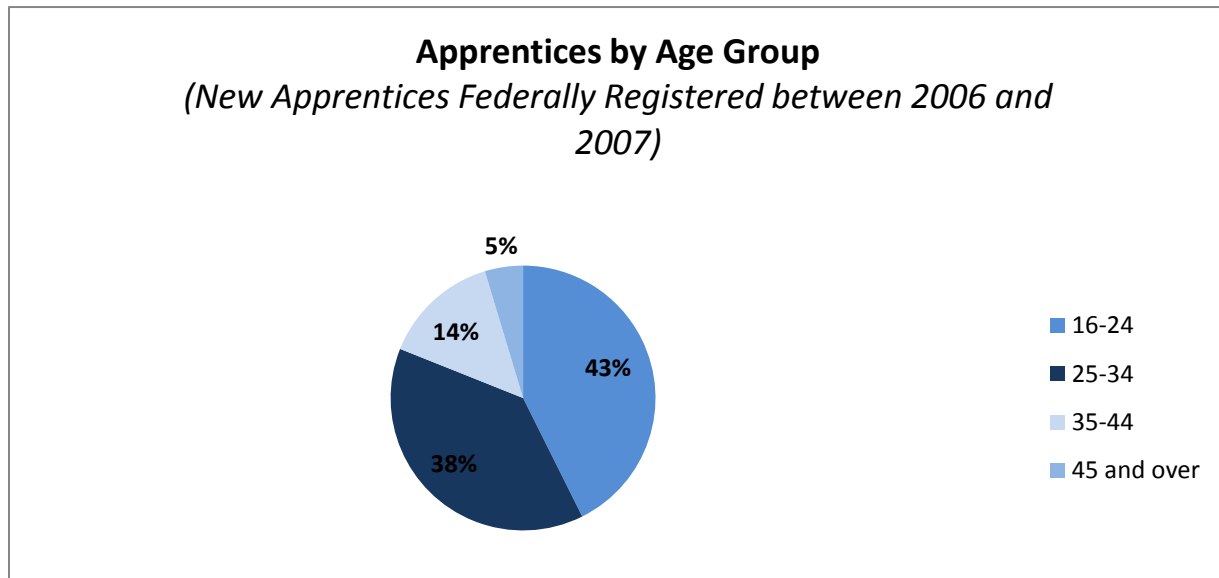
Most apprentices in construction enter an apprenticeship with either a GED or High School Diploma. And in general, most apprenticeships require one of those two credentials. As seen in the chart below, however, many apprentices start their programs of study with less than a high school education.



² Race and Hispanic ethnicity are separate variables in the OA database. AspenWSI combined these variables into one variable to include Hispanics. Asian, African-American, Native-American/Alaskan and White apprentices identified as having Hispanic ethnicity were recoded as Hispanic.

Age Construction Apprentices at Time of Registration

Construction apprentices who registered between 2006 and 2007 in the dataset provided by OA had a median age of 26. The chart below shows the percentage of apprentices by age group at the time of registration.



Veterans

Construction careers are often pursued by those leaving the military. Between 2006 and 2007, 6.2 percent of new construction agreements in our national data set from OA were entered into by military veterans. In Washington State, 9.7 percent of new construction agreements between 1994 and 2007 were entered into by military veterans.

Appendix C: Statistical Appendix

Data tables in this appendix include AspenWSI analysis of new construction apprenticeship agreements initiated between 2006 to 2007 from the Office of Apprenticeship RAPIDS Database updated as of May 2012.

Characteristics and Demographics of Construction Apprentices

Registration of New Construction Apprentices by Year		
<i>Year</i>	Frequency	Percent
2006	39,914	32.4
2007	81,178	67.6
Total	120,972	100

Part of the large increase from 2006 to 2007 can be attributed to California becoming an OA state and submitting data to RAPIDS.

New Construction Apprentices by Trade 2006-2007		
	Frequency	Percent
Boilermaker	3061	2.5
Brickmasons, Blockmasons, and Stonemasons	1990	1.6
Carpenters	22570	18.7
Cement Masons, Concrete Finishers and Terrazzo Workers	1889	1.6
Construction and Building Inspectors	167	0.1
Construction and Related Workers, All Other	185	0.2
Construction Craft Laborers	7794	6.4
Construction Worker	56	0.0
Drywall and Ceiling Tile Installers	5921	4.9
Earth Drillers except oil and gas	5	0.0
Electrician	25438	21.0
Elevator Installers and Repairers	2687	2.2
Fence Erectors	47	0.0
Floor Layer	1597	1.3
Glazier	1491	1.2
Insulation Workers	1311	1.1
Operating Engineers and Other Const Equip Op	3051	2.5
Painter	3200	2.6
Pavement Stripper	117	0.1
Paving, Surfacing and Tamping Equip Operators	32	0.0
Plasters and Stucco Masons	728	0.6
Plumber, Pipefitter and Steamfitter	18281	15.1
Reinforcing Iron and Rebar Workers	841	0.7
Roofers	4423	3.7
Sheet Metal Workers	5693	4.7
Structural Iron and Steel Workers	6640	5.5
Taper	720	0.6

Tile and Marble Setter	564	0.5
Tile Finishers and Marble Finishers	473	0.4
Total	120972	100

Length of Training for New Construction Apprentices Registered 2006-2007		
<i>Hours of Training</i>	Frequency	Percent
Up to 4000	9,658	8.0
4001-6000	36,580	30.2
6001-8000	55,483	45.9
8001 or more	18,867	15.6
Missing	384	0.3

New Construction Apprentices Registered 2006-2007 by Geographical Region		
<i>Region</i>	Frequency	Percent
Northeast	11,890	9.8
Midwest	35,463	26.8
South	21,426	17.7
West	55,156	45.6
Territories	40	0.0

Gender of New Construction Apprentices Registered 2006-2007		
<i>Gender</i>	Frequency	Percent
Female	3,034	2.5
Male	117,930	97.5

Race and Ethnicity of New Construction Apprentices Registered 2006-2007		
<i>Race</i>	<i>Frequency</i>	<i>Percent</i>
African-American	9,952	8.2
Asian	2,011	1.7
Native-American/Alaskan	1,775	1.5
Hispanic ³	33,153	27.4
Hawaiian-Pacific Islander	1,492	1.2
White	71,835	59.4
Unknown	754	0.6
Total	120,972	100

Age of New Construction Apprentices Registered 2006-2007		
<i>Age Group</i>	Frequency	Percent

³ Includes all African-American, Asian, Native-American-Alaskan, Hawaiian-Pacific Islander and White apprentices identified as having Hispanic ethnicity in the RAPIDS database.

