

Degree Production Trends by Program Area

A National Analysis 2004 – 2009

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State Higher Education Executive Officers

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Introduction

The national imperative for increased postsecondary level completions has never been clearer. In order to remain competitive in an ever-changing global market, the United States must produce an educated workforce; one that is ready to lead and inspire a 21st century economy.

Recognizing this urgency, the President, several foundations, policy organizations, and states recently set bold college completion goals:

- President Obama called for the U.S. to be first in the world again in college attainment by 2020.
- Lumina Foundation for Education set a national goal for 60 percent of Americans to have a high-quality degree or credential by 2025.
- The Bill & Melinda Gates Foundation aims to double the number of low-income adults who earn a postsecondary degree or credential with genuine value in the marketplace by age 26.
- Complete College America, along with their Alliance of 24 states, set a national goal that six out of 10 young adults in the U.S. will have a college degree or credential of value by 2020.

Since last year, the State Higher Education Executive Officers have added to the public dialogue with the release of a series of reports, including trends in national degree production and costs related to postsecondary completions and sub-baccalaureate certificate and degree growth. This report is a follow-up to ***Degree Production and Cost Trends: A National Analysis***, released in August 2010.

With a focus on completions by program area over the last five years, the following questions continue to drive our research and analysis:

- What trends can we observe in completion production?
- Are there different state factors driving results?
- What are the policy implications of a state's completion production?

Regional and state economies differ from one another in terms of what they demand from a particular workforce. Our certificate production report illustrated some differences in certificate and associate degree growth by region. This analysis goes a step further to see if similar trends exist within completion data across program areas.

The overall goal of this series is to create a context for state policy discussion and stimulate challenging questions about completion data and certificate production.

Methodology

This analysis uses data downloaded directly from the Integrated Postsecondary Education Data System (IPEDS), unlike the ***Degree Productions and Costs Trends*** report, which utilized the *Delta Cost Project's* dataset. To maintain consistency across these reports, institutions included in this analysis were based on data reported in the 2009 IPEDS Institutional Characteristics Survey. They include Title IV, public, postsecondary institutions from all fifty states that reported both

full-time equivalent (FTE)¹ and completions by Classification of Instructional Programs (CIP) code. In addition, this report maintains institutional groupings based on the Carnegie 2005 Basic Classification (Appendix 1a):

- Associates²
- Baccalaureate, Masters, Doctoral³
- Research, High Activity
- Research, Very High Activity

This analysis looks at degrees and certificates awarded by fields of study based on data collected in the IPEDS Completions Survey. The National Center for Education Statistics (NCES) created the first CIP taxonomy in 1980 to track fields of study, which was revised in 1985, 1990, 2000, and, 2010. CIP codes do not directly track to college “majors” and “minors;” they are a field of study classification tied to enrollment and completion data reported by IPEDS keyholders.

For the purposes of this analysis, the 2-digit CIP series is utilized rather than the 6-digit or 4-digit CIP codes, the latter of which are more specific descriptions of a field of study. Further, the 57 individual 2-digit CIP codes were categorized into nine groups (see Appendix 1b); seven of those groups are examined in this report:⁴

- Arts and Humanities;
- Business and Communication;
- Education;
- Health;
- Science, Technology, Engineering, and Math (STEM);
- Social and Behavior Sciences and Human Services; and
- Trades.

Additionally, this report groups academic awards as follows. Certificates and 2 or 4 Year Degrees comprise the majority of the completions included in this analysis.

- **Certificate** includes: *Award of less than 1 academic year; Award of at least 1 but less than 2 academic years; and Award of at least 2 but less than 4 academic years;*
- **2 or 4 Year Degree** includes: *Associates degree and Bachelors degree;*
- **Advanced Degree** includes: *Masters degree; Doctors degree; and First-professional degree; and*
- **Post Degree or Advanced Certificate** includes: *Post-masters certificate; Postbaccalaureate certificate; and First-professional certificate.*

Although this report looks at total completions rather than a ratio of completions by student, parts of the analysis use FTE to put completions data into greater context. IPEDS describes FTE as “a single value providing a meaningful combination of full-time and part-time students.” IPEDS provides two different measures of FTE, one based on enrollment and the other based on contact and credit hours, in other words institutional activity. Since the FTE calculated from contact and credit hours represents an institution’s annual activity, this report uses this annual student FTE measure for the years analyzed in this study, 2003-2004 to 2008-2009.

¹ Institutions with five or fewer FTE in any of the study years were excluded as was one institution with FTE data that was a significant outlier.

² Includes institutions classified as baccalaureate institutions that predominantly award associates degrees. Associate Institutions with a “special” Carnegie classification were omitted from the analysis.

³ These categories were combined because their populations are fundamentally similar as are their FTE and enrollment trends.

⁴ Residency programs and High School/Secondary Diplomas and Certificates are not included in this analysis.

Findings

Total Degrees, Certificates, and Completions, 2004-2009

Table 1 provides an overview of the number of total degrees and certificates awarded and total completions at all levels by program area. From 2004 to 2009, student FTE increased by 11%, while the number of degrees awarded grew by 13% and total completions grew by 15%. The total number of certificates awarded increased significantly (26%) over the same 5-year time period.

Health fields experienced the largest increase in the number of degrees awarded, rising by 41% between 2004 and 2009. Education experienced a 1% increase in the total number of degrees awarded during the same time period. STEM fields experienced a relatively low increase in the total number of degrees awarded from 2004 to 2009 (4%).

The number of total certificates awarded grew dramatically within the Arts and Humanities program area (139%), while the STEM fields experienced a similar relatively low increase in the number of total certificates awarded over the same 5-year time period (1%).

Across disciplines, Health (37%) experienced the largest increase in the number of total completions, while total completions in Trades grew by 24%. Education (2%) and STEM (4%) experienced the lowest growth in total completions from 2004 to 2009.

Numerically, Arts and Humanities led all disciplines with 534,567 total completions in 2008-2009, followed by Business and Communications with 436,309 total completions. Those two areas also led all disciplines in the total number of degrees awarded in 2008-2009. Health (122,870) and Trades (113,539) led all disciplines in the number of total certificates awarded during the 2008-2009 academic year.

	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	1-Year % Change 2007-08 to 2008-09	5-Year % Change 2003-04 to 2008-09
Arts and Humanities								
All Degrees	446,399	467,412	479,993	490,100	500,107	511,317	2%	15%
All Certificates	9,745	9,877	12,183	16,158	15,969	23,250	46%	139%
All Completions	456,144	477,289	492,176	506,258	516,076	534,567	4%	17%
Business and Communication								
All Degrees	360,489	364,694	363,219	366,635	376,806	390,614	4%	8%
All Certificates	39,790	39,165	42,070	42,499	42,809	45,695	7%	15%
All Completions	400,279	403,859	405,289	409,134	419,615	436,309	4%	9%
Education								
All Degrees	175,194	178,986	181,313	177,989	175,675	176,358	0%	1%
All Certificates	11,569	12,426	13,677	13,442	14,300	14,949	5%	29%
All Completions	186,763	191,412	194,990	191,431	189,975	191,307	1%	2%
Health								
All Degrees	160,200	176,514	189,510	202,374	215,174	225,697	5%	41%
All Certificates	93,509	103,307	106,299	111,272	111,865	122,870	10%	31%
All Completions	253,709	279,821	295,809	313,646	327,039	348,567	7%	37%
Science, Technology, Engineering, and Math (STEM)								
All Degrees	302,539	304,381	302,364	302,072	307,571	315,959	3%	4%
All Certificates	38,118	35,036	32,592	32,328	35,267	38,449	9%	1%
All Completions	340,657	339,417	334,956	334,400	342,838	354,408	3%	4%
Social and Behavior Sciences and Human Services								
All Degrees	275,000	288,717	298,027	304,379	313,909	318,923	2%	16%
All Certificates	18,420	20,614	21,834	20,990	21,518	21,826	1%	18%
All Completions	293,420	309,331	319,861	325,369	335,427	340,749	2%	16%
Trades								
All Degrees	58,952	62,838	66,979	68,122	69,469	71,010	2%	20%
All Certificates	90,324	92,206	94,373	106,131	108,339	113,539	5%	26%
All Completions	149,276	155,044	161,352	174,253	177,808	184,549	4%	24%
Total Completions								
FTE	9,746,211	9,824,655	9,860,305	9,980,005	10,319,539	10,783,154	4%	11%
All Degrees	1,778,773	1,843,542	1,881,405	1,911,671	1,958,711	2,009,878	3%	13%
All Certificates	301,475	312,631	323,028	342,820	350,067	380,578	9%	26%
All Completions	2,080,248	2,156,173	2,204,433	2,254,491	2,308,778	2,390,456	4%	15%

Figure 1 shows the total number of degrees awarded by program area from 2004 to 2009. While still relatively low with regard to total number of degrees awarded, the trend line for health fields displayed the sharpest increase over the 5-year period. Education is the only program area that did not grow materially from 2004 to 2009, with a modest increase from 2004 to 2006, followed by a return to approximately 2004 levels by 2009.