16-24	51,570	42.6
25-34	46,475	38.4
35-44	17,293	14.3
45 and over	5,634	4.7
Total	120,972	100.0

Age of New Construction Apprentices Registered 2006-2007		
Mean Age		27.8
Median Age		26.0

Education Level of New Construction Apprentices Registered 2006-2007		
<i>Education Level</i>	Frequency	Percent
8th Grade or Less	2,058	1.7
9th-12th Grade	12,603	10.4
GED	11,948	9.9
High School Diploma or greater	89,320	73.9
Unknown/Missing	4,933	4.1
Total	120,972	100.0

Veteran Status of New Construction Apprentices Registered 2006-2007		
<i>Veteran Status</i>	Frequency	Percent
Non-Veteran	111,465	92.1
Unknown	1,982	1.6
Veteran	7,525	6.2

Overall Completion Rates of Construction Apprentices

Note: Active apprentices are defined as those with a status of registered, reinstated or suspended.

Status of New Construction Apprentices Who Registered 2006-2007		
<i>Status</i>	<i>Frequency</i>	<i>Percent</i>
Missing	4	.0
Cancelled	55,810	46.1
Completed	43,400	35.9
Registered	18,933	15.7
Reinstated	2,191	1.8
Suspended	634	0.5
Total	120,972	100.0

Status of New Construction Apprentices Who Registered 2006-2007 by Year Registered							
Year Registered		Missing	Cancelled	Completed	Registered	Reinstated	Suspended
2006	Frequency	1	16648	17107	4596	597	245
	Percent	0.00%	42.47%	43.65%	11.73%	1.52%	0.63%

2007	Frequency	3	39162	26293	14337	1594	389
	Percent	0.00%	47.89%	32.15%	17.53%	1.95%	0.48%

Apprenticeship Completion Rates by Union and Nonunion Apprentices

Status of New Construction Apprentices Who Registered 2006-2007 by Union or Non-Union Program								
Program Type		Missing	Cancelled	Complete	Registered	Reinstated	Suspended	Total
Missing	Frequency	0	456	626	492	11	0	1585
	Percent	0	28.8	39.5	31.0	0.7	0	100
Non-Union Program	Frequency	1	12853	7119	2261	318	117	22669
	Percent	0.0	56.7	31.4	10.0	1.4	0.5	100
Union Program	Frequency	3	42501	35655	16180	1862	517	96718
	Percent	0.0	43.9	36.9	16.7	1.9	0.5	100

Independent Samples T-Test of Cancellation Rate for Union and Non-Union Program						N	Mean	Std. Deviation	Std. Error Mean
non-union program						22669	0.566986	0.495504	0.003291
union program						96718	0.439432	0.496321	0.001596
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	13.07505	0.000	34.83834	119385	.000	0.127554	0.003661	0.120378	0.13473
Equal variances not assumed			34.87396	34140.06	.000	0.127554	0.003658	0.120385	0.134723

Apprenticeship Completion Rates by Construction Trade of Apprentices Registered 2006-2007

Occupation		Missing	Cancelled	Completed	Registered	Reinstated	Suspended
Boilermaker	Frequency	0	1204	1375	436	46	0
	Percent	0	39.33355	44.91996	14.24371	1.502777	0
Brickmasons, Blockmasons, and Stonemasons	Frequency	0	1116	677	157	21	19
	Percent	0	56.0804	34.0201	7.889447	1.055276	0.954774
Carpenter	Frequency	0	12014	6447	3448	594	67
	Percent	0	53.22995	28.56447	15.27692	2.631812	0.296854
Cement Masons, Concrete Finishers and Terrazzo Workers	Frequency	1	926	610	291	56	5
	Percent	0.052938	49.02065	32.29222	15.40498	2.964531	0.26469
Construction and Building Inspectors	Frequency	0	92	59	15	1	0
	Percent	0	55.08982	35.32934	8.982036	0.598802	0
Construction and Related Workers, All Other	Frequency	0	57	78	39	6	5
	Percent	0	30.81081	42.16216	21.08108	3.243243	2.702703
Construction Craft Laborers	Frequency	0	3886	3030	783	89	6

	Percent	0	49.85887	38.87606	10.04619	1.141904	0.076982
Construction Worker	Frequency	0	3	50	3	0	0
	Percent	0	5.357143	89.28571	5.357143	0	0
Drywall and Ceiling Tile Installers	Frequency	0	2823	2472	383	243	0
	Percent	0	47.67776	41.7497	6.468502	4.104036	0
Earth Drillers except oil and gas	Frequency	0	3	0	0	0	2
	Percent	0	60	0	0	0	40
Electrician	Frequency	0	10962	10164	3859	295	158
	Percent	0	43.09301	39.95597	15.17022	1.159682	0.621118
Elevator Installers and Repairers	Frequency	0	624	905	1075	59	24
	Percent	0	23.22293	33.68068	40.00744	2.195757	0.893189
Fence Erectors	Frequency	0	20	27	0	0	0
	Percent	0	42.55319	57.44681	0	0	0
Floor Layer	Frequency	0	749	330	472	39	7
	Percent	0	46.90044	20.66374	29.55542	2.442079	0.438322
Glazier	Frequency	0	624	692	136	15	24
	Percent	0	41.85111	46.4118	9.121395	1.006036	1.609658
Insulation Workers	Frequency	0	488	684	109	23	7
	Percent	0	37.22349	52.17391	8.314264	1.754386	0.533944
Operating Engineers and Other Const Equip Op	Frequency	0	979	1625	423	17	7
	Percent	0	32.08784	53.26123	13.86431	0.557194	0.229433
Painter	Frequency	0	1886	971	279	45	19
	Percent	0	58.9375	30.34375	8.71875	1.40625	0.59375
Pavement Stripper	Frequency	0	50	61	3	1	2
	Percent	0	42.73504	52.13675	2.564103	0.854701	1.709402
Paving, Surfacing and Tamping Equip Operators	Frequency	0	6	26	0	0	0
	Percent	0	18.75	81.25	0	0	0
Plasters and Stucco Masons	Frequency	0	394	211	109	14	0
	Percent	0	54.12088	28.98352	14.97253	1.923077	0
Plumber, Pipefitter and Steamfitter	Frequency	3	7975	5797	4117	210	179
	Percent	0.01641	43.62453	31.71052	22.52065	1.148734	0.979159
Reinforcing Iron and Rebar Workers	Frequency	0	466	323	31	17	4
	Percent	0	55.41023	38.40666	3.686088	2.021403	0.475624
Roofers	Frequency	0	2850	863	593	112	5
	Percent	0	64.4359	19.51164	13.40719	2.532218	0.113045
Sheet Metal Worker	Frequency	0	1805	2511	1204	131	42
	Percent	0	31.7056	44.1068	21.14878	2.301071	0.737748
Structural Iron and Steel Workers	Frequency	0	2821	2801	854	128	36
	Percent	0	42.48494	42.18373	12.86145	1.927711	0.542169
Taper	Frequency	0	448	206	56	7	3

	Percent	0	62.22222	28.61111	7.777778	0.972222	0.416667
Tile and Marble Setter	Frequency	0	307	190	43	15	9
	Percent	0	54.43262	33.68794	7.624113	2.659574	1.595745
Tile Finishers and Marble Finishers	Frequency	0	232	215	15	7	4
	Percent	0	49.04863	45.45455	3.171247	1.479915	0.845666

Apprenticeship Completion Rates of Construction Apprentices with OJT and RTI Credits

Status of New Construction Apprentices Who Registered 2006-2007 with On-the-Job Training Credits		
<i>Status</i>	<i>Frequency</i>	<i>Percent</i>
Cancelled	16,076	40.4
Completed	18,366	46.2
Registered	4,565	11.5
Reinstated	631	1.6
Suspended	138	0.3
Total	39,776	100.0

Status of New Construction Apprentices Who Registered 2006-2007 with Related Technical Instruction Credits		
<i>Status</i>	<i>Frequency</i>	<i>Percent</i>
Cancelled	37,874	46.6
Completed	29,585	36.4
Registered	11,783	14.5
Reinstated	1,517	1.9
Suspended	491	0.6
Total	81,254	100.0

Status of New Construction Apprentices Who Registered 2006-2007 with Related Technical Instruction Credits and On-the-Job Training Credits		
<i>Status</i>	<i>Frequency</i>	<i>Percent</i>
Cancelled	12,980	41.3
Completed	14,600	46.4
Registered	3,233	10.3
Reinstated	507	1.6
Suspended	121	0.4
Total	31,441	100.0

Status of New Construction Apprentices Who Registered 2006-2007 with No Related Technical Instruction Credits and No On-the-Job Training Credits		
<i>Status</i>	<i>Frequency</i>	<i>Percent</i>
Cancelled	13,023	48.3
Completed	8,393	31.2
Registered	4,867	18.1

Reinstated	535	2.0
Suspended	122	0.4
Total	26,940	100.0

Independent Samples T-Test of Cancellation Rate for Union and Non-Union Program						N	Mean	Std. Deviation	Std. Error Mean
No OJT or RTI Hours						26940	0.483408	0.499734	0.003045
Some OJT or RTI Hours (at least one)						89589	0.457311	0.498177	0.001664
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	136.3324	.000	7.53358	116527	.000	0.026097	0.003464	0.019307	0.032887
Equal variances not assumed			7.520953	44256.97	.000	0.026097	0.00347	0.019296	0.032898

Apprenticeship Completion Rates in Construction by Gender

Status of New Male and Female Construction Apprentices Who Registered 2006-2007 by Year of Registration								
		Cancelled	Completed	Registered	Reinstated	Suspend.	Missing Status	Total
Men	Frequency	54,248	42,447	18,472	2,158	601	4	117,930
	Percent	46.0	36.0	15.7	1.8	0.5	0.0	100
Women	Frequency	1,558	951	459	33	33	0	3,034
	Percent	51.4	31.3	15.1	1.1	1.1	0	100.0
Missing	Frequency	4	2	2	0	0	0	8
	Percent	50	25	25	0	0	0	100

Status of New Male Construction Apprentices Who Registered 2006-2007 by Construction Trade								
Trade		Missing	Cancelled	Completed	Registered	Reinstated	Suspended	Total
Carpenter	Frequency	0	11,667	6,383	3,384	583	63	22,080
	Percent	0	52.8	28.9	15.3	2.6	0.3	100
Electrician	Frequency	0	10,677	9,920	3,744	293	151	24,785
	Percent	0	43.1	40.0	15.1	1.2	0.6	100
Construction Craft Laborers	Frequency	0	3,675	2,861	726	84	5	7,351
	Percent	0	50.0	38.9	9.9	1.1	0.1	100
Plumber, Pipefitter and Steamfitter	Frequency	3	7,835	5,724	4,057	209	172	18,000
	Percent	0.0	43.5	31.8	22.5	1.1	1.0	100
Operating Engineers and Other Const	Frequency	0	894	1528	386	16	7	2,831

Equip Op								
	Percent	0	31.6	54.0	13.6	0.6	0.2	100
Painter	Frequency	0	1,800	927	264	42	16	3,049
	Percent	0	59.0	30.4	8.7	1.4	0.5	100

Status of New Women Construction Apprentices Who Registered 2006-2007 by Construction Trade							
Trade		Cancelled	Completed	Registered	Reinstated	Suspended	Total
Carpenter	Frequency	347	68	68	11	4	498
	Percent	69.68%	13.65%	13.65%	2.21%	0.80%	100%
Electrician	Frequency	291	249	119	2	8	669
	Percent	43.50%	37.22%	17.79%	0.30%	1.20%	100%
Construction Craft Laborers	Frequency	214	174	58	5	1	452
	Percent	47.35%	38.50%	12.83%	1.11%	0.22%	100%
Plumber, Pipefitter and Steamfitter	Frequency	143	78	65	1	7	294
	Percent	48.64%	26.53%	22.11%	0.34%	2.38%	100%
Operating Engineers and Other Const Equip Op	Frequency	85	97	37	1	0	220
	Percent	38.64%	44.09%	16.82%	0.45%	0%	100%
Painter	Frequency	89	54	15	3	3	164
	Percent	54.27%	32.93%	9.15%	1.83%	1.83%	100%

Apprenticeship Completion Rates in Construction by Race and Ethnicity

Status of New Minority Construction Apprentices Who Registered 2006-2007		
Status	Frequency	Percent
Cancelled	23,917	49.4
Completed	15,579	32.2
Registered	7,643	15.8
Reinstated	1,045	2.2
Suspended	199	0.4
Total	48,383	100.0

Status of New White Construction Apprentices Who Registered 2006-2007		
Status	Frequency	Percent
Missing	4	0.0
Cancelled	31,526	43.9
Completed	27,562	38.4
Registered	11,181	15.5
Reinstated	1,136	1.6
Suspended	426	0.6
Total	71,835	100.0

Status of New Construction Apprentices Who Registered 2006-2007 by Race/Ethnicity