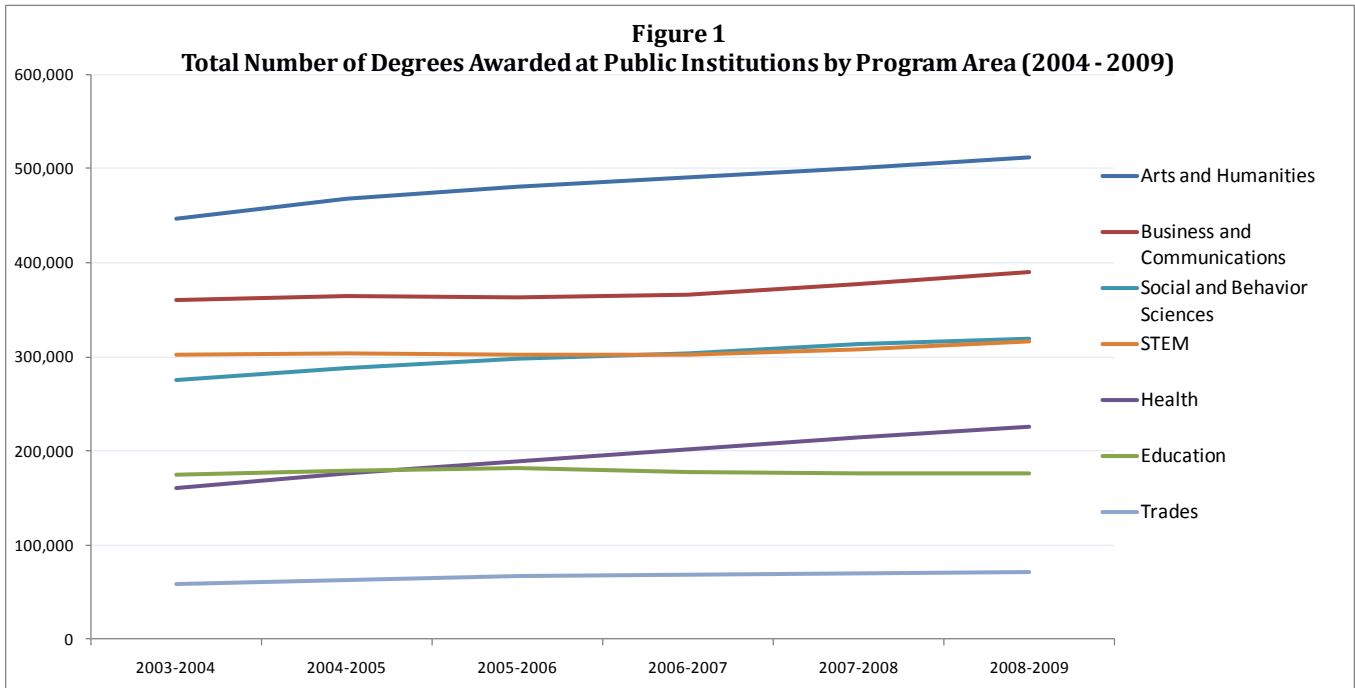


Figure 2 shows the total number of certificates awarded by program area from 2004 to 2009. Health, Trades, and Arts and Humanities have experienced a constant, steady increase in the number of certificates awarded. Between 2004 and 2007, STEM experienced a decline in certificates awarded, but that trend has slightly increased since 2007. Since 2006, Social & Behavioral Sciences/Human Services have experienced a steady increase in certificates awarded, while Arts and Humanities experienced its sharpest increase in certificates from 2007 to 2008.

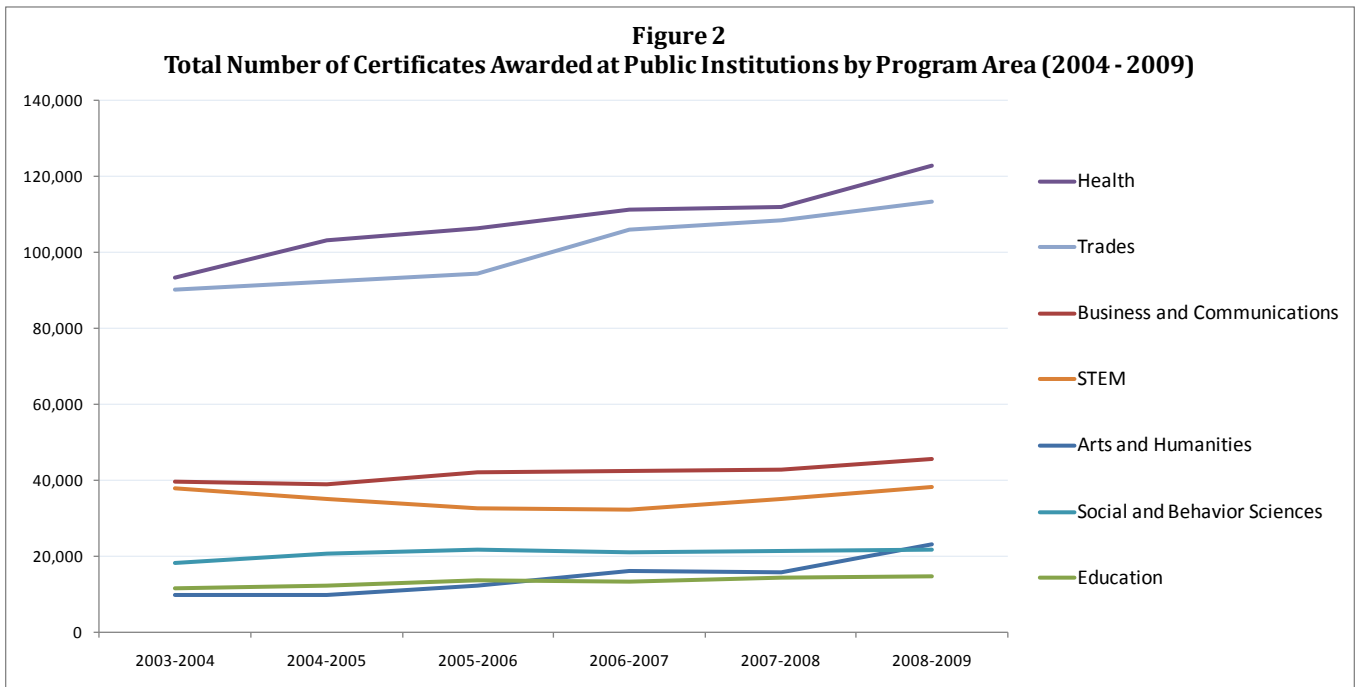


Figure 3 shows the number of total completions by program area between 2004 and 2009. Health fields and Arts and Humanities experienced sharp, increasing trend lines. Since 2006, the trend for Education has modestly decreased.

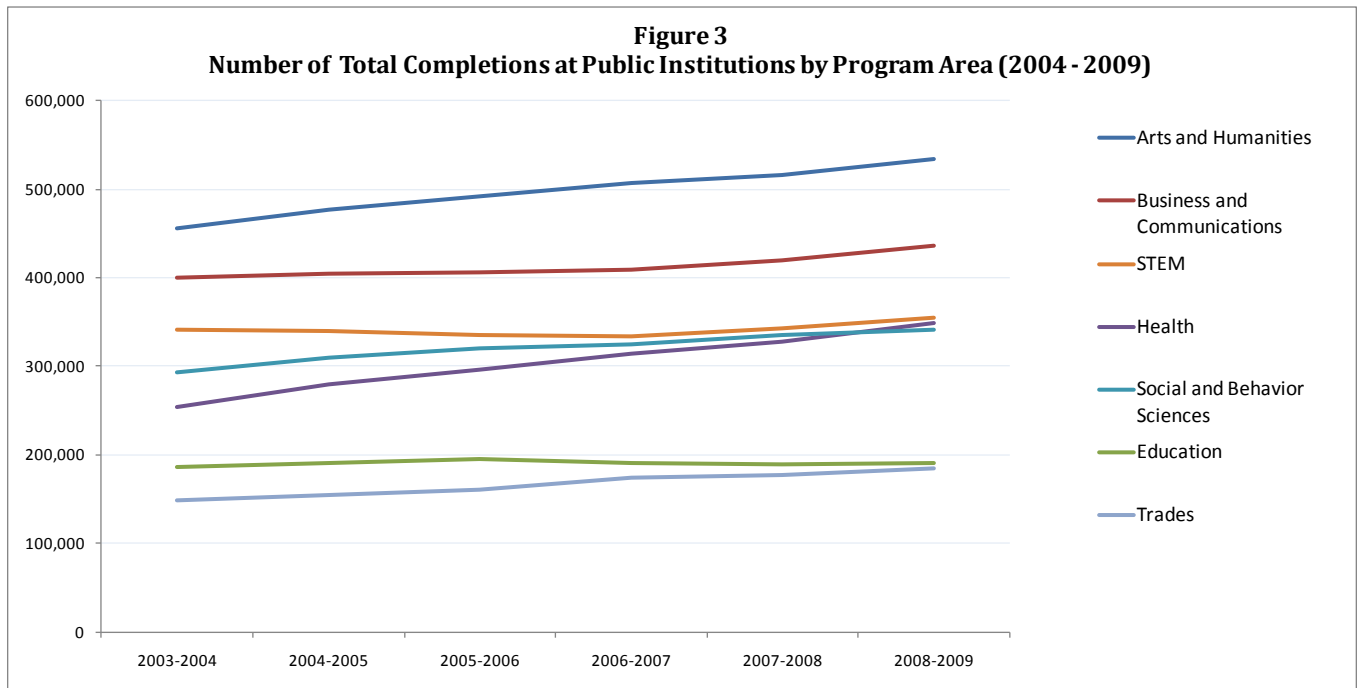


Table 2 provides an in-depth examination of all completions within discipline areas, based on the level of degree or certificate awarded (i.e. certificates,⁵ associates, bachelors, masters, and doctoral degrees). From 2004 to 2009, the number of certificates awarded increased by 26% (as also noted in Table 1), while doctoral degrees awarded increased by 22%. The number of masters degrees awarded experienced the lowest increase over the same time period with a 9% increase. As expected, bachelors led all degree types in the number awarded from 2004 to 2009.

⁵ For the purpose of this analysis, the variable certificate encompasses both pre-bachelors and post-graduate certifications.

Table 2 Degree Awards and Certificates by Program Area								
	2004	2005	2006	2007	2008	2009	1-Year % Change From 2008-2009	5-Year % Change From 2004-2009
Arts and Humanities								
Certificate	9,745	9,877	12,183	16,158	15,969	23,250	46%	139%
Associates	242,347	253,613	259,068	265,668	270,206	277,567	3%	15%
Bachelors	178,070	186,624	193,034	196,792	201,342	204,586	2%	15%
Masters	22,100	23,319	23,810	23,603	24,338	24,690	1%	12%
Doctoral	3,882	3,856	4,081	4,037	4,221	4,474	6%	15%
All Completions	456,144	477,289	492,176	506,258	516,076	534,567	4%	17%
Business and Communication								
Certificate	39,790	39,165	42,070	42,499	42,809	45,695	7%	15%
Associates	68,136	68,447	67,459	67,286	68,199	70,464	3%	3%
Bachelors	235,846	239,320	239,073	242,187	248,803	256,668	3%	9%
Masters	55,481	55,845	55,511	55,846	58,531	62,164	6%	12%
Doctoral	1,026	1,082	1,176	1,316	1,273	1,318	4%	28%
All Completions	400,279	403,859	405,289	409,134	419,615	436,309	4%	9%
Education								
Certificate	11,569	12,426	13,677	13,442	14,300	14,949	5%	29%
Associates	10,816	11,890	12,988	11,700	11,778	12,581	7%	16%
Bachelors	76,015	76,018	77,508	76,812	74,722	75,095	0%	-1%
Masters	83,720	86,377	86,108	84,557	84,108	83,499	-1%	0%
Doctoral	4,643	4,701	4,709	4,920	5,067	5,183	2%	12%
All Completions	186,763	191,412	194,990	191,431	189,975	191,307	1%	2%
Health								
Certificate	93,509	103,307	106,299	111,272	111,865	122,870	10%	31%
Associates	80,150	90,810	97,164	102,663	107,717	111,140	3%	39%
Bachelors	44,011	47,666	52,586	57,467	62,678	67,627	8%	54%
Masters	20,113	20,809	21,853	23,068	24,483	25,763	5%	28%
Doctoral	15,926	17,229	17,907	19,176	20,296	21,167	4%	33%
All Completions	253,709	279,821	295,809	313,646	327,039	348,567	7%	37%
Science, Technology, Engineering, and Math (STEM)								
Certificate	38,118	35,036	32,592	32,328	35,267	38,449	9%	1%
Associates	57,544	53,788	49,769	47,715	47,819	49,459	3%	-14%
Bachelors	178,615	182,746	184,891	187,428	189,857	194,260	2%	9%
Masters	53,956	54,255	52,696	50,532	53,042	55,312	4%	3%
Doctoral	12,424	13,592	15,008	16,397	16,853	16,928	0%	36%
All Completions	340,657	339,417	334,956	334,400	342,838	354,408	3%	4%
Social and Behavior Sciences and Human Services								
Certificate	18,420	20,614	21,834	20,990	21,518	21,826	1%	18%
Associates	25,418	26,379	26,985	27,112	27,275	28,929	6%	14%
Bachelors	189,349	200,067	206,600	212,097	219,271	221,551	1%	17%
Masters	42,026	43,336	45,452	46,144	47,940	48,951	2%	16%
Doctoral	18,207	18,935	18,990	19,026	19,423	19,492	0%	7%
All Completions	293,420	309,331	319,861	325,369	335,427	340,749	2%	16%
Trades								
Certificate	90,324	92,206	94,373	106,131	108,339	113,539	5%	26%
Associates	34,675	36,850	38,501	38,724	39,445	40,681	3%	17%
Bachelors	22,439	24,011	26,256	27,069	27,406	27,691	1%	23%
Masters	1,787	1,888	2,152	2,247	2,535	2,552	1%	43%
Doctoral	51	89	70	82	83	86	4%	69%
All Completions	149,276	155,044	161,352	174,253	177,808	184,549	4%	24%
Total Completions								
Certificate	301,475	312,631	323,028	342,820	350,067	380,578	9%	26%
Associates	519,086	541,777	551,934	560,868	572,439	590,821	3%	14%
Bachelors	924,345	956,452	979,948	999,852	1,024,079	1,047,478	2%	13%
Masters	279,183	285,829	287,582	285,997	294,977	302,931	3%	9%
Doctoral	56,159	59,484	61,941	64,954	67,216	68,648	2%	22%
All Completions	2,080,248	2,156,173	2,204,433	2,254,491	2,308,778	2,390,456	4%	15%

Business and Communications

Within Business and Communications, the largest increases in types of degrees awarded from 2004 to 2009 were doctoral degrees (28%), followed by certificates with a 15% increase. Comparatively, the number of associates degrees awarded in Business and Communications increased by 3%.

Education

Within Education, the largest increase in the number of completions was found in certificates (29%), followed by associates degrees with 16%. Notably, there was no significant increase in number of masters degrees awarded in Education from 2004 to 2009 (0% percent change) and there was a 1% decrease in the number of bachelor's degrees awarded in this program area during the same time period.