Year of Registration		Cancelled	Completed	Registered	Reinstated	Suspended	Total
African-America	Frequency	5,723	2,451	1,494	213	71	9,952
	Percent	57.5	24.6	15.0	2.1	0.7	100
Asian	Frequency	725	670	569	37	10	2,011
	Percent	36.1	33.3	23.3	1.8	0.5	100
Hawaiian-Pacific Islander	Frequency	691	319	431	46	5	1,492
	Percent	46.3	21.4	28.9	3.1	0.3	100
Hispanic	Frequency	15,867	11,681	4,778	722	105	33,153
	Percent	47.9	35.2	14.4	2.2	0.3	100
Native-American/Alaskan	Frequency	911	458	371	27	8	1,775
	Percent	51.3	25.8	20.9	1.5	0.5	100
Unknown	Frequency	367	259	109	10	9	754
	Percent	48.7	34.3	14.5	1.3	1.2	100

Independent Samples T-Test of Cancellation Rate for Minority and White Apprentices							N	Mean	Std. Deviation	Std. Error Mean
Minority							48383	0.494327	0.499973	0.002273
White							71835	0.438867	0.496252	0.001852
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
								Lower	Upper	
Equal variances assumed	717.4263	.000	18.94494	120216	.000	0.05546	0.002927	0.049722	0.061197	
Equal variances not assumed			18.91735	103267.5	.000	0.05546	0.002932	0.049714	0.061206	

Apprenticeship Completion Rates in Construction by Age Group

Status of New 25-34 Year Old Construction Apprentices Who Registered 2006-2007 by Year of Registration								
		Missing	Cancelled	Completed	Registered	Reinstated	Suspended	Total
16-24	Frequency	3	24,385	17,421	8,255	1,229	277	51,570
	Percent	0.0	47.3	33.8	16.0	2.4	0.5	100
25-34	Frequency	1	20,394	17,834	7,327	686	233	46,475
	Percent	0.0	43.9	38.4	15.8	1.5	0.5	100.1
35-44	Frequency	0	8,104	6,327	2,560	219	83	17,293
	Percent	0	46.9	36.6	14.8	1.3	0.5	100.1
45 and over	Frequency	0	2,927	1,818	791	57	41	5,634
	Percent	0	52.0	32.3	14.0	1.0	0.7	100.0

Independent Samples T-Test of Cancellation Rate for Apprentices Ages 18-24 vs 25-34	N	Mean	Std. Deviation	Std. Error Mean
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Age 18-24						51570	0.472852	0.499267	0.002199
Age 25-34						46475	0.438817	0.496248	0.002302
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	414.0681	.000	10.68917	98043	.000	0.034036	0.003184	0.027795	0.040277
Equal variances not assumed			10.69254	97110.09	.000	0.034036	0.003183	0.027797	0.040275

Independent Samples T-Test of Cancellation Rate for Apprentices Ages 25-34 vs 35-44						N	Mean	Std. Deviation	Std. Error Mean
Age 35-44						17293	0.468629	0.499029	0.003795
Age 25-34						46475	0.438817	0.496248	0.002302
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	129.964	.000	6.73411	63766	.000	0.029812	0.004427	0.021135	0.038489
Equal variances not assumed			6.716907	30806.66	.000	0.029812	0.004438	0.021113	0.038512

Independent Samples T-Test of Cancellation Rate for Apprentices Ages 25-34 vs 45 and over						N	Mean	Std. Deviation	Std. Error Mean
Age 45 and over						5634	0.519524	0.499663	0.006657
Age 25-34						46475	0.438817	0.496248	0.002302
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	68.233	.000	11.52005	52107	.000	0.080708	0.007006	0.066976	0.094439
Equal variances not assumed			11.45829	7048.458	.000	0.080708	0.007044	0.0669	0.094515

Apprenticeship Completion in Construction by Education Level

Status of New Construction Apprentices Who Registered 2006-2007 Education Level								
		Missing	Cancelled	Completed	Registered	Reinstated	Suspended	Total
8th Grade or Less	Frequency	0	1,257	606	159	30	6	2,058

	Percent	0	61.1	29.4	7.7	1.5	0.3	100
9th-12th Grade	Frequency	1	6,051	4,225	2,028	245	53	12,603
	Percent	0.0	48.0	33.5	16.1	1.9	0.4	99.9
GED	Frequency	1	7,078	3,232	1,275	253	109	11,948
	Percent	0.0	59.2	27.1	10.7	2.1	0.9	100
High School Diploma or Greater	Frequency	2	39,595	33,145	14,684	1,544	460	89,430
	Percent	0.0	44.3	37.1	16.4	1.7	0.5	100
Unknown	Frequency	0	1,829	2,192	787	119	6	4,933
	Percent	0	37.1	44.4	16.0	2.4	0.1	100

Independent Samples T-Test of Cancellation Rate for Apprentices with Less than a GED vs High School Diploma or More					N	Mean	Std. Deviation	Std. Error Mean	
High School Diploma or More					89430	0.442749	0.496714	0.001661	
GED or Less					26609	0.540644	0.498355	0.003055	
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	75.56334	.000	-28.2021	116037	.000	-.00979	0.003471	-0.1047	-0.09109
Equal variances not assumed			-28.1518	43530.96	.000	-.00979	0.003477	-0.10471	-0.09108

Apprenticeship Completion in Construction by Military Veteran Status

Status of New Construction Apprentices Who Registered 2006-2007 by Veteran Status								
Veteran Status		Missing	Cancelled	Completed	Registered	Reinstated	Suspended	Total
Non-Veteran	Percent	4	51,091	40,296	17,494	2,019	561	111465
	Frequency	0.0	45.8	36.2	15.7	1.8	0.5	100
Unknown	Percent	0	1057	568	274	67	16	1,982
	Frequency	0.0	53.3	28.7	13.8	3.4	0.8	100
Veteran	Percent	0	3,662	2,536	1,165	105	57	7,525
	Frequency	0	48.7	33.7	15.5	1.4	0.7	100

Independent Samples T-Test of Cancellation Rate for Military Veterans vs Non-Veterans					N		Mean	Std. Deviation	Std. Error Mean
Veteran					7525		0.486645	0.499855	0.005762
Non-Veteran					111465		0.458359	0.498265	0.001492
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	

						nce			
								Lower	Upper
Equal variances assumed	42.00588	.000	4.7652	118988	.000	0.028285	0.005936	0.016651	0.03992
Equal variances not assumed			4.751961	8564.695	.000	0.028285	0.005952	0.016617	0.039953

Time to Cancellation

Number of Months to Cancellation for New Construction Apprentices Registered 2006-2007 that Subsequently Cancelled	
Valid	55775
Missing	35
Mean	24.75355
Median	21

Number of Months to Cancellation for New Construction Apprentices Registered 2006-2007 that Subsequently Cancelled		
Number of months	Frequency	Percent
0	179	0.320731
1	315	0.564415
2	612	1.096578
3	814	1.45852
4	955	1.711163
5	1354	2.426089
6	1911	3.424118
7	1511	2.7074
8	1596	2.859703
9	1390	2.490593
10	1452	2.601684
11	1720	3.081885
12	1673	2.997671
13	1509	2.703817
14	1414	2.533596
15	1394	2.49776
16	1593	2.854327
17	1423	2.549722
18	1364	2.444006
19	1252	2.243326
20	1284	2.300663