STEM

Overall, while the increase in the total number of total completions has been modest within STEM fields, there has been a dramatic increase in the number of doctoral degrees awarded (36%) within the discipline from 2004 to 2009. However, STEM has experienced a 14% decrease in the number of associates degrees awarded and a 1% increase in certificate completion from 2004 to 2009.

Total Completions at Public Institutions by Institutional Sector

Figure 4 shows total completions in Arts and Humanities by sector in 2009. There were a total of 534,567 total completions across all institutions types in 2009. Associates institutions produced the highest number of completions in this area (54%), while Research – High Activity institutions produced the lowest number of total completions (9%).

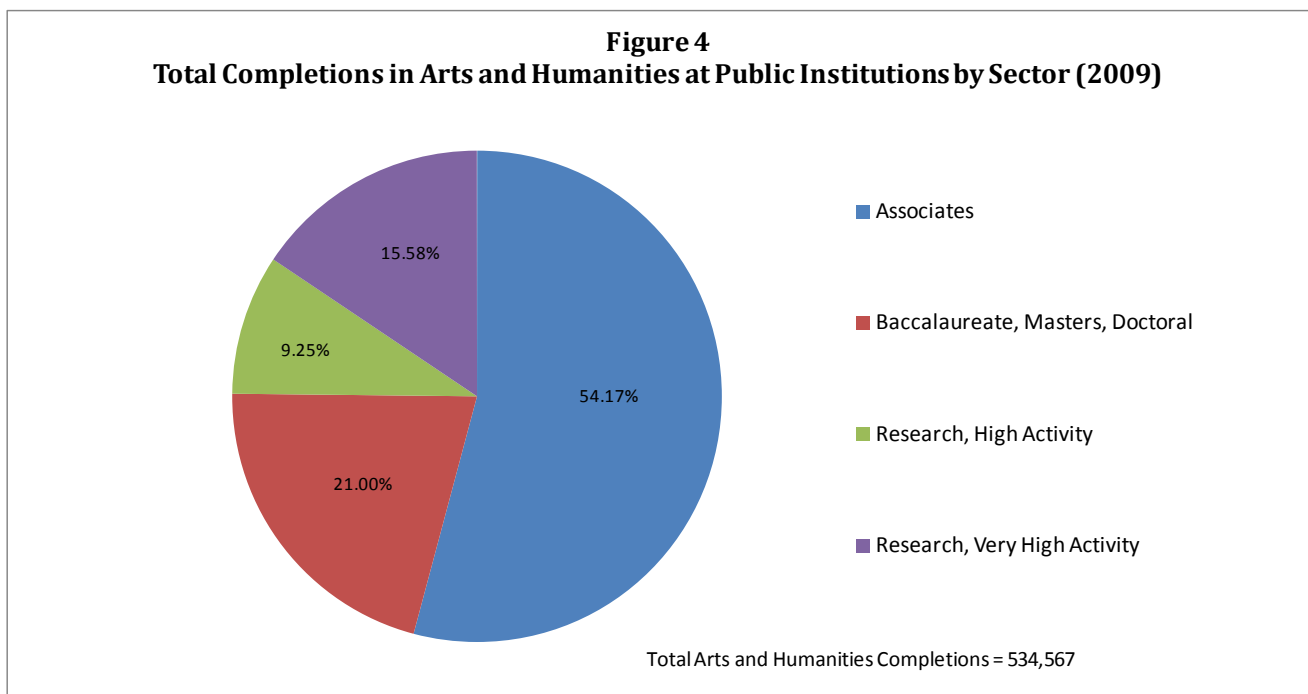


Figure 5 shows total completions in Business and Communications by sector in 2009. There were a total of 436,309 total completions across all institutions types in 2009. Baccalaureate, Masters, and Doctoral institutions produced the highest number of completions in this area (35%), while Research – High Activity institutions produced the lowest number of total completions (17%).

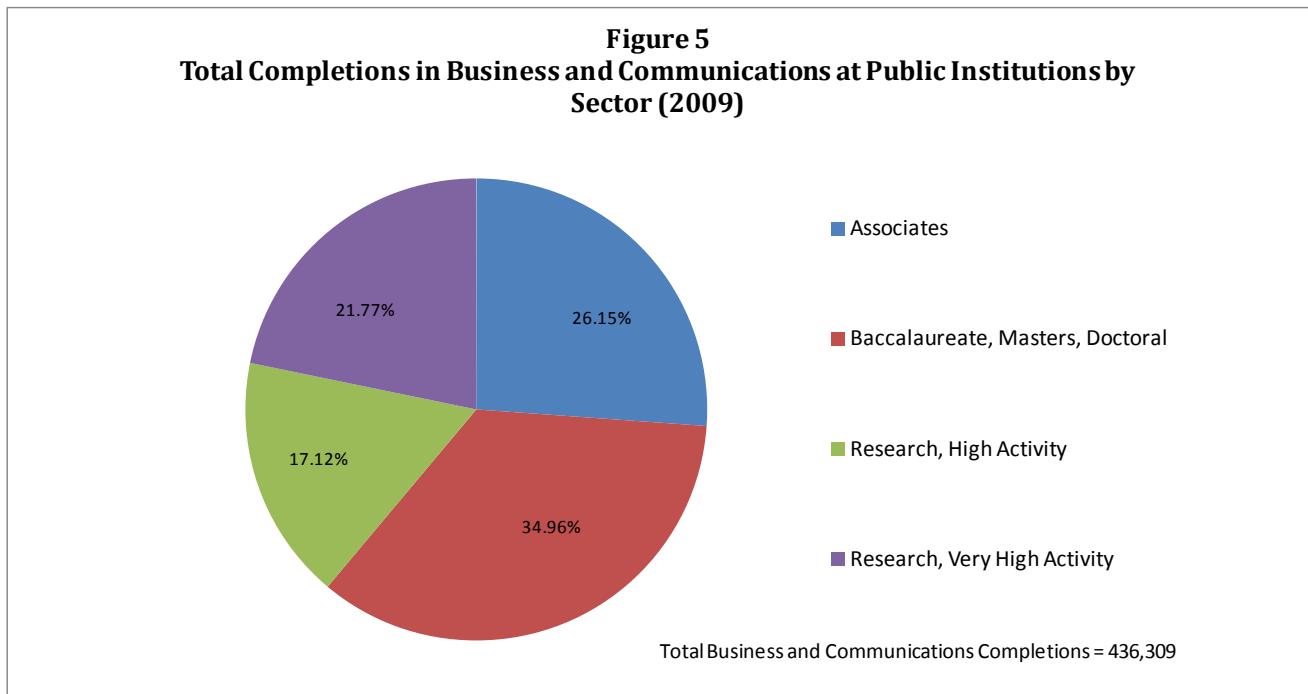


Figure 6 shows total completions in Education by sector in 2009. There were a total of 191,307 total completions across all institutions types in 2009. Baccalaureate, Masters, and Doctoral institutions produced the highest number of completions in this area (54%), while Associates institutions produced the lowest number of total completions (9%).

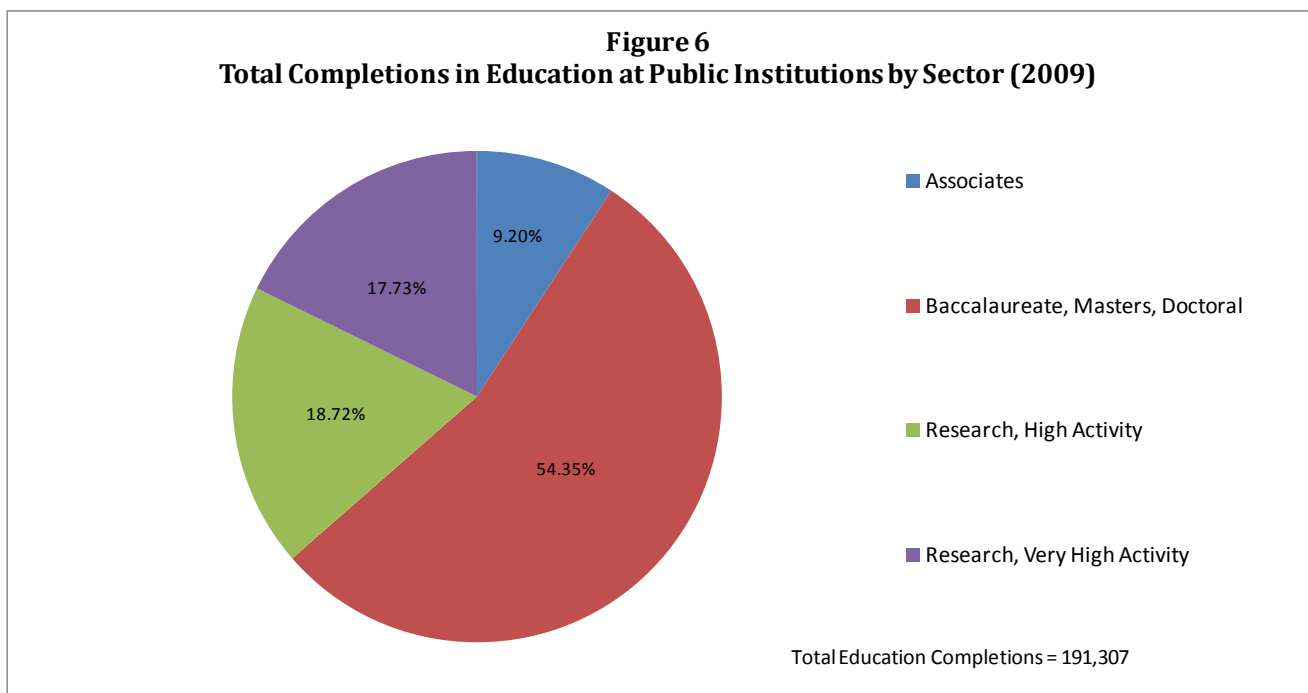


Figure 7 shows total completions in Health by sector in 2009. There were a total of 348,567 total completions across all institutions types in 2009. Overwhelmingly, Associates institutions produced the highest number of total completions in this area (65%), while Research – High Activity institutions produced the lowest number of total completions (8%).

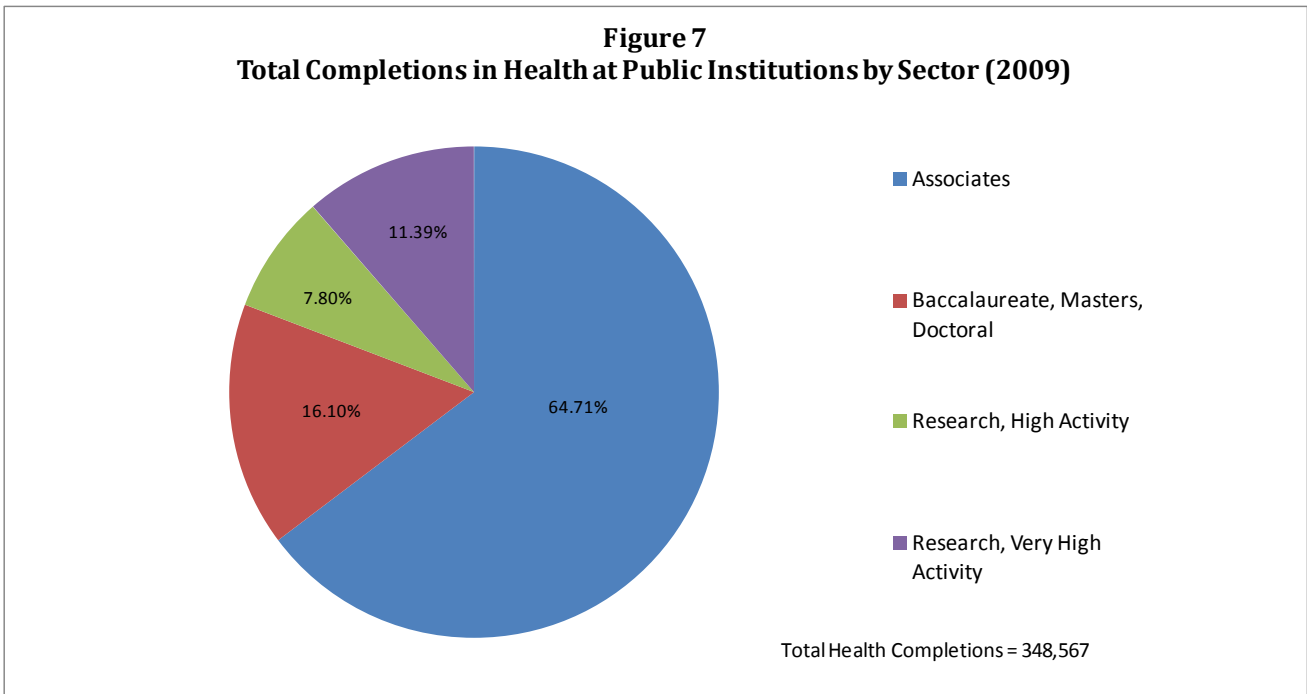


Figure 8 shows total completions in Social and Behavior Sciences/Human Services by sector in 2009. There were a total of 340,749 total completions across all institutions types in 2009. Baccalaureate, Masters, and Doctoral institutions produced the highest number of completions in this area (34%), while Associates institutions produced the lowest number of total completions (14%).

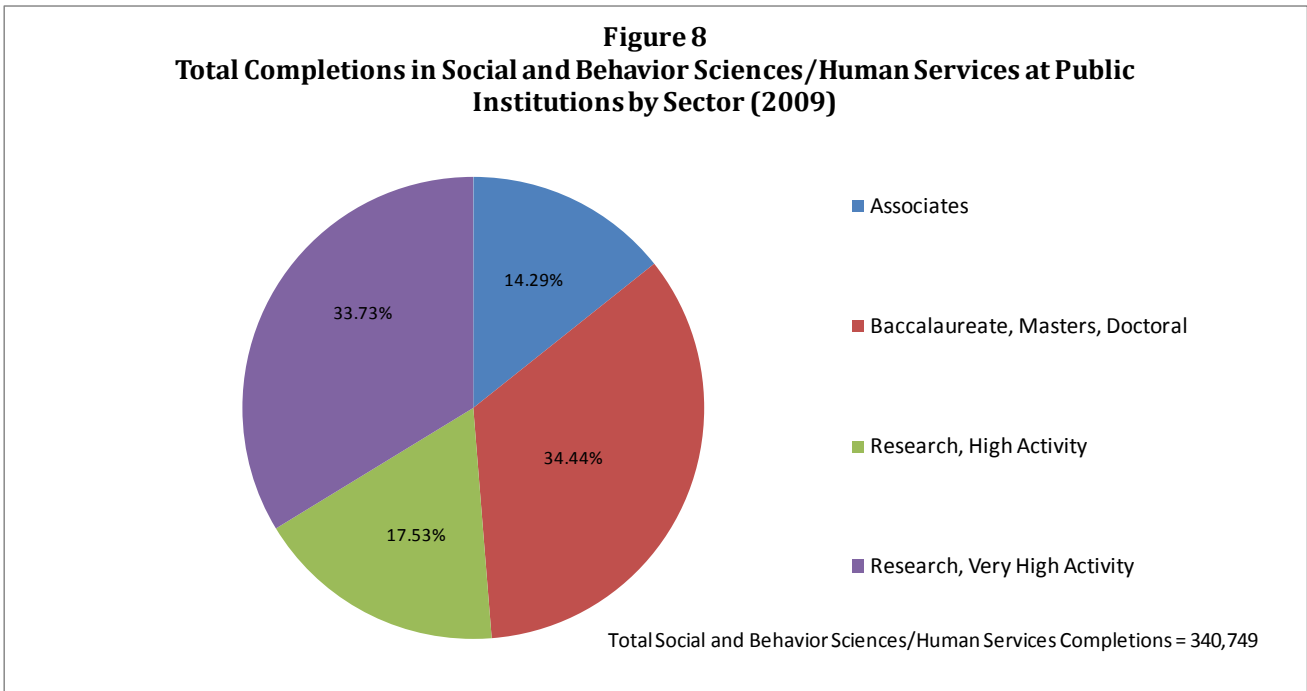


Figure 9 shows total completions in STEM by sector in 2009. There were a total of 354,408 total completions across all institutions types in 2009. Research – Very High Activity institutions produced the highest number of total completions in this area (37%), while Research – High Activity institutions produced the lowest number of total completions (17%).