21	1277	2.28812
22	1289	2.309622
23	1223	2.191364
24	1195	2.141193
25	1167	2.091023
26	1124	2.013976
27	976	1.748791
28	1045	1.872424
29	1101	1.972765
30	876	1.569611
31	785	1.406558
32	790	1.415517
33	776	1.390432
34	767	1.374306
35	712	1.275757
36	797	1.428059
37	725	1.29905
38	725	1.29905
39	753	1.349221
40	717	1.284716
41	557	0.998029
42	588	1.053575
43	564	1.010572
44	505	0.904856
45	515	0.922774
46	514	0.920982
47	476	0.852894
48	512	0.917398
49	535	0.95861
50	480	0.860061
51	385	0.689841
52	490	0.877979
53	359	0.643254
54	407	0.72926
55	332	0.594875
56	324	0.580541
57	294	0.526787
58	288	0.516037
59	262	0.46945
60	233	0.417488
61	213	0.381652
62	171	0.306397
63	168	0.301021

64	162	0.290271
65	166	0.297438
66	170	0.304605
67	136	0.243684
68	101	0.180971
69	74	0.132593
70	75	0.134385
71	57	0.102132
72	34	0.060921
73	42	0.075255
74	35	0.062713
75	12	0.021502
76	3	0.005375
77	1	0.001792
Total	55775	99.93729
System	35	0.062713
	55810	100

Appendix C: Statistical Appendix

Data tables in this appendix include AspenWSI analysis of new construction apprenticeship agreements initiated between 2006 to 2007 from the Office of Apprenticeship RAPIDS Database updated as of May 2012.

Characteristics and Demographics of Construction Apprentices

Registration of New Construction Apprentices by Year		
<i>Year</i>	Frequency	Percent
2006	39,914	32.4
2007	81,178	67.6
Total	120,972	100

Part of the large increase from 2006 to 2007 can be attributed to California becoming an OA state and submitting data to RAPIDS.

New Construction Apprentices by Trade 2006-2007		
	Frequency	Percent
Boilermaker	3061	2.5
Brickmasons, Blockmasons, and Stonemasons	1990	1.6
Carpenters	22570	18.7
Cement Masons, Concrete Finishers and Terrazzo Workers	1889	1.6
Construction and Building Inspectors	167	0.1
Construction and Related Workers, All Other	185	0.2
Construction Craft Laborers	7794	6.4
Construction Worker	56	0.0
Drywall and Ceiling Tile Installers	5921	4.9
Earth Drillers except oil and gas	5	0.0
Electrician	25438	21.0
Elevator Installers and Repairers	2687	2.2
Fence Erectors	47	0.0
Floor Layer	1597	1.3
Glazier	1491	1.2
Insulation Workers	1311	1.1
Operating Engineers and Other Const Equip Op	3051	2.5
Painter	3200	2.6
Pavement Stripper	117	0.1
Paving, Surfacing and Tamping Equip Operators	32	0.0
Plasters and Stucco Masons	728	0.6
Plumber, Pipefitter and Steamfitter	18281	15.1
Reinforcing Iron and Rebar Workers	841	0.7
Roofers	4423	3.7
Sheet Metal Workers	5693	4.7
Structural Iron and Steel Workers	6640	5.5
Taper	720	0.6
Tile and Marble Setter	564	0.5
Tile Finishers and Marble Finishers	473	0.4
Total	120972	100

Length of Training for New Construction Apprentices Registered 2006-2007		
<i>Hours of Training</i>	Frequency	Percent
Up to 4000	9,658	8.0
4001-6000	36,580	30.2
6001-8000	55,483	45.9
8001 or more	18,867	15.6
Missing	384	0.3

New Construction Apprentices Registered 2006-2007 by Geographical Region		
<i>Region</i>	Frequency	Percent
Northeast	11,890	9.8
Midwest	35,463	26.8
South	21,426	17.7
West	55,156	45.6
Territories	40	0.0

Gender of New Construction Apprentices Registered 2006-2007		
<i>Gender</i>	Frequency	Percent
Female	3,034	2.5
Male	117,930	97.5

Race and Ethnicity of New Construction Apprentices Registered 2006-2007		
<i>Race</i>	Frequency	Percent
African-American	9,952	8.2
Asian	2,011	1.7
Native-American/Alaskan	1,775	1.5
Hispanic ³	33,153	27.4
Hawaiian-Pacific Islander	1,492	1.2
White	71,835	59.4
Unknown	754	0.6
Total	120,972	100

Age of New Construction Apprentices Registered 2006-2007		
<i>Age Group</i>	Frequency	Percent
16-24	51,570	42.6
25-34	46,475	38.4
35-44	17,293	14.3
45 and over	5,634	4.7
Total	120,972	100.0

Age of New Construction Apprentices Registered 2006-2007	
Mean Age	27.8
Median Age	26.0

³ Includes all African-American, Asian, Native-American-Alaskan, Hawaiian-Pacific Islander and White apprentices identified as having Hispanic ethnicity in the RAPIDS database.

Education Level of New Construction Apprentices Registered 2006-2007		
<i>Education Level</i>	Frequency	Percent
8th Grade or Less	2,058	1.7
9th-12th Grade	12,603	10.4
GED	11,948	9.9
High School Diploma or greater	89,320	73.9
Unknown/Missing	4,933	4.1
Total	120,972	100.0

Veteran Status of New Construction Apprentices Registered 2006-2007		
<i>Veteran Status</i>	Frequency	Percent
Non-Veteran	111,465	92.1
Unknown	1,982	1.6
Veteran	7,525	6.2

Overall Completion Rates of Construction Apprentices

Note: Active apprentices are defined as those with a status of registered, reinstated or suspended.