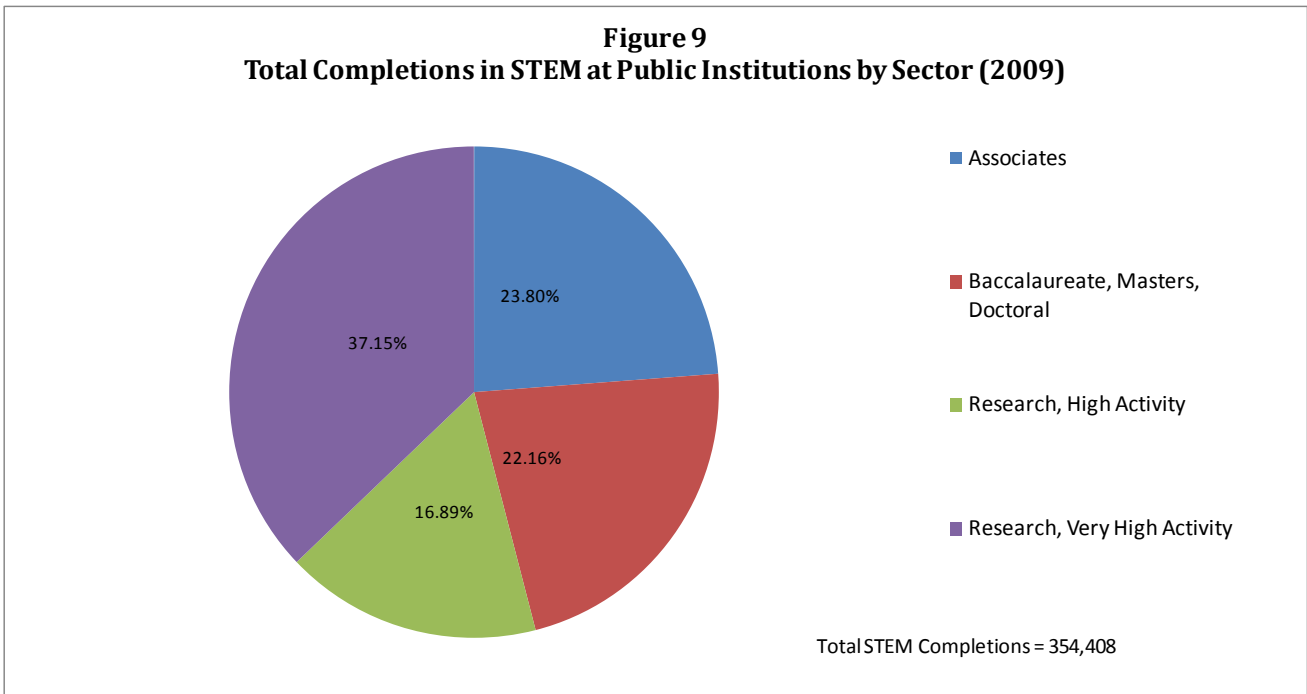
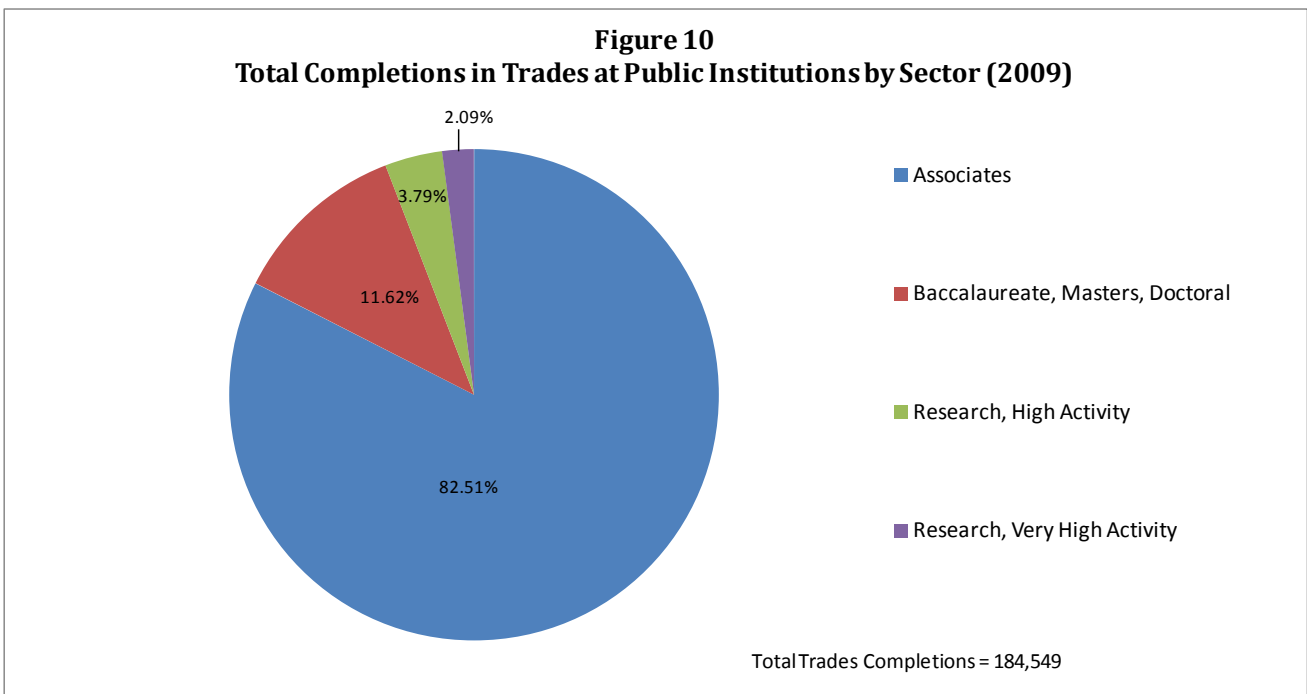


Figure 10 shows total completions in Trades by sector in 2009. There were a total of 184,549 total completions across all institutions types in 2009, 62% of which were certificates and 38% of which were degrees (see Table 1). Associates institutions produced the highest number of total completions in this area (83%), while Research – Very High Activity institutions produced the lowest number of total completions (2%).



Market Share of Degree Completions by Institutional Sector

Table 3 shows degree completions across disciplines within public Associates institutions and the market share that each discipline held with regards to degree completions in this sector. There was a 15% increase in all degree completions in this sector from 2004 to 2009. Specifically, Health experienced a 41% increase in degree completions over the 5-year period, followed by Education with a 24% increase. STEM fields experienced a 12% decrease in degree completions in this sector from 2004 to 2009.

With regards to market share, the majority of disciplines maintained their market share levels from 2004 to 2009 in this sector, with the exception of Health and STEM fields. From 2004 to 2009, Health experienced an increase in market share of degrees completed in public Associates institutions from 15% to 18%, while STEM fields decreased their market share from 11% to 8%.

	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	1-Year % Change From 2007-08 to 2008-09	5-Year % Change From 2003-04 to 2008-09
Arts and Humanities								
Number of Degrees Completed in Arts and Humanities	234,381	245,523	251,118	257,878	262,498	269,662		
Market Share of Degree Completions Contained Within Arts and Humanities	47%	47%	47%	47%	47%	47%	3%	15%
Business and Communications								
Number of Degrees Completed in Business and Communications	67,485	67,898	67,236	67,558	68,900	71,823		
Market Share of Degree Completions Contained Within Business and Communications	13%	13%	13%	12%	12%	12%	4%	6%
Education								
Number of Degrees Completed in Education	10,941	12,375	13,627	12,513	12,647	13,577		
Market Share of Degree Completions Contained Within Education	2%	2%	3%	2%	2%	2%	7%	24%
Health								
Number of Degrees Completed in Health	74,555	84,586	91,190	96,382	101,790	105,485		
Market Share of Degree Completions Contained Within Health	15%	16%	17%	18%	18%	18%	4%	41%
STEM								
Number of Degrees Completed in STEM	55,110	51,779	48,113	46,559	46,561	48,526		
Market Share of Degree Completions Contained Within STEM	11%	10%	9%	9%	8%	8%	4%	-12%
Social and Behavior Sciences and Human Services (SBS/HS)								
Number of Degrees Completed in SBS/HS	25,300	26,410	27,048	27,390	27,717	29,452		
Market Share of Degree Completions Contained Within SBS/HS	5%	5%	5%	5%	5%	5%	6%	16%
Trades								
Number of Degrees Completed in Trades	33,533	35,716	37,561	37,751	38,568	40,008		
Market Share of Degree Completions Contained Within Trades	7%	7%	7%	7%	7%	7%	4%	19%
Total Degree Completions in ALL Program Areas	501,305	524,287	535,893	546,031	558,681	578,533	4%	15%

Table 4 shows degree completions across disciplines within public Baccalaureate, Masters, and Doctoral institutions and the market share that each discipline holds with regards to degree completions in this sector. Overall, there was a 14% increase in degree completions from 2004 to 2009. Health experienced the largest increase in degree completions from 2004 to 2009 with 49%, followed by Trades with a 23% increase, and Social and Behaviors Sciences/Human Services with a 22% increase. The number of degree completions stayed the same in Education (0% change) in this sector.

From 2004 to 2009, Education decreased its market share in total degree completions within public Baccalaureate, Masters, and Doctoral institutions from 18% to 16%, while Health fields increased their market share of total degree completions from 7% to 9%.

	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	1-Year % Change From 2007-08 to 2008-09	5-Year % Change From 2003-04 to 2008-09
Arts and Humanities								
Number of Degrees Completed in Arts and Humanities	98,179	103,361	107,258	108,655	109,820	111,760	2%	14%
Market Share of Degree Completions Contained Within Arts and Humanities	18%	18%	18%	18%	18%	18%		
Business and Communications								
Number of Degrees Completed in Business and Communications	135,579	138,722	138,353	141,230	145,108	150,890	4%	11%
Market Share of Degree Completions Contained Within Business and Communications	25%	24%	24%	24%	24%	24%		
Education								
Number of Degrees Completed in Education	97,156	98,761	99,840	99,400	96,976	97,639	1%	0%
Market Share of Degree Completions Contained Within Education	18%	17%	17%	17%	16%	16%		
Health								
Number of Degrees Completed in Health	36,866	40,130	43,511	47,642	50,912	54,791	8%	49%
Market Share of Degree Completions Contained Within Health	7%	7%	7%	8%	8%	9%		
STEM								
Number of Degrees Completed in STEM	71,972	73,421	73,901	73,498	75,548	77,603	3%	8%
Market Share of Degree Completions Contained Within STEM	13%	13%	13%	12%	12%	12%		
Social and Behavior Sciences and Human Services (SBS/HS)								
Number of Degrees Completed in SBS/HS	95,175	100,662	105,767	109,210	113,904	116,240	2%	22%
Market Share of Degree Completions Contained Within SBS/HS	17%	18%	18%	18%	19%	18%		
Trades								
Number of Degrees Completed in Trades	16,636	17,549	18,946	19,908	20,235	20,492	1%	23%
Market Share of Degree Completions Contained Within Trades	3%	3%	3%	3%	3%	3%		
Total Degree Completions in ALL Program Areas	551,563	572,606	587,576	599,543	612,503	629,415	3%	14%

Table 5 shows degree completions across disciplines within public Research – High Activity institutions and the market share that each discipline holds with regards to degree completions in this sector. Overall, there was a 12% increase in degree completions from 2004 to 2009 in this sector. Health experienced the largest increase in degrees completed in this sector at 35%, followed by Trades (24%) and Arts and Humanities (21%). Comparatively, Education witnessed a 4% decrease in degree completions within public Research – High Activity institutions from 2004 to 2009.

From 2004 to 2009, Education decreased its market share in total degree completions in this sector from 13% to 11%, while Health fields increased their market share of total degree completions from 7% to 9%.

Table 5 Market Share of Degree Completions at Public Research - High Activity Institutions, 2004 - 2009							1-Year % Change From 2007-08 to 2008-09	5-Year % Change From 2003-04 to 2008-09
	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009		
Arts and Humanities								
Number of Degrees Completed in Arts and Humanities	39,997	42,240	44,015	45,135	46,864	48,550	4%	21%
Market Share of Degree Completions Contained Within Arts and Humanities	15%	15%	15%	15%	16%	16%		
Business and Communications								
Number of Degrees Completed in Business and Communications	68,346	68,459	69,021	69,848	71,389	73,953	4%	8%
Market Share of Degree Completions Contained Within Business and Communications	25%	24%	24%	24%	24%	24%		
Education								
Number of Degrees Completed in Education	35,483	36,477	36,172	34,895	34,729	34,176	-2%	-4%
Market Share of Degree Completions Contained Within Education	13%	13%	12%	12%	12%	11%		
Health								
Number of Degrees Completed in Health	19,794	20,692	22,258	23,391	25,181	26,685	6%	35%
Market Share of Degree Completions Contained Within Health	7%	7%	8%	8%	8%	9%		
STEM								
Number of Degrees Completed in STEM	55,438	56,502	57,016	57,234	58,021	58,935	2%	6%
Market Share of Degree Completions Contained Within STEM	20%	20%	20%	19%	19%	19%		
Social and Behavior Sciences and Human Services (SBS/HS)								
Number of Degrees Completed in SBS/HS	51,040	53,183	55,749	57,810	58,654	59,007	1%	16%
Market Share of Degree Completions Contained Within SBS/HS	19%	19%	19%	20%	19%	19%		
Trades								
Number of Degrees Completed in Trades	5,412	6,039	6,765	6,835	6,769	6,736	0%	24%
Market Share of Degree Completions Contained Within Trades	2%	2%	2%	2%	2%	2%		
Total Degree Completions in ALL Program Areas	275,510	283,592	290,996	295,148	301,607	308,042	2%	12%

Table 6 shows degree completions across disciplines within public Research – Very High Activity institutions and the market share that each discipline holds with regards to degree completions in this sector. Overall, there was a 10% increase in degree completions in this sector from 2004 to 2009. Health experienced the largest increase in degree completions from 2004 to 2009 in this sector (34%), followed by Trades (12%), Arts and Humanities (10%), and Social and Behavior Sciences/Human Services (10%).

In 2009, STEM held the highest market share of degree completions in this sector with 26%, followed by Social and Behavior Sciences/Human Services (23%), and Business and Communications (19%).

	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	1-Year % Change From 2007-08 to 2008-09	5-Year % Change From 2003-04 to 2008-09
Arts and Humanities								
Number of Degrees Completed in Arts and Humanities	73,842	76,288	77,602	78,432	80,925	81,345	1%	10%
Market Share of Degree Completions Contained Within Arts and Humanities	16%	16%	17%	17%	17%	16%		
Business and Communications								
Number of Degrees Completed in Business and Communications	89,079	89,615	88,609	87,999	91,409	93,948	3%	5%
Market Share of Degree Completions Contained Within Business and Communications	20%	19%	19%	19%	19%	19%		
Education								
Number of Degrees Completed in Education	31,614	31,373	31,674	31,181	31,323	30,966	-1%	-2%
Market Share of Degree Completions Contained Within Education	7%	7%	7%	7%	6%	6%		
Health								
Number of Degrees Completed in Health	28,985	31,106	32,551	34,959	37,291	38,736	4%	34%
Market Share of Degree Completions Contained Within Health	6%	7%	7%	7%	8%	8%		
STEM								
Number of Degrees Completed in STEM	120,019	122,679	123,334	124,781	127,441	130,895	3%	9%
Market Share of Degree Completions Contained Within STEM	27%	26%	26%	26%	26%	27%		
Social and Behavior Sciences and Human Services (SBS/HS)								
Number of Degrees Completed in SBS/HS	103,485	108,462	109,463	109,969	113,634	114,224	1%	10%
Market Share of Degree Completions Contained Within SBS/HS	23%	23%	23%	23%	23%	23%		
Trades								
Number of Degrees Completed in Trades	3,371	3,534	3,707	3,628	3,897	3,774	-3%	12%
Market Share of Degree Completions Contained Within Trades	1%	1%	1%	1%	1%	1%		
Total Degree Completions in ALL Program Areas	450,395	463,057	466,940	470,949	485,920	493,888	2%	10%