Status of New Construction Apprentices Who Registered 2006-2007		
<i>Status</i>	<i>Frequency</i>	<i>Percent</i>
Missing	4	.0
Cancelled	55,810	46.1
Completed	43,400	35.9
Registered	18,933	15.7
Reinstated	2,191	1.8
Suspended	634	0.5
Total	120,972	100.0

Status of New Construction Apprentices Who Registered 2006-2007 by Year Registered							
Year Registered		Missing	Cancelled	Completed	Registered	Reinstated	Suspended
2006	Frequency	1	16648	17107	4596	597	245
	Percent	0.00%	42.47%	43.65%	11.73%	1.52%	0.63%
2007	Frequency	3	39162	26293	14337	1594	389
	Percent	0.00%	47.89%	32.15%	17.53%	1.95%	0.48%

Apprenticeship Completion Rates by Union and Nonunion Apprentices

Status of New Construction Apprentices Who Registered 2006-2007 by Union or Non-Union Program								
Program Type		Missing	Cancelled	Complete	Registered	Reinstated	Suspended	Total
Missing	Frequency	0	456	626	492	11	0	1585
	Percent	0	28.8	39.5	31.0	0.7	0	100
Non-Union Program	Frequency	1	12853	7119	2261	318	117	22669
	Percent	0.0	56.7	31.4	10.0	1.4	0.5	100
Union Program	Frequency	3	42501	35655	16180	1862	517	96718
	Percent	0.0	43.9	36.9	16.7	1.9	0.5	100

Independent Samples T-Test of Cancellation Rate for Union and Non-Union Program						N	Mean	Std. Deviation	Std. Error Mean
non-union program						22669	0.566986	0.495504	0.003291
union program						96718	0.439432	0.496321	0.001596
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	13.07505	0.000	34.83834	119385	.000	0.127554	0.003661	0.120378	0.13473
Equal variances not assumed			34.87396	34140.06	.000	0.127554	0.003658	0.120385	0.134723

Apprenticeship Completion Rates by Construction Trade of Apprentices Registered 2006-2007

Occupation		Missing	Cancelled	Completed	Registered	Reinstated	Suspended
Boilermaker	Frequency	0	1204	1375	436	46	0
	Percent	0	39.33355	44.91996	14.24371	1.502777	0
Brickmasons, Blockmasons, and Stonemasons	Frequency	0	1116	677	157	21	19
	Percent	0	56.0804	34.0201	7.889447	1.055276	0.954774
Carpenter	Frequency	0	12014	6447	3448	594	67
	Percent	0	53.22995	28.56447	15.27692	2.631812	0.296854
Cement Masons, Concrete Finishers and Terrazzo Workers	Frequency	1	926	610	291	56	5
	Percent	0.052938	49.02065	32.29222	15.40498	2.964531	0.26469
Construction and Building Inspectors	Frequency	0	92	59	15	1	0
	Percent	0	55.08982	35.32934	8.982036	0.598802	0
Construction and Related Workers, All Other	Frequency	0	57	78	39	6	5
	Percent	0	30.81081	42.16216	21.08108	3.243243	2.702703
Construction Craft Laborers	Frequency	0	3886	3030	783	89	6
	Percent	0	49.85887	38.87606	10.04619	1.141904	0.076982
Construction Worker	Frequency	0	3	50	3	0	0
	Percent	0	5.357143	89.28571	5.357143	0	0
Drywall and Ceiling Tile Installers	Frequency	0	2823	2472	383	243	0

	Percent	0	47.67776	41.7497	6.468502	4.104036	0
Earth Drillers except oil and gas	Frequency	0	3	0	0	0	2
	Percent	0	60	0	0	0	40
Electrician	Frequency	0	10962	10164	3859	295	158
	Percent	0	43.09301	39.95597	15.17022	1.159682	0.621118
Elevator Installers and Repairers	Frequency	0	624	905	1075	59	24
	Percent	0	23.22293	33.68068	40.00744	2.195757	0.893189
Fence Erectors	Frequency	0	20	27	0	0	0
	Percent	0	42.55319	57.44681	0	0	0
Floor Layer	Frequency	0	749	330	472	39	7
	Percent	0	46.90044	20.66374	29.55542	2.442079	0.438322
Glazier	Frequency	0	624	692	136	15	24
	Percent	0	41.85111	46.4118	9.121395	1.006036	1.609658
Insulation Workers	Frequency	0	488	684	109	23	7
	Percent	0	37.22349	52.17391	8.314264	1.754386	0.533944
Operating Engineers and Other Const Equip Op	Frequency	0	979	1625	423	17	7
	Percent	0	32.08784	53.26123	13.86431	0.557194	0.229433
Painter	Frequency	0	1886	971	279	45	19
	Percent	0	58.9375	30.34375	8.71875	1.40625	0.59375
Pavement Stripper	Frequency	0	50	61	3	1	2
	Percent	0	42.73504	52.13675	2.564103	0.854701	1.709402
Paving, Surfacing and Tamping Equip Operators	Frequency	0	6	26	0	0	0
	Percent	0	18.75	81.25	0	0	0
Plasters and Stucco Masons	Frequency	0	394	211	109	14	0
	Percent	0	54.12088	28.98352	14.97253	1.923077	0
Plumber, Pipefitter and Steamfitter	Frequency	3	7975	5797	4117	210	179
	Percent	0.01641	43.62453	31.71052	22.52065	1.148734	0.979159
Reinforcing Iron and Rebar Workers	Frequency	0	466	323	31	17	4
	Percent	0	55.41023	38.40666	3.686088	2.021403	0.475624
Roofers	Frequency	0	2850	863	593	112	5
	Percent	0	64.4359	19.51164	13.40719	2.532218	0.113045
Sheet Metal Worker	Frequency	0	1805	2511	1204	131	42
	Percent	0	31.7056	44.1068	21.14878	2.301071	0.737748
Structural Iron and Steel Workers	Frequency	0	2821	2801	854	128	36
	Percent	0	42.48494	42.18373	12.86145	1.927711	0.542169
Taper	Frequency	0	448	206	56	7	3
	Percent	0	62.22222	28.61111	7.777778	0.972222	0.416667
Tile and Marble Setter	Frequency	0	307	190	43	15	9
	Percent	0	54.43262	33.68794	7.624113	2.659574	1.595745
Tile Finishers and Marble Finishers	Frequency	0	232	215	15	7	4
	Percent	0	49.04863	45.45455	3.171247	1.479915	0.845666

Apprenticeship Completion Rates of Construction Apprentices with OJT and RTI Credits

Status of New Construction Apprentices Who Registered 2006-2007 with On-the-Job Training Credits		
<i>Status</i>	<i>Frequency</i>	<i>Percent</i>
Cancelled	16,076	40.4
Completed	18,366	46.2
Registered	4,565	11.5
Reinstated	631	1.6
Suspended	138	0.3
Total	39,776	100.0

Status of New Construction Apprentices Who Registered 2006-2007 with Related Technical Instruction Credits		
<i>Status</i>	<i>Frequency</i>	<i>Percent</i>
Cancelled	37,874	46.6
Completed	29,585	36.4
Registered	11,783	14.5
Reinstated	1,517	1.9
Suspended	491	0.6
Total	81,254	100.0

Status of New Construction Apprentices Who Registered 2006-2007 with Related Technical Instruction Credits and On-the-Job Training Credits		
<i>Status</i>	<i>Frequency</i>	<i>Percent</i>
Cancelled	12,980	41.3
Completed	14,600	46.4
Registered	3,233	10.3
Reinstated	507	1.6
Suspended	121	0.4
Total	31,441	100.0