Conclusion

This analysis of postsecondary degree and certificate completions in seven program areas from 2004 to 2009 included public institutions in the fifty states. Among the major findings of this analysis during the five-year time period:

- Student FTE increased by 11%, while the number of degrees awarded grew by 13% and total completions grew by 15% (see Table 1). The total number of certificates awarded increased significantly (26%).
- Across disciplines, **Health** (37%) experienced the largest increase in the number of total completions, while total completions in Trades grew by 24%. Education (2%) and STEM (4%) experienced the lowest growth in total completions (see Table 2). More specifically, during the period of analysis:
 - For **Health**, close to two-thirds of total completions were in degrees (64%) and 36% were in certificates;
 - For **Trades**, 60% of total completions were in certificates and 40% were in degrees;
 - For **Education**, 93% of total completions were in degrees and 7% were in certificates; and
 - For **STEM**, 90% of total completions were in degrees and 10% were in certificates.
- Across the seven program areas by institutional sector (see Figures 4 through 10):
 - Public **Associates institutions** produced the highest percentage of completions within Arts and Humanities (54%), Health (65%), and Trades (83%);
 - Public **Baccalaureate, Masters, and Doctoral institutions** produced the highest percentage of completions within Business and Communications (35%), Education (54%), and Social and Behavior Sciences/Human Services (34%); and
 - Public **Research – Very High Activity institutions** produced the highest percentage of total completions in STEM (37%).
- With regards to **market share** from 2004 to 2009, **Health** had the highest increase in degree completions in every institutional sector (see Tables 3 through 6):
 - Public **Associates institutions** generated 41% more degrees in Health, compared to a 15% increase in degree completions across all program areas.
 - Public **Baccalaureate, Masters, and Doctoral institutions** generated 49% more health degrees, compared to a 14% increase in degree completions across all program areas;
 - Public **Research – High Activity institutions** generated 35% more Health degrees, compared to a 12% increase in degree completions across all program areas; and
 - Public **Research – Very High Activity** institutions generated 34% more Health degrees, compared to a 10% increase in degree completions across all program areas.

Appendix 1a: Carnegie Classification Institution Types

Carnegie 2005 Basic Classification	Grouped Carnegie Classification
Associates--Public Rural-serving Small	Associates
Associates--Public Rural-serving Medium	Associates
Associates--Public Rural-serving Large	Associates
Associates--Public Suburban-serving Single Campus	Associates
Associates--Public Suburban-serving Multi-campus	Associates
Associates--Public Urban-serving Single Campus	Associates
Associates--Public Urban-serving Multi-campus	Associates
Associates--Public Special Use*	Special
Associates--Private Not-for-profit*	Associates
Associates--Private For-profit*	Associates
Associates--Public 2-year colleges under 4-year universities	Associates
Associates--Public 4-year Primarily Associates	Associates
Associates--Private Not-for-profit 4-year Primarily Associates*	Associates
Associates--Private For-profit 4-year Primarily Associates*	Associates
Research Universities (very high research activity)	Research, Very High Activity
Research Universities (high research activity)	Research, High Activity
Doctoral/Research Universities: Doctorate-granting Universities	Baccalaureate, Masters, Doctoral
Masters Colleges and Universities (larger programs)	Baccalaureate, Masters, Doctoral
Masters Colleges and Universities (medium programs)	Baccalaureate, Masters, Doctoral
Masters Colleges and Universities (smaller programs)	Baccalaureate, Masters, Doctoral
Baccalaureate Colleges--Arts & Sciences	Baccalaureate, Masters, Doctoral
Baccalaureate Colleges--Diverse Fields	Baccalaureate, Masters, Doctoral
Baccalaureate/Associates Colleges	Associates
Special Focus Institutions--Theological seminaries, Bible colleges, and other faith-related institutions*	Special
Special Focus Institutions--Medical schools and medical centers*	Special
Special Focus Institutions--Other health professions schools*	Special
Special Focus Institutions--Schools of engineering*	Special
Special Focus Institutions--Other technology-related schools*	Special
Special Focus Institutions--Schools of business and management*	Special
Special Focus Institutions--Schools of art, music, and design*	Special
Special Focus Institutions--Schools of law*	Special
Special Focus Institutions--Other special-focus institutions*	Special
Tribal Colleges*	Special
Not classified*	N/A
Not applicable, not in Carnegie universe (not accredited or non-degree-granting)*	N/A

Note: Classifications marked with an asterisk (*) are not included in the report. Institutions classified with a “special” Carnegie Class in 2000 and reclassified in 2005 class were also excluded (i.e. Military institutions).

Appendix 1b: SHEEO Groupings of Program Areas Based on 2-Digit CIP Codes

NCES CIP Codes and Titles		SHEEO Groupings	
2 Digit Family	2 Digit Family Title	SHEEO Group	SHEEO Group Title
01	Agriculture, Agriculture Operations, And Related Services	04	Science, Technology, Engineering, and Math
03	Natural Resources and Conservation	04	Science, Technology, Engineering, and Math
04	Architecture and Related Services	04	Science, Technology, Engineering, and Math
05	Area, Ethnic, Cultural, Gender, and Group Studies	02	Arts and Humanities
09	Communication, Journalism, and Related Programs	05	Business and Communication
10	Communications Technologies/Technicians and Support Services	05	Business and Communication
11	Computer and Information Sciences and Support Services	04	Science, Technology, Engineering, and Math
12	Personal and Culinary Services	07	Trades
13	Education	01	Education
14	Engineering	04	Science, Technology, Engineering, and Math
15	Engineering Technologies and Engineering-Related Fields	04	Science, Technology, Engineering, and Math
16	Foreign Languages, Literatures, and Linguistics	02	Arts and Humanities
19	Family and Consumer Sciences/Human Sciences	03	Social and Behavior Sciences and Human
22	Legal Professions and Studies	03	Social and Behavior Sciences and Human
23	English Language and Literature/Letters	02	Arts and Humanities
24	Liberal Arts and Sciences, General Studies and Humanities	02	Arts and Humanities
25	Library Science	03	Social and Behavior Sciences and Human
26	Biological and Biomedical Sciences	04	Science, Technology, Engineering, and Math
27	Mathematics and Statistics	04	Science, Technology, Engineering, and Math
28	Military Science, Leadership and Operational Art.	07	Trades
29	Military Technologies and Applied Sciences	04	Science, Technology, Engineering, and Math
30	Multi/Interdisciplinary Studies	02	Arts and Humanities
31	Parks, Recreation, Leisure, and Fitness Studies	03	Social and Behavior Sciences and Human
32	Basic Skills and Developmental/Remedial Education	02	Arts and Humanities
33	Citizenship Activities	02	Arts and Humanities
34	Health-Related Knowledge and Skills	02	Arts and Humanities
35	Interpersonal and Social Skills	02	Arts and Humanities
36	Leisure and Recreational Activities	02	Arts and Humanities
37	Personal Awareness and Self-Improvement	02	Arts and Humanities
38	Philosophy and Religious Studies	02	Arts and Humanities
39	Theology and Religious Vocations	02	Arts and Humanities
40	Physical Sciences	04	Science, Technology, Engineering, and Math
41	Science and Technologies/Technicians	04	Science, Technology, Engineering, and Math
42	Psychology	03	Social and Behavior Sciences and Human
43	Homeland Security, Law Enforcement, Firefighting and Related Protective	07	Trades
44	Public Administration and Social Service Professions	03	Social and Behavior Sciences and Human
45	Social Sciences	03	Social and Behavior Sciences and Human
46	Construction Trades	07	Trades
47	Mechanic and Repair Technologies/Technicians	07	Trades
48	Precision Production	07	Trades
49	Transportation and Materials Moving	07	Trades
50	Visual and Performing Arts	02	Arts and Humanities
51	Health Professions and Related Programs	06	Health
52	Business, Management, Marketing, and Related Support Services	05	Business and Communication
53*	High School/Secondary Diplomas and Certificates	08	High School/Secondary Diplomas and
54	History	02	Arts and Humanities
60*	Residency Programs	09	Residency Programs

Note: CIP Codes marked with an asterisk (*) are not included in the report.