Status of New Construction Apprentices Who Registered 2006-2007 with No Related Technical Instruction Credits and No On-the-Job Training Credits		
<i>Status</i>	<i>Frequency</i>	<i>Percent</i>
Cancelled	13,023	48.3
Completed	8,393	31.2
Registered	4,867	18.1
Reinstated	535	2.0
Suspended	122	0.4
Total	26,940	100.0

Independent Samples T-Test of Cancellation Rate for Union and Non-Union Program						N	Mean	Std. Deviation	Std. Error Mean
No OJT or RTI Hours						26940	0.483408	0.499734	0.003045
Some OJT or RTI Hours (at least one)						89589	0.457311	0.498177	0.001664
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	136.3324	.000	7.53358	116527	.000	0.026097	0.003464	0.019307	0.032887
Equal variances not assumed			7.520953	44256.97	.000	0.026097	0.00347	0.019296	0.032898

Apprenticeship Completion Rates in Construction by Gender

Status of New Male and Female Construction Apprentices Who Registered 2006-2007 by Year of Registration								
		Cancelled	Completed	Registered	Reinstated	Suspend.	Missing Status	Total
Men	Frequency	54,248	42,447	18,472	2,158	601	4	117,930
	Percent	46.0	36.0	15.7	1.8	0.5	0.0	100
Women	Frequency	1,558	951	459	33	33	0	3,034
	Percent	51.4	31.3	15.1	1.1	1.1	0	100.0
Missing	Frequency	4	2	2	0	0	0	8
	Percent	50	25	25	0	0	0	100

Status of New Male Construction Apprentices Who Registered 2006-2007 by Construction Trade								
Trade		Missing	Cancelled	Completed	Registered	Reinstated	Suspended	Total
Carpenter	Frequency	0	11,667	6,383	3,384	583	63	22,080
	Percent	0	52.8	28.9	15.3	2.6	0.3	100
Electrician	Frequency	0	10,677	9,920	3,744	293	151	24,785
	Percent	0	43.1	40.0	15.1	1.2	0.6	100
Construction Craft Laborers	Frequency	0	3,675	2,861	726	84	5	7,351
	Percent	0	50.0	38.9	9.9	1.1	0.1	100
Plumber, Pipefitter and Steamfitter	Frequency	3	7,835	5,724	4,057	209	172	18,000
	Percent	0.0	43.5	31.8	22.5	1.1	1.0	100
Operating Engineers and Other Const Equip Op	Frequency	0	894	1528	386	16	7	2,831
	Percent	0	31.6	54.0	13.6	0.6	0.2	100
Painter	Frequency	0	1,800	927	264	42	16	3,049
	Percent	0	59.0	30.4	8.7	1.4	0.5	100

Status of New Women Construction Apprentices Who Registered 2006-2007 by Construction Trade							
Trade		Cancelled	Completed	Registered	Reinstated	Suspended	Total
Carpenter	Frequency	347	68	68	11	4	498
	Percent	69.68%	13.65%	13.65%	2.21%	0.80%	100%
Electrician	Frequency	291	249	119	2	8	669
	Percent	43.50%	37.22%	17.79%	0.30%	1.20%	100%
Construction Craft Laborers	Frequency	214	174	58	5	1	452
	Percent	47.35%	38.50%	12.83%	1.11%	0.22%	100%
Plumber, Pipefitter and Steamfitter	Frequency	143	78	65	1	7	294
	Percent	48.64%	26.53%	22.11%	0.34%	2.38%	100%
Operating Engineers and Other Const Equip Op	Frequency	85	97	37	1	0	220
	Percent	38.64%	44.09%	16.82%	0.45%	0%	100%
Painter	Frequency	89	54	15	3	3	164
	Percent	54.27%	32.93%	9.15%	1.83%	1.83%	100%

Apprenticeship Completion Rates in Construction by Race and Ethnicity

Status of New Minority Construction Apprentices Who Registered 2006-2007		
<i>Status</i>	<i>Frequency</i>	<i>Percent</i>
Cancelled	23,917	49.4
Completed	15,579	32.2
Registered	7,643	15.8
Reinstated	1,045	2.2
Suspended	199	0.4
Total	48,383	100.0

Status of New White Construction Apprentices Who Registered 2006-2007		
<i>Status</i>	<i>Frequency</i>	<i>Percent</i>
Missing	4	0.0
Cancelled	31,526	43.9
Completed	27,562	38.4
Registered	11,181	15.5
Reinstated	1,136	1.6
Suspended	426	0.6
Total	71,835	100.0

Status of New Construction Apprentices Who Registered 2006-2007 by Race/Ethnicity							
Year of Registration		Cancelled	Completed	Registered	Reinstated	Suspended	Total
African-America	Frequency	5,723	2,451	1,494	213	71	9,952
	Percent	57.5	24.6	15.0	2.1	0.7	100
Asian	Frequency	725	670	569	37	10	2,011
	Percent	36.1	33.3	23.3	1.8	0.5	100
Hawaiian-Pacific Islander	Frequency	691	319	431	46	5	1,492
	Percent	46.3	21.4	28.9	3.1	0.3	100
Hispanic	Frequency	15,867	11,681	4,778	722	105	33,153
	Percent	47.9	35.2	14.4	2.2	0.3	100
Native-American/Alaskan	Frequency	911	458	371	27	8	1,775
	Percent	51.3	25.8	20.9	1.5	0.5	100
Unknown	Frequency	367	259	109	10	9	754
	Percent	48.7	34.3	14.5	1.3	1.2	100

Independent Samples T-Test of Cancellation Rate for Minority and White Apprentices						N	Mean	Std. Deviation	Std. Error Mean
Minority						48383	0.4943 27	0.499973	0.002273
White						71835	0.4388 67	0.496252	0.001852
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	717.4263	.000	18.94494	120216	.000	0.05546	0.002927	0.049722	0.061197
Equal variances not assumed			18.91735	103267.5	.000	0.05546	0.002932	0.049714	0.061206

Apprenticeship Completion Rates in Construction by Age Group

Status of New 25-34 Year Old Construction Apprentices Who Registered 2006-2007 by Year of Registration								
		Missing	Cancelled	Completed	Registered	Reinstated	Suspended	Total
16-24	Frequency	3	24,385	17,421	8,255	1,229	277	51,570
	Percent	0.0	47.3	33.8	16.0	2.4	0.5	100
25-34	Frequency	1	20,394	17,834	7,327	686	233	46,475
	Percent	0.0	43.9	38.4	15.8	1.5	0.5	100.1
35-44	Frequency	0	8,104	6,327	2,560	219	83	17,293
	Percent	0	46.9	36.6	14.8	1.3	0.5	100.1
45 and over	Frequency	0	2,927	1,818	791	57	41	5,634
	Percent	0	52.0	32.3	14.0	1.0	0.7	100.0

Independent Samples T-Test of Cancellation Rate for Apprentices Ages 18-24 vs 25-34					N		Mean	Std. Deviation	Std. Error Mean
Age 18-24					51570		0.472852	0.499267	0.002199
Age 25-34					46475		0.438817	0.496248	0.002302
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	414.0681	.000	10.68917	98043	.000	0.034036	0.003184	0.027795	0.040277
Equal variances not assumed			10.69254	97110.09	.000	0.034036	0.003183	0.027797	0.040275

Independent Samples T-Test of Cancellation Rate for Apprentices Ages 25-34 vs 35-44					N		Mean	Std. Deviation	Std. Error Mean
Age 35-44					17293		0.468629	0.499029	0.003795
Age 25-34					46475		0.438817	0.496248	0.002302
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	129.964	.000	6.73411	63766	.000	0.029812	0.004427	0.021135	0.038489
Equal variances not assumed			6.716907	30806.66	.000	0.029812	0.004438	0.021113	0.038512

Independent Samples T-Test of Cancellation Rate for Apprentices Ages 25-34 vs 45 and over					N		Mean	Std. Deviation	Std. Error Mean
Age 45 and over					5634		0.519524	0.499663	0.006657
Age 25-34					46475		0.438817	0.496248	0.002302
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	68.233	.000	11.52005	52107	.000	0.080708	0.007006	0.066976	0.094439
Equal variances not assumed			11.45829	7048.458	.000	0.080708	0.007044	0.0669	0.094515

Apprenticeship Completion in Construction by Education Level

Status of New Construction Apprentices Who Registered 2006-2007 Education Level								
		Missing	Cancelled	Completed	Registered	Reinstated	Suspended	Total
8th Grade or Less	Frequency	0	1,257	606	159	30	6	2,058
	Percent	0	61.1	29.4	7.7	1.5	0.3	100
9th-12th Grade	Frequency	1	6,051	4,225	2,028	245	53	12,603
	Percent	0.0	48.0	33.5	16.1	1.9	0.4	99.9
GED	Frequency	1	7,078	3,232	1,275	253	109	11,948
	Percent	0.0	59.2	27.1	10.7	2.1	0.9	100
High School Diploma or Greater	Frequency	2	39,595	33,145	14,684	1,544	460	89,430
	Percent	0.0	44.3	37.1	16.4	1.7	0.5	100
Unknown	Frequency	0	1,829	2,192	787	119	6	4,933
	Percent	0	37.1	44.4	16.0	2.4	0.1	100

Independent Samples T-Test of Cancellation Rate for Apprentices with Less than a GED vs High School Diploma or More						N	Mean	Std. Deviation	Std. Error Mean
High School Diploma or More						89430	0.442749	0.496714	0.001661
GED or Less						26609	0.540644	0.498355	0.003055
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	75.56334	.000	-28.2021	116037	.000	-0.0979	0.003471	-0.1047	-0.09109
Equal variances not assumed			-28.1518	43530.96	.000	-0.0979	0.003477	-0.10471	-0.09108

Apprenticeship Completion in Construction by Military Veteran Status

Status of New Construction Apprentices Who Registered 2006-2007 by Veteran Status								
Veteran Status		Missing	Cancelled	Completed	Registered	Reinstated	Suspended	Total
Non-Veteran	Percent	4	51,091	40,296	17,494	2,019	561	111465
	Frequency	0.0	45.8	36.2	15.7	1.8	0.5	100
Unknown	Percent	0	1057	568	274	67	16	1,982
	Frequency	0.0	53.3	28.7	13.8	3.4	0.8	100
Veteran	Percent	0	3,662	2,536	1,165	105	57	7,525
	Frequency	0	48.7	33.7	15.5	1.4	0.7	100

Independent Samples T-Test of Cancellation Rate for Military Veterans vs Non-Veterans					N	Mean	Std. Deviation	Std. Error Mean	
Veteran					7525	0.486645	0.499855	0.005762	
Non-Veteran					111465	0.458359	0.498265	0.001492	
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	42.00588	.000	4.7652	118988	.000	0.028285	0.005936	0.016651	0.03992
Equal variances not assumed			4.751961	8564.695	.000	0.028285	0.005952	0.016617	0.039953

Time to Cancellation

Number of Months to Cancellation for New Construction Apprentices Registered 2006-2007 that Subsequently Cancelled	
Valid	55775
Missing	35
Mean	24.75355
Median	21

Number of Months to Cancellation for New Construction Apprentices Registered 2006-2007 that Subsequently Cancelled		
Number of months	Frequency	Percent
0	179	0.320731
1	315	0.564415
2	612	1.096578
3	814	1.45852
4	955	1.711163
5	1354	2.426089
6	1911	3.424118
7	1511	2.7074
8	1596	2.859703
9	1390	2.490593
10	1452	2.601684
11	1720	3.081885
12	1673	2.997671
13	1509	2.703817
14	1414	2.533596
15	1394	2.49776
16	1593	2.854327
17	1423	2.549722
18	1364	2.444006

Number of months	Frequency	Percent
19	1252	2.243326
20	1284	2.300663
21	1277	2.28812
22	1289	2.309622
23	1223	2.191364
24	1195	2.141193
25	1167	2.091023
26	1124	2.013976
27	976	1.748791
28	1045	1.872424
29	1101	1.972765
30	876	1.569611
31	785	1.406558
32	790	1.415517
33	776	1.390432
34	767	1.374306
35	712	1.275757
36	797	1.428059
37	725	1.29905
38	725	1.29905
39	753	1.349221
40	717	1.284716
41	557	0.998029
42	588	1.053575
43	564	1.010572
44	505	0.904856
45	515	0.922774
46	514	0.920982
47	476	0.852894
48	512	0.917398
49	535	0.95861
50	480	0.860061
51	385	0.689841
52	490	0.877979
53	359	0.643254
54	407	0.72926
55	332	0.594875
56	324	0.580541
57	294	0.526787
58	288	0.516037
59	262	0.46945
60	233	0.417488
61	213	0.381652

Number of months	Frequency	Percent
62	171	0.306397
63	168	0.301021
64	162	0.290271
65	166	0.297438
66	170	0.304605
67	136	0.243684
68	101	0.180971
69	74	0.132593
70	75	0.134385
71	57	0.102132
72	34	0.060921
73	42	0.075255
74	35	0.062713
75	12	0.021502
76	3	0.005375
77	1	0.001792
Total	55775	99.93729
System	35	0.062713
	55810	100